



**Department of  
Design and  
Construction**

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

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

**LAW**

**VOLUME 1 OF 3  
BID BOOKLET**

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND  
REQUIRED FOR:

**PROJECT ID: HWXS511**

**RECONSTRUCTION OF**

**WEST TREMONT STEP STREET**

**INCLUDING STREET LIGHTING, ROADWAY RECONSTRUCTION,  
SEWER, AND TRAFFIC WORK**

Together With All Work Incidental Thereto

**BOROUGH OF THE BRONX  
CITY OF NEW YORK**

FOR THE DEPARTMENT OF TRANSPORTATION  
PREPARED BY

*URS CORPORATION*

**APRIL 14, 2017**



**7-103**



November 14, 2017

CERTIFIED MAIL - RETURN RECEIPT REQUEST  
LAWS CONSTRUCTION CORP.  
34 IRVINGTON STREET  
PLEASANTVILLE, NY 10570

RE: FMS ID: HWXS511  
E-PIN: 85017B0100001  
DDC PIN: 8502017HW0043C  
RECONSTRUCTION OF WEST TREMONT  
AVE STEP STREET, BOROUGH OF THE  
BRONX  
**NOTICE OF AWARD**

Dear Contractor:

You are hereby awarded the above referenced contract based upon your bid in the amount of \$5,386,000.00 submitted at the bid opening on July 25, 2017. Within ten (10) days of your receipt of this notice of award, you are required to take the actions set forth in Paragraphs (1) through (3) below. For your convenience, attached please find a copy of Schedule A of the General Conditions to the Contract, which sets forth the types and amounts of insurance coverage required for this contract.

- (1) Execute two copies of the Agreement in the Contracts Unit, 30-30 Thomson Avenue, 1<sup>st</sup> Floor, Long Island City, New York (IDCNY Building). A Commissioner of Deeds will be available to witness and notarize your signature. The Agreement must be signed by an officer of the corporation or a partner of the firm.
- (2) Submit to the Contracts Unit two 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 disability 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.





**Department of  
Design and  
Construction**

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.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Shipman".

Michael Shipman  
Director of Contracts

# Notices to Bidders

## Pre-Bid Questions (PBQs)

Please be advised that PBQs should be submitted to the Agency Contact Person (CSB\_projectinquiries@ddc.nyc.gov) at least five (5) business days (by 5:00 PM EST) prior to the bid opening date as indicated in ATTACHMENT 1 - BID INFORMATION, page A-1 and SCHEDULE B, page 13, VOLUME 1 OF 3 of this BID BOOKLET.

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

## Apprenticeship Program

*If Apprenticeship Program is required as noted on Page 19 of this BID BOOKLET, the following notice applies:*

Please be advised that, pursuant to the authority granted to the City under Labor Law §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.

# Notices to Bidders

## NYC Construction Loan Pilot Program

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](http://www.nyc.gov/nycbusiness) to learn more about the loan or contact [constructionloan@sbs.nyc.gov](mailto: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.

**CITY OF NEW YORK**

**DEPARTMENT OF  
DESIGN AND CONSTRUCTION  
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**BID BOOKLET**

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NECESSARY AND REQUIRED FOR:

**PROJECT ID: HWXS511**

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WEST TREMONT STEP STREET**

**INCLUDING STREET LIGHTING, ROADWAY RECONSTRUCTION,  
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BID BOOKLET

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**CITY OF NEW YORK  
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. Schedule B: M/WBE 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. Bidder's Certification of Compliance with Iran Divestment Act
9. Special Experience Requirements (if applicable)
10. Apprenticeship Program Questionnaire (if applicable)
11. Any addenda issued prior to the receipt of bids

**FAILURE TO SUBMIT ITEMS (4) THROUGH (11)  
MAY RESULT IN THE DISQUALIFICATION 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 (718-391-2627), or via E-mail: [CSB\\_projectinquiries@ddc.nyc.gov](mailto:CSB_projectinquiries@ddc.nyc.gov).
- (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](http://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.

## SPECIAL NOTICE TO BIDDERS

### SPECIAL EXPERIENCE REQUIREMENTS (Revised 03/2014)

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

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

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

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

- ☐ **Trunk Water Main Work:** The entity that will perform the trunk water main work must, within the last seven (7) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least one (1) project similar in scope and type to the required work.
- ☐ **Best Management Practice Work:** Best Management Practice ("BMP") Work is any item of work in the Bid Schedule that begins with the prefix "BMP". The entity that will perform any BMP Work must, within the last five (5) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least three (3) projects similar in scope and type to the required work.

For professional services in connection with BMP Work, (i.e., monitoring and reporting services), the individual who will perform the required services must, within the last five (5) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least three (3) projects similar in scope and type to the required work. Additional requirements are set forth below.

- ☐ The individual serving as the Restoration Specialist (Construction Monitor) must be a Registered Landscape Architect licensed by the state of New York, or must have equivalent professional experience.
- ☐ The individual serving as the Erosion and Sediment Control Licensed/Certified Professional must be a Certified Professional in Erosion and Sediment Control (CPESC), certified by CPESC, Inc.
- ☐ **Micro-Tunneling/Pipe Jacking Work:** The entity that will perform the micro-tunneling/pipe jacking work must, within the last five (5) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least two (2) projects similar in scope and type to the required work.
- ☐ **OTHER:** \_\_\_\_\_

(B) **SPECIAL EXPERIENCE REQUIREMENTS 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 sub-subcontractor 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 sub-subcontractor must demonstrate compliance with the Special Experience Requirements. Once approved, no substitution will be permitted, unless the qualifications of the proposed replacement have been approved in writing in advance by the City.

Special Experience Requirements apply to the 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 sub-subcontractor.

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

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

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

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

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

□ **OTHER: OTHER:** The entity that will perform:



(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 REQUIREMENTS:** 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: \_\_\_\_\_

Name of Project: \_\_\_\_\_

Location of Project: \_\_\_\_\_

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

Name: \_\_\_\_\_

Title: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Brief description of the Project completed or the Project in progress: \_\_\_\_\_

\_\_\_\_\_

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

Amount of Contract, Subcontract or Sub-subcontract: \_\_\_\_\_

Start Date and Completion Date: \_\_\_\_\_

\*\*\*\*\*

Name of Contractor: \_\_\_\_\_

Name of Project: \_\_\_\_\_

Location of Project: \_\_\_\_\_

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

Name: \_\_\_\_\_

Title: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Brief description of the Project completed or the Project in progress: \_\_\_\_\_

\_\_\_\_\_

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

Amount of Contract, Subcontract or Sub-subcontract: \_\_\_\_\_

Start Date and Completion Date: \_\_\_\_\_

\_\_\_\_\_

**ATTACHMENT 1 - BID INFORMATION**

**PROJECT ID: HWXS511**

**PIN: 8502017HW0043C**

Description and Location of Work:

**RECONSTRUCTION OF  
WEST TREMONT STEP STREET**

**INCLUDING STREET LIGHTING, ROADWAY RECONSTRUCTION, SEWER, AND  
TRAFFIC WORK**

**Together With All Work Incidental Thereto**

**BOROUGH OF THE BRONX  
CITY OF NEW YORK**

Documents Available At:

30-30 Thomson Avenue  
First Floor Bid Procurement Room  
Long Island City, New York 11101  
8:30 A.M. to 4:00 P.M. – Monday through Friday

Submission of Bids To:

30-30 Thomson Avenue  
First Floor Bid Procurement Room  
Long Island City, New York 11101  
Before 11:00 A.M. on **JULY 14, 2017**

Bid Opening:

30-30 Thomson Avenue  
First Floor Bid Procurement Room  
Long Island City, New York 11101

Time and Date: 11:00 A.M. on **JULY 14, 2017**

Pre-Bid Conference:

Yes \_\_\_\_\_ No **X**  
If Yes, Mandatory \_\_\_\_\_ Optional: \_\_\_\_\_  
Time and Date: \_\_\_\_\_  
Location: \_\_\_\_\_

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 2% 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: 718-391-2627  
Email: CSB\_projectinquiries@ddc.nyc.gov

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2	LEG - 1	INDEX OF DRAWINGS
3	LEG - 2	LEGEND AND ABBREVIATIONS
4	GEN - 1	GENERAL NOTES 1
5	GEN - 2	GENERAL NOTES 2
6	SDS - 1	LIST OF STANDARD REFERENCE DRAWINGS
7	TOP - 1	SURVEY CONTROL
8	TOP - 2	TOPOGRAPHIC PLAN 1
9	TOP - 3	TOPOGRAPHIC PLAN 2
10	B - 101	RECORD OF BORINGS 1
11	B - 102	RECORD OF BORINGS 2
12	CRO - 1	STEP STREET – EXISTING PLAN
13	CRO - 2	STEP STREET – DEMOLITION PLAN
14	CRO - 3	WEST TREMONT AVE – DEMOLITION PLAN
15	CRO - 4	STEP STREET – EXISTING – DEMOLITION LONGITUDINAL SECTION
16	CRO - 5	STEP STREET – EXISTING – DEMOLITION CROSS SECTIONS
17	STG - 1	STEP STREET – CONSTRUCTION STAGING PLAN 1
18	STG - 2	STEP STREET – CONSTRUCTION STAGING PLAN 2
19	STG - 3	STEP STREET – CONSTRUCTION STAGING PLAN 3
20	CON - 1	COORDINATION PLAN
21	CON - 2	STEP STREET PROPOSED – CONSTRUCTION PLAN
22	CON - 3	PROPOSED LONGITUDINAL SECTION AT CENTERLINE
23	CON - 4	PROPOSED LONGITUDINAL SECTION AT SIDE SLOPE
24	CON - 5	PROPOSED STEP STREET SECTIONS – 1
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26	CON - 7	PROPOSED STEP STREET SECTIONS – 3
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28	UDP - 2	URBAN DESIGN DETAIL PLAN
29	UDD - 1	URBAN DESIGN DETAILS 1
30	UDD - 2	URBAN DESIGN DETAILS 2
31	UDD - 3	URBAN DESIGN DETAILS 3
32	UDD - 4	URBAN DESIGN DETAILS 4
33	UDD - 5	URBAN DESIGN DETAILS 5
34	UDD - 6	URBAN DESIGN DETAILS 6
35	UDD - 7	URBAN DESIGN DETAILS 7
36	UDD - 8	URBAN DESIGN DETAILS 8
37	UDD - 9	URBAN DESIGN DETAILS 9
38	S - 1	STRUCTURAL - GENERAL NOTES
39	S - 2	PROPOSED STRUCTURAL PLAN
40	S - 3	LONGITUDINAL SECTION AT STAIR – EXCAVATION AND BACKFILL LIMITS
41	S - 4	LONGITUDINAL SECTION AT NORTH TERRACE – EXCAVATION AND BACKFILL LIMITS
42	S - 5	LONGITUDINAL SECTION AT SOUTH TERRACE – EXCAVATION AND BACKFILL LIMITS
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44	S - 7	RETAINING WALL 2 AND 2A REINFORCEMENT DETAILS

LIST OF CONTRACT DRAWINGS		
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47	S - 10	RETAINING WALL 4 ELEVATION AND REINFORCEMENT DETAILS
48	S - 11	RETAINING WALL 5 REINFORCEMENT DETAILS
49	S - 12	STAIR REINFORCEMENT DETAILS - 1
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51	S - 14	TERRACE REINFORCEMENT DETAILS
52	S - 15	RAILING DETAILS
53	S - 16	MISCELLANEOUS STRUCTURAL DETAILS
54	C - 1	ROADWAY CONSTRUCTION PLAN - 1
55	C - 2	ROADWAY CONSTRUCTION PLAN - 2
56	C - 3	ROADWAY CROSS SECTIONS
57	C - 4	ROADWAY DETAILS
58	C - 5	GRADING PLAN (W. TREMONT AVENUE) - 1
59	C - 6	GRADING PLAN (W. TREMONT AVENUE) - 2
60	C - 7	GRADING PLAN (STEP STREET)
61	C - 8	HIGHWAY PROFILES - WEST TREMONT AVENUE
62	C - 9	PROPOSED STRIPING AND SIGNAGE PLAN
63	C - 10	PROPOSED DRAINAGE PLAN & PROFILE - 1 (STEP STREET)
64	C - 11	PROPOSED DRAINAGE PLAN & PROFILE - 2 (W TREMONT AVE)
65	C - 12	SOIL EROSION PLAN
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67	MPT - 2	MPT GENERAL NOTES - 2
68	MPT - 3	MPT LEGEND AND ABBREVIATIONS
69	MPT - 4	MPT STAGE 1 - W TREMONT AVE (DRAINAGE)
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72	MPT - 7	MPT STAGE 4 - W TREMONT AVE (SIDEWALK CONSTRUCTION)
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79	STL - 3	STREET LIGHTING PLAN PAGE 2 OF 2
80	STL - 4	STREET LIGHTING DETAILS
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82	LAN - 2	TREE PLANTING PLAN
83	LAN - 3	PLANTING DETAILS & FURNITURE
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86	FD - 1	FIRE ALARM BASE MAP 17

LIST OF CONTRACT DRAWINGS		
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88	FD - 3	FIRE ALARM RELOCATION
89	JB - 1	GENERAL NOTES AND CONDITIONS
90	CE - 1	CON EDISON EXISTING FACILITIES PLAN - 1
91	CE - 2	CON EDISON EXISTING FACILITIES PLAN - 2
92	CE - 3	CON EDISON EXISTING FACILITIES PLAN - 3
93	CE - 4	CON EDISON EXISTING FACILITIES PLAN - 4
94	CE - 5	CON EDISON SPECIAL CARE EXCAVATION PLAN
95	CE - 6	CON EDISON ELECTRIC CAPITAL PLAN
96	CE - 7	CAPITAL PROJECT HWXS511 PLAN
97	CE - 8	CAPITAL PROJECT HWXS511 PLAN
98	ECS - 1	EMPIRE CITY SUBWAY FACILITY PLATE
99	CBL - 1	CABLEVISION CONDUIT UTILITY PLATE

LIST OF STANDARDS AND REFERENCE DRAWINGS				
DRAWING NO.	REVISION DATE	DRAWING TITLE	DETAIL CATEGORY	AGENCY
H - 1010	7/1/2010	STEEL FACED CONCRETE CURB, STEEL FACING TYPE D	HIGHWAY	NYC DOT
H - 1011	7/1/2010	SIDEWALK PEDESTRIAN RAMPS	HIGHWAY	NYC DOT
H - 1012	7/1/2010	TIMBER CURB	HIGHWAY	NYC DOT
H - 1013	7/1/2010	ILLUMINATED TIMBER BARRICADE	HIGHWAY	NYC DOT
H - 1014	7/1/2010	TEMPORARY PEDESTRIAN STEEL BARRICADE	HIGHWAY	NYC DOT
H - 1015	7/1/2010	STEEL FACED DROP CURB DRIVEWAY	HIGHWAY	NYC DOT
H - 1017	7/1/2010	BAR PICKET FENCE (4'- 0" HIGH)	HIGHWAY	NYC DOT
H - 1021	7/1/2010	CHAIN LINK FENCE DETAILS (SH. 1 TO 4)	HIGHWAY	NYC DOT
H - 1031	7/1/2010	TYPICAL PAVEMENT KEY	HIGHWAY	NYC DOT
H - 1034	7/1/2010	TYPICAL CONSTRUCTION JOINTS FOR CONCRETE BASE FOR PAVEMENT	HIGHWAY	NYC DOT
H - 1037	7/1/2010	UNDER SIDEWALK DRAIN	HIGHWAY	NYC DOT
H - 1038	7/1/2010	TYPE III BREAKAWAY BARRICADE	HIGHWAY	NYC DOT
H - 1040	7/1/2010	TRANSVERSE CONSTRUCTION JOINTS FOR CONCRETE BASE	HIGHWAY	NYC DOT
H - 1042A	7/1/2010	STANDARD TRENCH OR HOLE RESTORATION FOR STREETS PROTECTED BY NYC ADMINISTRATION CODE § 19 - 144	HIGHWAY	NYC DOT
H - 1042B	7/1/2010	CONCRETE PAVEMENT RESTORATION	HIGHWAY	NYC DOT
H - 1042C	7/1/2010	ROADWAY RESTORATION FOR NEWLY CONSTRUCTED ROADWAY	HIGHWAY	NYC DOT
H - 1043	7/1/2010	STEEL FACED CURB/STEEL FACING TYPE D FOR STRUCTURES	HIGHWAY	NYC DOT
H - 1045	7/1/2010	CONCRETE SIDEWALK	HIGHWAY	NYC DOT
H - 1046	7/1/2010	STREET TREE PLANTING DETAIL - TYPE I	HIGHWAY	NYC DOT
H - 1046A	7/1/2010	PROTECTIVE TREE BARRIER	HIGHWAY	NYC DOT
H - 1049	7/1/2010	PLASTIC BARREL	HIGHWAY	NYC DOT
H - 1050 1/2/3/4	7/1/2010	REINFORCED CONCRETE PAVEMENT / CONSTRUCTION DETAILS (4 SHEETS)	HIGHWAY	NYC DOT
H - 1051	7/1/2010	TEMPORARY WOOD STAIRS	HIGHWAY	NYC DOT
H - 1053	7/1/2010	DETAILS FOR CONSTRUCTING AREAS OF ADJUSTMENTS AND TRANSITION SECTIONS	HIGHWAY	NYC DOT
H - 1057	7/1/2010	TEMPORARY STORAGE AREA	HIGHWAY	NYC DOT
H - 5124	9/4/1990	TYPE WF 12XX STEEL POST FOR PARKS	STREET LIGHTING	NYC DOT
H - 5260	2/9/2006	TYPE M POLE, FINAL AND LUMINAIRE CONNECTION	STREET LIGHTING	NYC DOT
H - 5275	7/1/1999	CAST PEDESTAL, COLUMN AND CAPITAL	STREET LIGHTING	NYC DOT
H - 3711	-	INSTALLATION OF PHOTO-ELECTRIC CONTROL UNIT	STREET LIGHTING	NYC DOT
J - 5253	11/15/1995	CONCRETE ANCHOR BOLT FOUNDATION	STREET LIGHTING	NYC DOT
MS -1000	7/1/2010	NEW YORK CITY COMPARISON OF DATUM PLATES	HIGHWAY	NYC DOT
MS -1003	7/1/2010	TYPICAL ROADWAY CROSS SECTION / RESURFACING	HIGHWAY	NYC DOT
TAR - 1	12/1/2015	TYPICAL PAVEMENT MARKINGS, ARROWS & SYMBOLS	TRAFFIC	NYC DOT

LIST OF STANDARDS AND REFERENCE DRAWINGS				
DRAWING NO.	REVISION DATE	DRAWING TITLE	DETAIL CATEGORY	AGENCY
TCW - 1	12/1/2015	TYPICAL PAVEMENT MARKINGS, CROSSWALKS & STOP BARS	TRAFFIC	NYC DOT
TSS - 1	3/21/2002	TYPICAL PAVEMENT MARKINGS, SPECIAL SYMBOLS	TRAFFIC	NYC DOT
TWM - 1	12/1/2015	TYPICAL PAVEMENT MARKINGS, WORD MESSAGES	TRAFFIC	NYC DOT
S.D. 141	11/21/2014	MANHOLE CONSTRUCTION POST SETTING AND SUBSIDIARY CONNECTIONS	FDNY	NYC FIRE DEPARTMENT
S.D. 168	11/21/2014	INSTALLATION OF FIRE ALARM PEDESTAL BUMPERS	FDNY	NYC FIRE DEPARTMENT
SE - 1	8/10/2007	STANDARD FOR VERIFIED CLAY PIPE ON CONCRETE CRADLE ON EARTH OR ON ROCK	SEWER	NYC DEP
SE - 11	8/10/2007	STANDARD FOR MANHOLE ON 8" DIA. TO 30" DIA. PIPE SEWER IN DRY LOCATION TYPE A-2 (25' MAX. COVER)	SEWER	NYC DEP
SE - 28A SE - 28C	8/10/2007	STANDARD FOR 4'-0" DIAMETER PRECAST MANHOLE (3 DWGS)	SEWER	NYC DEP
SE - 31A SE - 31B	8/10/2007	STANDARD FOR PRECAST MANHOLE DETAILS (3 DWGS)	SEWER	NYC DEP
SE - 35	8/10/2007	STANDARD FOR REMOVABLE PRECAST REINFORCED CONCRETE SLAB	SEWER	NYC DEP
SE - 38	8/10/2007	STANDARD FOR MANHOLE CHIMNEY DETAILS	SEWER	NYC DEP
SE - 39	9/15/2008	STANDARD FOR 27" DIAMETER CAST IRON MANHOLE FRAME AND COVER (FOR ACCESS OR CLEANOUT)	SEWER	NYC DEP
SE - 43	8/10/2007	STANDARD FOR CAST IRON MANHOLE STEP	SEWER	NYC DEP
SE - 45	8/10/2007	STANDARD FOR CIRCULAR CAST IRON MANHOLE STEP (BOLT-ON TYPE)	SEWER	NYC DEP
SE - 48	8/10/2007	STANDARD FOR TYPE 2 CATCH BASIN (WITHOUT CURB PIECE)	SEWER	NYC DEP
SE - 49	8/10/2007	STANDARD FOR TYPE 3 CATCH BASIN (WITHOUT CURB PIECE)	SEWER	NYC DEP
SE - 52A	8/10/2007	STANDARD FOR PRECAST TYPE 1 CATCH BASIN	SEWER	NYC DEP
SE - 53A	8/10/2007	STANDARD FOR PRECAST TYPE 2 CATCH BASIN	SEWER	NYC DEP
SE - 53B	8/10/2007	STANDARD FOR SPLIT PRECAST TYPE 2 CATCH BASIN	SEWER	NYC DEP
SE - 54	8/10/2007	STANDARD FOR PRECAST TYPE 3 CATCH BASIN	SEWER	NYC DEP
SE - 58	1/30/2009	STANDARD FOR CAST IRON FRAME FOR CATCH BASINS (WITHOUT CURB PIECE)	SEWER	NYC DEP
SE - 59	1/30/2009	STANDARD FOR CAST IRON GRATING, BACK PLATE AND CURB PIECE FOR CATCH BASINS	SEWER	NYC DEP
SE - 60	1/30/2009	STANDARD FOR CAST IRON HOOD AND HOOKS FOR CATCH BASINS	SEWER	NYC DEP
SE - 61	1/30/2009	STANDARD FOR DUCTILE IRON PIPE ALTERNATIVE	SEWER	NYC DEP



LIST OF STANDARDS AND REFERENCE DRAWINGS				
DRAWING NO.	REVISION DATE	DRAWING TITLE	DETAIL CATEGORY	AGENCY
SE - 62	8/10/2007	STANDARD FOR HOUSE CONNECTIONS (FOR 6" AND 8" DIA. CAST IRON SOIL PIPE OR VITRIFIED CLAY PIPE ON CONCRETE CRADLE OR ENCASED IN CONCRETE ON EARTH OR ON ROCK)	SEWER	NYC DEP
SE - 63	8/10/2007	STANDARD FOR RISER ON 10" DIAMETER TO 18" DIAMETER VITRIFIED CLAY PIPE SEWERS ON CONCRETE CRADLE.	SEWER	NYC DEP

## NOTE:

1. OTHER AGENCY STANDARDS AND REFERENCE DRAWINGS TO BE USED WHERE APPLICABLE.
2. THE ABOVE NYCDEP STANDARD DRAWINGS ARE INCORPORATED BY REFERENCE INTO THE CONTRACT DOCUMENTS. THE WORK REQUIRED TO FURNISH AND INSTALL THE WATER MAINS AND APPURTENANCES ARE INDICATED IN THE SCHEDULED BID ITEMS. ANY WORK REQUIRED THAT IS SHOWN ON THE DRAWINGS BUT NOT ITEMIZED AS A SPECIFIC PAY ITEM IS DEEMED INCLUDED IN ALL SCHEDULED BID ITEMS.

# **BID SCHEDULE**

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

## **NOTES:**

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

Item Number Format	Applicable Specifications
4.XXX 6.XXX 7.XXX 8.XXX <i>(Except 8.01 XXX; see below)</i> 9.XXX	NYC Department of Transportation ("DOT") Standard Highway Specifications, as amended in the R-Pages, located in Volume 3 of 3 herein;  <p style="text-align: center;"><b>AND</b></p> NYC DOT Standard Details of Construction;  <p style="text-align: center;"><b>OR,</b></p> <b><i>if the item is not contained within the Standard Specifications</i></b> , then see the applicable New Sections in the I-Pages, located in Volume 3 of 3 herein.
1.XXX 50.XXX through 55.XXX 60.XXX through 66.XXX 70.XXX through 79.XXX <i>(Except 79.11XXX; see below)</i> DSS XXX DSW XXX	NYC Department of Environmental Protection ("DEP") Standard Sewer and Water Main Specifications, as amended in the R-Pages and SW-Pages, located in Volume 3 of 3 herein;  <p style="text-align: center;"><b>AND</b></p> NYC DOT Specifications for Trunk Main Work;  <p style="text-align: center;"><b>AND</b></p> NYC DOT Sewer Design Standards;  <p style="text-align: center;"><b>AND</b></p> NYC DOT Water Main Standard Drawings;  <p style="text-align: center;"><b>OR,</b></p> <b><i>if the item is not contained within the Standard Specifications</i></b> , then see the Amendments to the Standard Sewer and Water Main Specifications in the SW-Pages, located in Volume 3 of 3 herein.
GI-XXX PM-XXX ROW XXX	New Sections in the I-Pages, located in Volume 3 of 3 herein  <p style="text-align: center;"><b>AND</b></p> NYC DEP Standards for Green Infrastructure.
UTL-XXX	Gas Cost Sharing Standard Specifications in the EP7-Pages, located in Volume 3 of 3 herein.

# **BID SCHEDULE**

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

**(NO FURTHER TEXT ON THIS PAGE)**

## **NOTICES TO BIDDERS**

### **JOINT BID PROJECTS (UNIT PRICE)**

The City has combined its **Public Work, Interference Work, and Utility Work** into one bid contract package and prepared contract documents which include specifications, drawings and all other necessary contract documents. The bid items, specifications, and estimated quantities have been designed to fully compensate the Contractor for its costs to perform the Public Work, Interference Work, and Utility Work.

The Contractor **agrees** that its bid items and prices for the Public Work, Interference Work, and Utility Work shall include all incremental costs and/ or additional compensation for performing Public Work including: coordination of its work with the Utilities, loss of productivity and efficiency, idle time, delays (including any delays occasioned by negotiation of a contract change), change in operations, mobilization, remobilization, demobilization, added cost or expense, loss of profit, other damages or impact costs that may be suffered by the Contractor because of direct or indirect obstructions due to the presence of Utility Facilities, such as conduits, ducts or duct banks containing conductors for live and/or abandoned electric, telephone, cable TV, any type of communication cables, "Non Cost Sharing" gas mains and services, steam mains, and various non-hazardous encasement materials or utility structures located within the Public Work project area.

In the bid solicitation documents, the City has provided estimates of quantities for both Specific Public Work Items and Specific Utility Work Items. Bidders shall be required to bid a **unit price** on Items. For the purposes of identifying the lowest responsive and responsible bidder, a bidder's unit prices bid shall be calculated on the City's Specific Public Work Items and estimates and the Utilities' Specific Utility Work Items and estimates.

**(NO TEXT ON THIS PAGE)**

## BID SCHEDULE

**NOTE:** (1) The Agency may reject a bid if it contains unbalanced bid prices. An unbalanced bid is considered to be one containing lump sum or unit items which do not reflect reasonable actual costs plus a reasonable proportionate share of the Bidder's anticipated profit, overhead costs, and other indirect costs, anticipated 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 in the completed work or structure, and they cover the cost of all work, labor, material, tools, plant and appliances of every description necessary to complete the entire work, as specified, and the removal of all debris, temporary work and appliances.

(3) PLEASE BE SURE A LEGIBLE BID IS ENTERED, IN INK, FOR EACH ITEM.  
Alterations must be initiated in ink by the bidder.

(4) The Extended Amount entered in Column 6 shall be the product of the Estimated Quantity in Column 3 times the Unit Price Bid in Column 5.

(5) Prospective bidders must examine the Bid Schedule carefully and, before bidding, must advise the Commissioner, in writing, if any pages are missing, and must request that such missing pages be furnished them. The pages of this Bid Schedule are numbered consecutively, as follows:  
B - 3 Through B - 34

PLEASE BE SURE A LEGIBLE BID IS ENTERED FOR EACH ITEM.  
THE BIDDER SHALL INSERT THE TOTAL BID PRICE IN  
THE BID FORM ON PAGE C-4 OF THIS BID BOOKLET.

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## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEERS ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 BID UNIT PRICE (IN FIGURES) DOLLARS	COL 6 ESTIMATED TENDER AMOUNT (IN FIGURES) DOLLARS	COL 7 CTS
001	207.26 PREFABRICATED COMPOSITE STRUCTURAL DRAIN	70.00	S.Y.	40	2,800	—
002	4.02 AB-R ASPHALTIC CONCRETE WEARING COURSE, 1-1/2" THICK	23.00	S.Y.	30	690	—
003	4.02 AF-R ASPHALTIC CONCRETE WEARING COURSE, 2" THICK	25.00	S.Y.	40	1,000	—
004	4.02 AG ASPHALTIC CONCRETE WEARING COURSE, 3" THICK	445.00	S.Y.	45	20,025	—
005	4.02 CA BINDER MIXTURE	3.00	TONS	500	1,500	—
006	4.02 CB ASPHALTIC CONCRETE MIXTURE	10.00	TONS	500	5,000	—

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## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN DOLLARS)	COL 6 EXTENDED AMOUNT (IN DOLLARS)
007	4.04 B CONCRETE BASE FOR PAVEMENT, VARIABLE THICKNESS FOR TRENCH RESTORATION, CLASS B-32	10.00	C.Y.	500	5,000
008	4.04 H CONCRETE BASE FOR PAVEMENT, VARIABLE THICKNESS FOR TRENCH RESTORATION, (HIGH-EARLY STRENGTH)	6.00	C.Y.	600	3,600
009	4.04 HD CONCRETE BASE FOR PAVEMENT, 9" THICK (HIGH-EARLY STRENGTH)	5.00	C.Y.	510	2,550
010	4.04 HE CONCRETE BASE FOR PAVEMENT, 10" THICK (HIGH-EARLY STRENGTH)	120.00	C.Y.	510	61,200
011	4.06 CONCRETE IN STRUCTURES, CLASS A-40	300.00	C.Y.	2,370 <del>2,990</del>	711,000 <del>699,000</del>
012	4.09 AE STRAIGHT STEEL FACED CONCRETE CURB (21" DEEP)	320.00	L.F.	80	25,600



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# BID SCHEDULE FORM

SEQ. NO.	ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS
013	4.09 BE DEPRESSED STEEL FACED CONCRETE CURB (21" DEEP)	15.00	L.F.	100 -	1,500 -
014	4.09 CE CORNER STEEL FACED CONCRETE CURB (21" DEEP)	90.00	L.F.	160 -	14,400 -
015	4.11 AA ROCK EXCAVATION IN STREETS, TRENCHES AND STRUCTURES	25.00	C.Y.	1,200 -	30,000 -
016	4.11 AS EARTH EXCAVATION FOR STRUCTURES	525.00	C.Y.	490 -	257,250 -
017	4.11 CC SELECT GRANULAR FILL, PLACE MEASUREMENT	650.00	C.Y.	70 -	45,500 -
018	4.13 AAS 4" CONCRETE SIDEWALK (UNPIGMENTED)	2,700.00	S.F.	15 -	40,500 -

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## BID SCHEDULE FORM

COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS
019	4.13 ABS 4" CONCRETE SIDEWALK (PIGMENTED)	385.00	S.F.	21 -	8,085 -
020	4.13 BAS 7" CONCRETE SIDEWALK (UNPIGMENTED)	435.00	S.F.	18 -	7,830 -
021	4.13 DE EMBEDDED PREFORMED DETECTABLE WARNING UNITS	40.00	S.F.	30 -	1,200 -
022	4.13 X SPECIAL SCORING FOR CONCRETE SIDEWALK	385.00	S.F.	15 -	5,775 -
023	4.14 E EPOXY COATED STEEL REINFORCEMENT BARS	34,000.00	LBS.	6 -	204,000 -
024	4.15 SS STRUCTURAL SOIL FOUNDATION MATERIAL	5.00	C.Y.	170 -	850 -

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## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS
025	4.16 AA TREES REMOVED (4" TO UNDER 12" CALIPER)	4.00	EACH	600 -	2,400 -
026	4.16 AC TREES REMOVED (18" TO UNDER 24" CALIPER)	2.00	EACH	1,500 -	3,000 -
027	4.16 BA TREES PLANTED, 2-1/2" TO 3" CALIPER, ALL TYPES	4.00	EACH	1,600 -	6,400 -
028	4.20 SEEDING	150.00	S.Y.	10 -	1,500 -
029	4.21 TREE CONSULTANT	480.00	P/HR	50 -	24,000 -
030	5.37 CONSTRUCTION REPORT	1.00	L.S.	20,000 -	20,000 -



Department of  
Design and  
Construction

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

PROJECT ID: HWXS511  
CONTRACT PIN: 8502017HW0043C

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## BID SCHEDULE FORM

COL 1 LINE NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)	COL 6 EXTENDED AMOUNT (IN FIGURES)	COL 7 DOLLARS
031	50.31CC15 15" E.S.V.P. COMBINED SEWER, ON CONCRETE CRADLE	190.00	L.F.	650	123,500	—
032	50.31MC12 12" E.S.V.P. STORM SEWER, ON CONCRETE CRADLE	15.00	L.F.	600	9,000	—
033	50.41M6T12 12" D.I.P. CLASS 56 STORM SEWER, ENCASED IN CRUSHED STONE	120.00	L.F.	670	80,400	—
034	51.11P004 STANDARD 4'-0" DIAMETER PRECAST MANHOLE	6.00	EACH	10,000	60,000	—
035	51.41P001 SPECIAL CATCH BASIN NO. 1	1.00	EACH	40,000	40,000	—
036	51.41P002 SPECIAL CATCH BASIN NO. 2	1.00	EACH	40,000	40,000	—

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## BID SCHEDULE FORM

COL 1 SEQUENCE	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS
037	51.41S002 STANDARD CATCH BASIN, TYPE 2	1.00	EACH	75,000	25,000
038	51.42S1S0 INCREMENTAL COST OF STANDARD CATCH BASIN TYPE 3 WITH CURB PIECE IN LIEU OF STANDARD CATCH BASIN TYPE 1	1.00	EACH	15,000	15,000
039	52.11D12 12" DUCTILE IRON PIPE BASIN CONNECTION	10.00	L.F.	600	6,000
040	52.41V10N NEW 10" E.S.V.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE Unit price bid shall not be greater than: \$ 120.00	10.00	L.F.	120	1,200
041	6.01 AC CLEARING AND GRUBBING	550.00	S.Y.	20	11,000
042	6.02 AAN UNCLASSIFIED EXCAVATION	209.00	C.Y.	90	18,810

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## BID SCHEDULE FORM

SEQ. NO.	ITEM NUMBER AND DESCRIPTION	COL. 2 ENGINEER'S ESTIMATE OF QUANTITY	COL. 4 UNIT	COL. 5 QUANTITY IN FIGURES	COL. 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	COL. 7 C.I.S.
043	6.06 AB GRANITE BLOCK SIDEWALK (GROUTED JOINTS) (FURNISH BLOCK)	140.00	S.Y.	300	42,000	—
044	6.18 A - PR STEEL BAR PICKET RAILING	250.00	L.F.	330	82,500	—
045	6.18 A - PR1 STEEL PIPE HANDRAIL	205.00	L.F.	160	32,800	—
046	6.18 A70 STEEL BAR PICKET FENCE, 7'-0" HIGH	125.00	L.F.	350	43,750	—
047	6.18 XPR POST RAILING REMOVED	280.00	L.F.	30	8,400	—
048	6.20 BROKEN STONE BALLAST Unit price bld shall not be less than: \$ 100.00	100.00	C.Y.	100	10,000	—

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## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS
049	6.23 AB REMOVE EXISTING FIRE ALARM POST	1.00	EACH	600 -	600 -
050	6.23 BA FURNISH AND INSTALL FIRE ALARM POST AND SUBBASE IN ACCORDANCE WITH F.D. STD. DWG. #141	1.00	EACH	3,500 -	3,500 -
051	6.23 BP FURNISH AND INSTALL FIRE ALARM PEDESTAL BUMPERS (2 REQUIRED PER SET) IN ACCORDANCE WITH F.D. STD. DWG. #168	1.00	SETS	1,500 -	1,500 -
052	6.25 RS TEMPORARY SIGNS	553.00	S.F.	15 -	8,295 -
053	6.26 TIMBER CURB	803.00	L.F.	10 -	8,030 -
054	6.27 A DEMOLITION OF STRUCTURES	325.00	C.Y.	600 -	195,000 -

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## BID SCHEDULE FORM

COL 1 SEQUENCE	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 INITIAL BID DOLLARS (IN FIGURES)	COL 6 TENDER'S AMOUNT (IN FIGURES) DOLLARS
055	6.27 AW DEMOLITION OF RETAINING WALLS	20.00	C.Y.	1,200 -	24,000 -
056	6.27 M DEMOLITION OF MASONRY STRUCTURES	45.00	C.Y.	1,200 -	54,000 -
057	6.28 BA LIGHTED TYPE III BREAKAWAY BARRICADES	32.00	L.F.	30 -	960 -
058	6.34 ADT TEMPORARY CHAIN LINK FENCE, 8'-0" HIGH	152.00	L.F.	45 -	6,840 -
059	6.34 X REMOVE AND DISPOSE OF EXISTING CHAIN LINK FENCE	150.00	L.F.	20 -	3,000 -
060	6.40 CU ENGINEER'S FIELD OFFICE (JOINT USE) (TYPE CU)	24.00	MONTH	12,000 -	288,000 -



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## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ESTIMATED QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS
061	6.43 PHOTOGRAPHS	602.00	SETS	15 -	9,030 -
062	6.44 THERMOPLASTIC REFLECTORIZED PAVEMENT MARKINGS (4" WIDE)	950.00	L.F.	2 -	1,900 -
063	6.46 DENSE-GRADED STONE BASE	25.00	C.Y.	100 -	2,500 -
064	6.50 CLEANING OF DRAINAGE STRUCTURES	4.00	EACH	1,000 -	4,000 -
065	6.52 CG CROSSING GUARD	2,652.00	P/HR	20 -	53,040 -
066	6.55 SAWCUTTING EXISTING PAVEMENT	100.00	L.F.	10 -	1,000 -

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## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE IN FIGURES DOLLARS	COL 6 EXTENDED AMOUNT IN FIGURES DOLLARS	COL 7 CTS.
067	6.79 AA 6" DUCTILE IRON PIPE CONNECTION	45.00	L.F.	350	15,750	-
068	6.82 A REMOVING EXISTING TRAFFIC AND STREET NAME SIGNS	20.00	S.F.	25	500	-
069	6.82 B REMOVING EXISTING TRAFFIC AND STREET NAME SIGN POSTS	40.00	L.F.	20	800	-
070	6.83 AA FURNISHING NEW NON-REFLECTORIZED TRAFFIC SIGNS	10.00	S.F.	50	500	-
071	6.83 AB FURNISHING NEW TRAFFIC SIGN POSTS	150.00	L.F.	25	3,750	-
072	6.83 AR FURNISHING NEW REFLECTORIZED TRAFFIC SIGNS	90.00	S.F.	50	4,500	-

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## BID SCHEDULE FORM

COL 1 SEQ NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE QTY QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	COL 7 CITS
073	6.83 BA INSTALLING TRAFFIC SIGNS	90.00	S.F.	50 -	4,500 -	-
074	6.83 BB INSTALLING TRAFFIC SIGN POSTS	150.00	L.F.	30 -	4,500 -	-
075	6.87 PLASTIC BARRELS	63.00	EACH	55 -	3,465 -	-
076	6.91 REFLECTIVE CRACKING MEMBRANE (18" WIDE)	592.00	L.F.	4 -	2,368 -	-
077	65.31FF FURNISHING, DELIVERING AND PLACING FILTER FABRIC Unit price bid shall not be less than: \$ 0.15	1,000.00	S.F.	0 20/	200 -	-
078	7.13 B MAINTENANCE OF SITE Unit price bid shall not be less than: \$ 4,500.00	18.00	MONTH	25,000 -	450,000 -	-

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## BID SCHEDULE FORM

COL 1 SEQ NO	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)	COL 6 EXTENDED AMOUNT (IN FIGURES)	COL 7 DOLLARS	COL 8 CENTS
079	7.36 PEDESTRIAN STEEL BARRICADES	202.00	L.F.	15	3,030		
080	7.50 CB2 CITY BENCH WITH BACK (V 2)	1.00	EACH	6,000	6,000		
081	7.88 AA RODENT INFESTATION SURVEY AND MONITORING Unit price bid shall not be less than: \$ 4,300.00	1.00	L.S.	4,300	4,300		
082	7.88 AB RODENT BAIT STATIONS Unit price bid shall not be less than: \$ 75.00	185.00	EACH	75	13,875		
083	7.88 AC BAITING OF RODENT BAIT STATIONS Unit price bid shall not be less than: \$ 15.00	185.00	EACH	15	2,775		
084	7.88 AD WATERBUG BAIT APPLICATIONS Unit price bid shall not be less than: \$ 120.00	13.00	BLOCK	120	1,560		

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## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEERS ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS
085	7.96 A ANTI-GRAFFITI COATING	1,700.00	S.F.	6 -	10,200 -
086	70.51EO EXCAVATION OF BOULDERS IN OPEN CUT Unit price bid shall not be less than: \$ 105.00	10.00	C.Y.	200 -	2,000 -
087	70.61RE ROCK EXCAVATION	110.00	C.Y.	1,200 -	132,000 -
088	70.71SB STONE BALLAST Unit price bid shall not be less than: \$ 22.50	40.00	C.Y.	60 -	2,400 -
089	70.81CB CLEAN BACKFILL Unit price bid shall not be less than: \$ 17.50	380.00	C.Y.	40 -	15,200 -
090	73.11AB ADDITIONAL BRICK MASONRY Unit price bid shall not be less than: \$ 62.50	12.00	C.Y.	63 -	756 -

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## BID SCHEDULE FORM

BID ITEM SECTION	ITEM NUMBER AND DESCRIPTION	ESTIMATE QUANTITY	ENGINEERS ESTIMATE QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
					UNIT PRICE (IN FIGURES)	UNIT PRICE (IN FIGURES)	EXTENDED AMOUNT (IN FIGURES)	EXTENDED AMOUNT (IN FIGURES)
091	73.31AE1 ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (0' TO 12' DEPTH) Unit price bid shall not be less than: \$ 110.00	40.00		C.Y.	230	-	9,200	-
092	73.41AG ADDITIONAL SELECT GRANULAR BACKFILL Unit price bid shall not be less than: \$ 17.50	145.00		C.Y.	50	-	7,250	-
093	8.01 C1 HANDLING, TRANSPORTING AND DISPOSAL OF NON-HAZARDOUS CONTAMINATED SOIL	300.00		TONS	100	-	30,000	-
094	8.01 C2 SAMPLING AND TESTING OF CONTAMINATED/POTENTIALLY HAZARDOUS SOIL FOR DISPOSAL PURPOSES	3.00		SETS	3,000	-	9,000	-
095	8.01 H HANDLING, TRANSPORTING AND DISPOSAL OF HAZARDOUS SOIL	10.00		TONS	600	-	6,000	-
096	8.01 S HEALTH AND SAFETY	1.00		L.S.	7,000	-	7,000	-

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## BID SCHEDULE FORM

COL-1 SEQ. NO.	COL-2 ITEM NUMBER AND DESCRIPTION	COL-3 ENGINEER'S ESTIMATE OF QUANTITY	COL-4 UNIT	COL-5 UNIT PRICE (IN FIGURES) DOLLARS CENTS	COL-6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CENTS
097	8.01 W1 REMOVAL, TREATMENT, AND DISCHARGE/DISPOSAL OF CONTAMINATED WATER	1.00	DAY	500 -	500 -
098	8.01 W2 SAMPLING AND TESTING OF CONTAMINATED WATER	2.00	SETS	1,500 -	3,000 -
099	8.22 EMW ELASTOMERIC WATERPROOFING	450.00	S.F.	30 -	13,500 -
100	8.53 WFR RETAINING WALL FLAG REPAIRS PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 100,000.00	1.00	F.S.	100,000 00	\$100,000 00
101	9.30 STORM WATER POLLUTION PREVENTION	1.00	L.S.	15,000 -	15,000 -



Department of  
Design and  
Construction

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

PROJECT ID: HWXS511

CONTRACT PIN: 8502017HW00043C

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## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	C.T.S.
102	9.71 WBB VIBRATION MONITORING OF EXISTING BUILDINGS	1.00	L.S.	30,000	30,000	—
103	9.95 GC GRANITE COPING	75.00	L.F.	400	30,000	—
104	9.95 GCB GRANITE CURB WALL	24.00	C.F.	500	12,000	—
105	9.95 GCBC BEVELED GRANITE COPING WITH INTEGRAL BIKE CHANNEL	170.00	L.F.	440	74,800	—
106	9.95 GCF FLUSH GRANITE COPING	95.00	L.F.	350	33,250	—
107	9.95 GP GRANITE LIGHTING PIERS	93.00	C.F.	450	41,850	—





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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: HWXS511  
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN CONTRACT PIN: 8502017HW0043C

## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS.	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS.
108	9.95 GST GRANITE STAIR TREADS	570.00	L.F.	300 -	171,000 -
109	9.95 GV GRANITE VENEER	300.00	S.F.	WTJ 380 426 92	114,000 - WTJ 128,090 25
110	9.99 M FLASHING ARROW BOARD	10.00	MONTH	2,000 -	20,000 -
111	JB 100.2(CE) UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION AND/OR TEST PIT (TYPE 2)	1.00	EACH	2,000 -	2,000 -
112	JB 101.1(CE) UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE 1)	1.00	EACH	5,500 -	5,500 -
113	JB 101.2(CE) UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE 2)	6.00	EACH	6,000 -	36,000 -

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## BID SCHEDULE FORM

COL 1 SEQ NO	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEERS ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)	COL 6 EXTENDED AMOUNT (IN FIGURES)
114	JB 101.3(CE) UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .3)	1.00	EACH	8,500	8,500
115	JB 226(CE) INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES	1.00	EACH	6,000	6,000
116	JB 300(CE) SPECIAL CARE EXCAVATION AND BACKFILLING	5.00	C.Y.	400	2,000
117	JB 301(CE) SPECIAL CARE EXCAVATION AND BACKFILLING FOR OIL-O-STATIC PIPE	43.00	C.Y.	420	18,060
118	JB 302(CE) FIELD COATING OF OIL-O-STATIC FEEDER PIPES	227.00	L.F.	20	4,540
119	JB 303(CE) FURNISH, DELIVER AND INSTALL TYPE 3/8 CLEAN SAND BACKFILL	88.00	C.Y.	120	10,560

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## BID SCHEDULE FORM

COL 1 SECTION	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEERS ESTIMATE QTY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	COL 7 C.T.S.
120	JB 330E.1(CE) SUPPORT AND PROTECTION OF ELECTRIC AND GAS FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS (TYPE .1)	65.00	L.F.	120	7,800	-
121	JB 350 (CABV) OVERHEAD ACCOMMODATION PROTECTION OF OVERHEAD FACILITIES, POLES AND APPURTENANCES	1.00	L.S.	5,000	5,000	-
122	JB 350(CE) OVERHEAD ACCOMMODATION, PROTECTION OF OH FACILITIES & APPURTENANCES	1.00	L.S.	10,000	10,000	-
123	JB 351(CE) INSTALL AND REMOVE "A" FRAME ON UTILITY POLES	2.00	EACH	1,500	3,000	-
124	JB 400(CE) TEST PITS FOR UTILITY FACILITIES	50.00	C.Y.	300	15,000	-
125	JB 401(CE) TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES	12.00	C.Y.	400	4,800	-

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## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEERS ESTIMATE QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	COL 7 QTS
126	JB 402.1(CE) EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	120.00	L.F.	600	7,200	—
127	JB 403(CE) PLACING STEEL PROTECTION PLATES FOR UTILITY FACILITIES	1,500.00	S.F.	3	4,500	—
128	JB 405.1(CE) TRENCH EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS LESS THAN FIVE FEET	230.00	C.Y.	260	59,800	—
129	JB 406(CE) EXCAVATION FOR UTILITY STRUCTURE	24.00	C.Y.	400	9,600	—
130	JB 450.2(CE) CONSTRUCTION FIELD SUPPORT - SMALL SIZE CREW (TYPE 2)	94.00	CREW/HR	600	56,400	—
131	JB 450.3(CE) CONSTRUCTION FIELD SUPPORT - MEDIUM SIZE CREW (TYPE 3)	98.00	CREW/HR	1,100	107,800	—

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# BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	COL 7 CTS
132	JB 500(CE) REMOVAL OF ABANDONED UTILITY CONDUITS (NON-CONCRETE ENCASED)	120.00	L.F.	10	1,200	-
133	JB 500(ECS) REMOVAL OF ABANDONED UTILITY CONDUITS (NON-CONCRETE ENCASED)	40.00	L.F.	10	400	-
134	JB 6.02 XHEC (CE) INCREMENTAL COST FOR MODIFYING WORK METHODS NEAR (WITHIN 3 FEET OF) CONSOLIDATED EDITION OF NEW YORK INC. FACILITIES AND BUILDING VAULTS)	90.00	C.Y.	270	24,300	-
135	JB 6.02 XSCW (CE) INCREMENTAL COST FOR USING SPECIAL CARE WORK METHODS NEAR (FROM 3 FEET TO 50 FEET) CONSOLIDATED EDITION OF NEW YORK, INC. FACILITIES	200.00	C.Y.	150	30,000	-
136	JB 603E.1(CE) INSTALL UTILITY CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	100.00	L.F.	20	2,000	-

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## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER & DESCRIPTION	COL 3 ESTIMATE ENGINEER'S QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS
137	JB 603E.2(CE) INSTALL UTILITY CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	340.00	L.F.	30	10,200
138	JB 636 EA(CE) ADJUSTMENT OF UTILITY HARDWARE (UNDER 7" WIDTH)	1.00	EACH	200	200
139	JB 636 EC(CE) ADJUSTMENT OF UTILITY HARDWARE (14" TO UNDER 30" WIDTH)	1.00	EACH	500	500
140	JB 638 N(CE) INSTALLATION OF FIELD CONSTRUCTED UTILITY STRUCTURE	6.00	C.Y.	3,000	18,000
141	JB 7.06 (CE) PERFORATED CORRUGATED POLYETHYLENE UNDERDRAIN TUBING (CUSTOM FOR HWXS511)	110.00	L.F.	60	6,600
142	JB 700(CE) SPECIAL MODIFICATION OF WORK METHODS TO ACCOMMODATE/PROTECT UNDERGROUND FACILITIES WITH LIMITED COVER	102.00	C.Y.	110	11,220

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## BID SCHEDULE FORM

LINE NO.	ITEM NUMBER and DESCRIPTION	COL 3 ENGINEERS ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	CIS
143	JB 710.1(CE) REMOVAL OF ABANDONED UTILITY STEEL/CAST IRON/PLASTIC PIPES, UP TO AND INCLUDING 12" DIAMETER PIPE	350.00	L.F.	15 -	5,250 -	-
144	JB 800(CE) MODIFICATION OF TROLLEY STRUCTURE REMOVAL WHEN CROSSING UTILITY FACILITIES	100.00	L.F.	100 -	10,000 -	-
145	JB 801(CE) MODIFICATION OF TROLLEY STRUCTURE REMOVAL PARALLEL TO UTILITY FACILITIES	100.00	L.F.	100 -	10,000 -	-
146	JB 802A(CE) SPECIAL CARE EXCAVATION AND RESOTRATION FOR SIDEWALK WORK	1,075.00	S.F.	7 -	7,525 -	-
147	JB 802A(ECS) SPECIAL CARE EXCAVATION AND RESOTRATION FOR SIDEWALK WORK	100.00	S.F.	7 -	700 -	-
148	JB 802B(CE) SPECIAL CARE EXCAVATION AND RESOTRATION FOR CURB WORK	180.00	L.F.	15 -	2,700 -	-

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## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS
149	JB 802B(ECS) SPECIAL CARE EXCAVATION AND RESOTRATION FOR CURB WORK	35.00	L.F.	15 -	525 -
150	JB 803.2(CE) LINE CUT BY PNEUMATIC TOOLS IN LIEU OF SAW CUT ASSOCIATED WITH ROADWAY REMOVAL OPERATIONS (LINE CUT ANY COMBINATION OF ASPHALT AND CONCRETE ROADWAY)	165.00	L.F.	25 -	4,125 -
151	JB 900 (CABV) EXTRA UTILITY WORK COSTS ALLOWANCE PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 15,000.00	1.00	F.S.	15,000 00	\$15,000 00
152	JB 900(CE) EXTRA UTILITY WORK COSTS ALLOWANCE PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 94,380.00	1.00	F.S.	94,380 00	\$94,380 00
153	JB 900(ECS) EXTRA UTILITY WORK COSTS ALLOWANCE PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 3,000.00	1.00	F.S.	3,000 00	\$3,000 00



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## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	CIS
154	NYC-29634.1837 INCIDENTAL REPAIRS PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 150,000.00	1.00	F.S.	150,000.00	\$150,000.00	00
155	SL-20.01.02 FURNISH AND INSTALL FOUNDATION FOR TYPE "WF" LAMPPOST, AS PER DRAWING E-5124	1.00	EACH	3,200	3,200	—
156	SL-20.02.06 REVAMP EXISTING FOUNDATION, AS PER DRAWING E-3635	1.00	EACH	900	900	—
157	SL-20.03.01 FURNISH AND INSTALL PEDESTAL TYPE CONCRETE FOUNDATION, AS PER DRAWING D-3044A	4.00	EACH	1,800	7,200	—
158	SL-20.07.02 ROTOR FOUNDATION. FURNISH AND INSTALL RIGID CONDUIT BEND, SIZE AS ORDERED.	1.00	EACH	1,400	1,400	—

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## BID SCHEDULE FORM

COL SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS
159	SL-20.08.02 REMOVE FOUNDATION OTHER THAN STANDARD TYPE.	2.00	EACH	700 -	1,400 -
160	SL-21.03.03 FURNISH AND INSTALL TYPE 2T, 6T, 8T OR 12T LAMPPOST WITH TRANSFORMER BASE	1.00	EACH	4,200 -	4,200 -
161	SL-21.04.55 FURNISH AND INSTALL TYPE "FLUSHING MEADOWS PARK" LAMPPOST AS PER STD. DWG. H-5305.	5.00	EACH	4,600 -	23,000 -
162	SL-22.15.05 FURNISH AND INSTALL 70 WATT MAX LED "FLUSHING MEADOW PARK" TYPE LUMINAIRE AS PER SPECIFICATION 474	5.00	EACH	5,000 -	25,000 -
163	SL-22.16.05 FURNISH AND INSTALL ROADWAY TYPE LED FIXTURE AS PER SPECIFICATION 466 WITH PEC RECEPTACLE AND PEC	3.00	EACH	800 -	2,400 -
164	SL-24.01.04 REMOVE BRACKET, LUMINAIRE AND CONTROL, IF ANY, FROM WOOD POLE	2.00	EACH	250 -	500 -

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## BID SCHEDULE FORM

SEQ. NO.	ITEM NUMBER and DESCRIPTION	COL 1 ENGINEER'S ESTIMATE OF QUANTITY	COL 2 UNIT	COL 3 UNIT PRICE (IN FIGURES) DOLLARS	COL 4 EXTENDED AMOUNT (IN FIGURES) DOLLARS	COL 5 CTS
165	SL-24.01.05 FURNISH AND INSTALL FABRICATED STEEL 8 FT. BRACKET WITH HARDWARE ON WOOD POLE, AS PER DRAWING J-3585.	1.00	EACH	800	800	—
166	SL-24.02.12 FURNISH AND INSTALL 8 FT. ALUMINUM ARM ON EXISTING LAMPPOST.	1.00	EACH	500	500	—
167	SL-26.05.01 FURNISH AND INSTALL SINGLE PHASE 35 AMPERE RELAY	1.00	EACH	800	800	—
168	SL-27.01.01 FURNISH AND INSTALL ALUMINUM TAG ON A LAMPPOST, AS PER DRAWING D-2861	5.00	EACH	250	1,250	—
169	SL-28.01.02 FURNISH AND INSTALL COPPER WELD GROUND ROD AND CLAMP IN DIRT AREA, BURIED BOX, SIDEWALK OR ROADWAY BOX, AS PER DRAWING H-5019.	2.00	EACH	400	800	—
170	SL-29.01.03 FURNISH, INSTALL, MAINTAIN AND REMOVE EQUIPMENT FOR TEMPORARY LIGHTING, AS PER DRAWING J-5226	3.00	EACH	3,000	9,000	—

## BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEERS ESTIMATE OF QUANTITY	COL 4 UNITS	COL 5 UNIT PRICE (IN FIGURES) DOLLARS		COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	
					CTS		CTS
171	SL-33.01.02 FURNISH AND INSTALL NO. 6 AWG XLP COPPER CABLE OR EQUAL IN CONDUIT	835.00	L.F.	6	-	5,010	-
172	SL-33.03.01 FURNISH AND INSTALL #6 BARE COPPER CONDUCTOR IN CONDUIT OR OVERHEAD.	420.00	L.F.	6	-	2,520	-
173	SL-35.01.04 FURNISH AND INSTALL 2" HOT DIPPED GALVANIZED STEEL CONDUIT IN PAVED AREA	255.00	L.F.	90	-	22,950	-
174	SL-35.03.04 FURNISH AND INSTALL 2" HOT DIPPED GALVANIZED STEEL CONDUIT IN UNPAVED AREA	165.00	L.F.	80	-	13,200	-
175	SL-35.09.04 FURNISH AND INSTALL 2" HOT DIPPED GALVANIZED STEEL CONDUIT ON STRUCTURE	25.00	L.F.	100	-	2,500	-
176	SL-37.05.04 FURNISH AND INSTALL TYPE 2418 SIDEWALK CONCRETE BOX WITH CAST IRON FRAME AND COVER WITH TAMPER PROOF BOLTS AS PER DWG J-3179A.	2.00	EACH	5,500	-	11,000	-

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# BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS CTS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS CTS
177	SL-37.05.09 FURNISH AND INSTALL TYPE 2418 ROADWAY CONCRETE BOX WITH CAST IRON FRAME AND COVER WITH TAMPER PROOF BOLTS AS PER DWG J-3179B.	2.00	EACH	5500 -	11,000 -
178	SL-40.01.01 FURNISH AND INSTALL OVERHEAD SERVICE ENTRANCE FITTING	1.00	EACH	900 -	900 -

SUB-TOTAL: \$ 5,179,304 -

179	6.39 A MOBILIZATION BID PRICE OF MOBILIZATION SHALL NOT EXCEED 4% OF THE ABOVE SUB-TOTAL PRICE.	1.00	L.S.	206,696 -	206,696 -
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TOTAL BID PRICE: \$ 5,386,000 -

PLEASE BE SURE A LEGIBLE BID IS ENTERED FOR EACH ITEM.  
THE BIDDER SHALL INSERT THE TOTAL BID PRICE IN  
THE BID FORM ON PAGE C-4 OF THIS BID BOOKLET.

**BID FORM  
THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE**

**BID FOR FURNISHING ALL LABOR AND  
MATERIAL NECESSARY AND REQUIRED FOR:**

**PROJECT ID: HWXS511**

**RECONSTRUCTION OF**

**WEST TREMONT STEP STREET**

**INCLUDING STREET LIGHTING, ROADWAY RECONSTRUCTION, SEWER, AND TRAFFIC WORK**

**Together With All Work Incidental Thereto**

**BOROUGH OF THE BRONX  
CITY OF NEW YORK**

Name of Bidder: LAWS Construction Corp

Date of Bid Opening: 7/14/17

Bidder is: (Check one, whichever applies) Individual ( ) Partnership ( ) Corporation ☒

Place of Business of Bidder: 34 Irvington St, Pleasantville, NY 10570

Bidder's Telephone Number: (914) 741-2100 Fax Number: (914) 741-2150

Bidder's E-Mail Address: bids@lawscc.com

Residence of Bidder (If Individual): \_\_\_\_\_

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 New York

Name and Home Address of President: William J Vescio  
144 Old Briarcliff Rd, Briarcliff Manor, NY 10510

Name and Home Address of Secretary: Steven A Vescio  
136 Old Briarcliff Rd, Briarcliff Manor, NY 10510

Name and Home Address of Treasurer: Steven A Vescio  
136 Old Briarcliff Rd, Briarcliff Manor, NY 10510

## BID FORM

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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).

**BID FORM**

**PROJECT ID. HWXS511**

**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:  
(a/k/a BID PROPOSAL)**

WTV 5,386,000  
\$ 5,388,000 —

7/25/17 YAV

**BIDDER'S SIGNATURE AND AFFIDAVIT**

**Bidder:** LAWS Construction Corp

**By:** [Signature] President  
(Signature of Partner or corporate officer)

[Signature] Secretary

**Attest:  
(Corporate Seal)**

**Secretary of Corporate Bidder**

**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**

STATE OF NEW YORK, COUNTY OF \_\_\_\_\_ ss: \_\_\_\_\_ being duly sworn says:  
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 \_\_\_\_\_  
day of \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_  
Notary Public

**AFFIDAVIT WHERE BIDDER IS A PARTNERSHIP**

STATE OF NEW YORK, COUNTY OF \_\_\_\_\_ ss: \_\_\_\_\_ being duly sworn says:  
I am a member of \_\_\_\_\_ the firm described in and which executed the foregoing 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 \_\_\_\_\_  
day of \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_  
Notary Public

**AFFIDAVIT WHERE BIDDER IS A CORPORATION**

STATE OF NEW YORK, COUNTY OF Westchester ss: \_\_\_\_\_ being duly sworn says:  
I am the William J. Vesio President of the above named corporation whose name is subscribed to and which executed the foregoing bid. I reside at Briarcliff Manor, NY  
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 \_\_\_\_\_  
14th day of July, 2017

  
Notary Public

**DUNCAN C. GRAY III**  
Notary Public, State of New York  
No. 01GR6111642  
Qualified in Westchester County  
Commission Expires June 14, 2020

**AFFIRMATION**

**PROJECT ID. HWXS511**

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: None

(If none, the bidder shall insert the word "None" in the space provided above.)

Full Name of Bidder: LAWS Construction Corp  
Address: 34 Irvington St  
City Pleasantville State NY Zip Code 10570

**CHECK ONE BOX AND INCLUDE APPROPRIATE NUMBER:**

☐ A - Individual or Sole Proprietorship\*  
SOCIAL SECURITY NUMBER

-----

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

-----

☒ C - Corporation  
EMPLOYER IDENTIFICATION NUMBER

13-3209931

By: [Signature]  
Signature

Title: President

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.

**BID BOND 1  
FORM OF BID BOND**

**KNOW ALL MEN BY THESE PRESENTS.** That we, LAWS CONSTRUCTION CORP.

34 IRVINGTON STREET, PLEASANTVILLE, NY 10570

hereinafter referred to as the "Principal", and Fidelity and Deposit Company of Maryland  
600 Red Brook Blvd., Suite 600  
Owings Mills, MD 21117

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

Ten Percent of Amount Bid

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

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

PROJECT ID: HWXS511 - RECONSTRUCTION OF WEST TREMONT STEP STREET, INCLUDING STREET LIGHTING, ROADWAY RECONSTRUCTION, SEWER AND TRAFFIC WORK/BRONX

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.

## 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 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.

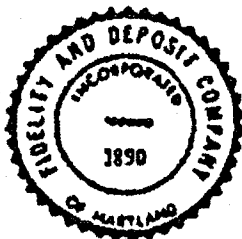
IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers the 14th day of July, 2017

(Seal)

LAWS CONSTRUCTION CORP. (L.S.)  
Principal

By: [Signature]

(Seal)



Fidelity and Deposit Company of Maryland  
Surety

By: [Signature]  
Dennis M. O'Brien, Attorney-in-Fact

ACKNOWLEDGMENT OF PRINCIPAL - IF A CORPORATION

STATE OF NY  
COUNTY OF WESTCHESTER } ss

On this 14<sup>th</sup> day of JULY, 2017, before me personally appeared  
WILLIAM J. VESCO to be known, who, being by me duly sworn, did depose and  
say; that he/she resides at BEARCLIFF MANOR 17, that he/she is the PRESIDENT  
of LAWS CONSTRUCTION CORP the corporation described in and which  
executed the within insurance instrument; that he/she knows the seal of said corporation; that the seal affixed  
to said instrument is such corporate seal; that it was so affixed by the Board of Directors of said corporation;  
and that he/she signed his/her name thereto by like order.

Elizabeth A. Bruno  
Notary Public, State of New York  
No. 01BR26075295  
Qualified in Dutchess County  
Commission Expires June 03, 2018

ACKNOWLEDGMENT OF PRINCIPAL - IF INDIVIDUAL OR FIRM

STATE OF  
COUNTY OF } ss

On this ..... day of ..... before me personally appeared  
..... to me know to be (the individual) (one of the firm  
of.....), described in and who executed the within instrument and he/she  
thereupon acknowledged to me that he/she executed the same (as the act and deed of said firm).

ACKNOWLEDGMENT OF SURETY COMPANY

STATE OF New York  
COUNTY OF Westchester } ss

On this July 14, 2017, before me personally came Dennis M. O'Brien  
to me known, who, being by me duly sworn, did depose and say; that he/she resides in  
North Merrick, New York; that he/she is the Attorney-in-Fact of the  
FIDELITY AND DEPOSIT COMPANY OF MARYLAND the corporation described in which  
executed the above instrument; that he/she knows the seal of said corporation; that the seal affixed to said  
instrument is such corporate seal; that it was so affixed by the Board of Directors of said corporation; and that  
he/she signed his/her name thereto by like order; and the affiant did further depose and say that the  
Superintendent of Insurance of the State of New York, has, pursuant to Section 1111 of the Insurance Law of  
the State of New York, issued to Dennis M. O'Brien his/her  
certificate of qualification evidencing the qualification of said Company and its sufficiency under any law of the  
State of New York as surety and guarantor, and the propriety of accepting and approving it as such; and that  
such certificate has not been revoked.

ALICE MCCARTHY  
NOTARY PUBLIC, State of New York  
No. 01MC5079342  
Qualified in Dutchess County  
Commission Expires June 02, 2019

Notary Public

# FIDELITY AND DEPOSIT COMPANY

OF MARYLAND

600 Red Brook Blvd., Suite 600, Owings Mills, MD 21117

## Statement of Financial Condition

As Of December 31, 2016

### ASSETS

Bonds .....	\$ 141,903,342
Stocks .....	22,845,654
Cash and Short Term Investments.....	3,080,053
Reinsurance Recoverable.....	13,996,720
Other Accounts Receivable.....	27,147,872
<b>TOTAL ADMITTED ASSETS .....</b>	<b>\$ 208,973,641</b>

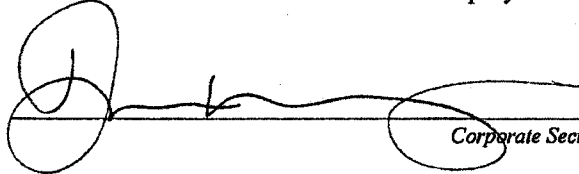
### LIABILITIES, SURPLUS AND OTHER FUNDS

Reserve for Taxes and Expenses.....	\$ 896,428
Ceded Reinsurance Premiums Payable .....	40,193,693
Securities Lending Collateral Liability .....	0
<b>TOTAL LIABILITIES.....</b>	<b>\$ 41,090,121</b>
Capital Stock, Paid Up .....	\$ 5,000,000
Surplus .....	162,883,521
<b>Surplus as regards Policyholders.....</b>	<b>167,883,520</b>
<b>TOTAL .....</b>	<b>\$ 208,973,641</b>

Securities carried at \$62,166,344 in the above statement are deposited with various states as required by law.

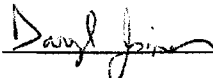
Securities carried on the basis prescribed by the National Association of Insurance Commissioners. On the basis of market quotations for all bonds and stocks owned, the Company's total admitted assets at December 31, 2016 would be \$209,350,832 and surplus as regards policyholders \$168,260,711.

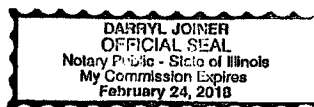
I, DENNIS F. KERRIGAN, Corporate Secretary of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing statement is a correct exhibit of the assets and liabilities of the said Company on the 31st day of December, 2016.

  
Corporate Secretary

State of Illinois }  
City of Schaumburg } SS:

Subscribed and sworn to, before me, a Notary Public of the State of Illinois, in the City of Schaumburg, this 1<sup>st</sup> day of March, 2017.

  
Notary Public



Bond Number Bid Bond

Obligee: The City of New York

**ZURICH AMERICAN INSURANCE COMPANY  
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY  
FIDELITY AND DEPOSIT COMPANY OF MARYLAND  
POWER OF ATTORNEY**

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Maryland, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Maryland (herein collectively called the "Companies"), by Michael P. Bond, Vice President, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint Dennis M. O'Brien, its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: any and all bonds and undertakings, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York, the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland, and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland, in their own proper persons.

The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND, this 24th day of April, A.D. 2017.

ATTEST:  
ZURICH AMERICAN INSURANCE COMPANY  
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY  
FIDELITY AND DEPOSIT COMPANY OF MARYLAND

*Michael P. Bond*

By: Michael P. Bond  
Vice President



*Dawn E. Brown*

By: Dawn E. Brown  
Secretary

State of Maryland  
County of Baltimore

On this 24th day of April, A.D. 2017, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, Michael P. Bond, Vice President and Dawn E. Brown, Secretary of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, depose and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.

*Constance A. Dunn*  
Constance A. Dunn, Notary Public  
My Commission Expires: July 9, 2019



## EXTRACT FROM BY-LAWS OF THE COMPANIES

"Article V, Section 8, Attorneys-in-Fact. The Chief Executive Officer, the President, or any Executive Vice President or Vice President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Company, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify or revoke any such appointment or authority at any time."

### CERTIFICATE

I, the undersigned, Vice President of the ZURICH AMERICAN INSURANCE COMPANY, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that Article V, Section 8, of the By-Laws of the Companies is still in force.

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the ZURICH AMERICAN INSURANCE COMPANY at a meeting duly called and held on the 15th day of December 1998.

RESOLVED: "That the signature of the President or a Vice President and the attesting signature of a Secretary or an Assistant Secretary and the Seal of the Company may be affixed by facsimile on any Power of Attorney...Any such Power or any certificate thereof bearing such facsimile signature and seal shall be valid and binding on the Company."

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at a meeting duly called and held on the 5th day of May, 1994, and the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990.

RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this 14th day of July, 2017.



*Michael C. Fay*

Michael C. Fay, Vice President

**TO REPORT A CLAIM WITH REGARD TO A SURETY BOND, PLEASE SUBMIT A COMPLETE DESCRIPTION OF THE CLAIM INCLUDING THE PRINCIPAL ON THE BOND, THE BOND NUMBER, AND YOUR CONTACT INFORMATION TO:**

Zurich Surety Claims  
1299 Zurich Way  
Schaumburg, IL 60196-1056  
[www.zurichna.com/en/claims](http://www.zurichna.com/en/claims)



BID BOND 3

ACKNOWLEDGMENT OF PRINCIPAL, IF A CORPORATION

State of New York County of Westchester ss:  
On this 14th day of July, 2017, before me personally came  
William S. Verico to me known, who, being by me duly sworn, did depose and say  
that he resides at Briarcliff Manor NY  
that he is the President of LAW Construction Corp.  
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.

**DUNCAN C. GRAY III**  
Notary Public, State of New York  
No. 01GR6111642  
Qualified in Westchester County  
Commission Expires June 14, 2020

  
Notary Public

ACKNOWLEDGMENT OF PRINCIPAL, IF A PARTNERSHIP

State of \_\_\_\_\_ County of \_\_\_\_\_ ss:  
On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, before me personally appeared  
\_\_\_\_\_ to me known and known to me to be one of the members of the  
firm of \_\_\_\_\_ described in and who executed the foregoing  
instrument, and he 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 \_\_\_\_\_ County of \_\_\_\_\_ ss:  
On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, before me personally appeared  
\_\_\_\_\_ to me known and known to me to be the person described in  
and who executed the foregoing instrument and acknowledged that he executed the same.

\_\_\_\_\_  
Notary Public

AFFIX ACKNOWLEDGMENTS AND JUSTIFICATION OF SURETIES

### 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: See Attached List of Projects

Name of Project: \_\_\_\_\_

Location of Project: \_\_\_\_\_

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

Name: \_\_\_\_\_

Title: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Brief description of the Project completed or the Project in progress: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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

Amount of Contract, Subcontract or Sub-subcontract: \_\_\_\_\_

Start Date and Completion Date: \_\_\_\_\_

\*\*\*\*\*

Name of Contractor: \_\_\_\_\_

Name of Project: \_\_\_\_\_

Location of Project: \_\_\_\_\_

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

Name: \_\_\_\_\_

Title: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Brief description of the Project completed or the Project in progress: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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

Amount of Contract, Subcontract or Sub-subcontract: \_\_\_\_\_

Start Date and Completion Date: \_\_\_\_\_

Contracts Completed By Bidder  
January 2017

Project	Owner	Engineer/Const. Mngr.	Contract Value	% Complete
SEX00201Y Reconstruct Collapsed Sewers Bronx, NY	NYC DDC 30-30 Thomson Avenue Long Island City NY 11101	NYCDEP Daniel Lefkowitz 718-595-7657	\$4,376,848.30	100%
X126-109M Ferry Point Golf Course Bronx NY	NYC Dept. of Parks & Recreation John Natoli, PE 718-760-6725	TRC Engineers, Inc. Tim Weiss 718-829-4651	\$120,000,000	100%
X126-208M Ferry Point Community Park Bronx NY	NYC Dept. of Parks & Recreation Philip Granitto 718-760-6651	NYC Dept. of Parks & Recreation Paul Eng 718-760-6586	\$12,871,000	100%
Contract #CR-32 Sitetwork Bernard Fineson Center Queens NY Sitetwork / Utilities	Dormitory Authority - NYS 80-45 Winchester Blvd. Queens Village NY 11427 Layla Bahbahani, Proj. Mngr. 212-273-5506	The LiRo Group 80-45 Winchester Blvd. Queens Village NY 11427 Jeff Fogel, Proj. Mngr. 718-465-3606	\$19,874,000	100%
HWX211T5B Step St. Stairway @ 183rd St. Bronx NY	NYC Dept. Of Design & Constr. Joseph Cassidy, Borough Dir. 718-365-2106	NYC Dept. Of Design & Constr.	\$4,957,000	100%
HWXP144 Kappock St. Wall Bronx NY Wall / Road Reconstruction	NYC Dept. Of Design & Constr. Dickens Charles 718-391-1052 646-235-3422 (cell Phone)	LiRo - CM John Khachmanian 917-847-0850	\$8,440,975	100%

LAVI Construction Corp.  
34 Livingston Street  
Pleasantville NY 10570

Tel: 914-741-2150  
Fax: 914-741-2150

Contracts Completed By Bidder  
January 2017

Project	Owner	Engineer/Const. Mngr.	Contract Value	% Complete
PS 29 Ballfield / Playground Bronx NY	EDC/NYCDPR	LiRo - CM Mike Rafat, Project Manager 718-292-1188	\$2,287,000	100%
X126-808M Ferry Point Park Maintenance Bronx NY	NYC Dept. of Parks & Recreation Hope Kaufman 718-760-6651	TRC Engineers, Inc. Steven Meersma 212-221-7822 x 109	\$6,000,000	100%
SEK002318 Owl's Head 1 - Area A Sewers & Water Mains	NYC Dept. of Design & Constr. Robert Yeuh 718-391-1937	NYC Dept. of Design & Constr.	\$11,942,000	100%
Contract 1 W 55th Street Salt Shed Manhattan NY	NYC Dept. of Sanitation Danny Walsh 917-237-5506	Bovis Lend Lease Cal Gerson 212-315-0235	\$5,838,500	100%
Contract#34449 Rock Sloper Stabilization Westchester County	Metro North Railroad Jeff Manthey 914-736-3182	N/A	\$2,969,000	100%
Contract #2 Approx. 90,000 LF Sewers & Water Mains with 5 Pump Stations	Village of Brewster Brewster NY 845-279-3760	J. Robert Folchetti & Assoc. Michael Corcoran 914-232-2500	\$16,010,005	100%

LAVI Construction Corp.  
34 Livingston Street  
Pleasantville NY 10570

Tel: 914-750-1150  
Fax: 914-750-1150

Contracts Completed By Bidder  
January 2017

Project	Owner	Engineer/Const. Mngr.	Contract Value	% Complete
Contract #2 Patterson Hamlet Sewer Patterson NY	Town of Patterson 1142 Route 311 Patterson NY	Sterns & Wheeler, PC 1 Remington Park Drive Caznovia NY	\$2,606,136	100%
Sewers / WWTF Sitework	Michael Griffon, Supervisor 845-878-6500	William R. Hall, P.E. 315-655-8161		
Ferry Point Park - Phase 1 Bronx NY	Ferry Point Partners, LLC c/o Flagg Finance 1370 Avenue of the Americas New York NY Pierre Gagne 203-273-8695	NYC Dept. of Parks & Recreation Anthony Macari 212-360-3420	\$16,000,000	100%
Constr. Of Jack Nicholas Signature Golf Course				
D259055 Rte 6 Bridge Rehab Southeast NY	NY's Dept. Of Transportation Region 8 4 Burnett Blvd. Poughkeepsie NY 12603 Frank Fischlein, Area Super 845-575-6000	N/A	\$4,142,571	100%
Rte 6 Bridge over Middle Branch Reservoir				
SEX002242 8' W x 6' H Box Culvert Combined Sewer	NYC Dept. of Design & Constr. Joe Cassidy 718-365-2106	NYC Dept. of Design & Constr.	\$4,645,670	100%
Woodcrest @ Leonard Park Mt. Kisco NY	Griffon Associates 570 Taxter Road Elmsford NY 10523	Ralph Mastromonaco, PC 13 Dove Court Croton-on-Hudson NY	\$6,570,000	100%
Site Work for 124 Unit Housing Development		Ralph Mastromonaco, P.E. 914-271-4762		

LAW  
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Pleasantville NY 10570

Tel: 914-  
Fax: 914-

Contracts Completed By Bidder  
January 2017

Project	Owner	Engineer/Const. Mngr.	Contract Value	% Complete
D258517 (Putnam) (213) Bikeway Inc. Box Culvert 2 Bridge Structure Carmel/Mahopac NY (Design/Build)	NYS Dept. of Transportation Region 8 4 Burnett Blvd. Poughkeepsie NY 12603 Ray Fischlein, Area Super 845-575-6000	NYS Dept. of Transportation Region 8 4 Burnett Blvd. Poughkeepsie NY 12603 R.Scott Kehoe, P.E., E.I.C. 845-431-5754	\$7,782,526	100%
D258325(West) (003) Reconstruction of Rte 32 & 22 Bedford NY	NYS Dept. Of Transportation Region 8 4 Burnett Blvd. Poughkeepsie NY 12603 Ed O'Leary, P.E. 845-575-6000	NYS Dept. of Transportation Region 8 4 Burnett Blvd. Poughkeepsie NY 12603 M. Crosby, Res.Engineer 914-232-9150 R. Schmidt, E.I.C. 845-575-6000	\$6,908,719	100%
48" & 36" Water Mains (218) Bronx Botanical Gardens	NYC Dept. of Environmental Protection Angelo Lorenzo 718-595-4229	NYC Dept. of Environmental Protection	\$783,807	100%
Contract 03-5 East Mohegan Sewer Yorktown Heights NY F & I 18,000 LF of Sewer w/ Restoration	Town of Yorktown 363 Underhill Road Yorktown Heights NY 10598 Sharon Robinson, P.E. Town Engineer 914-962-5722 x 218	N/A	\$3,119,200	100%
HWXPEMER1 Riverdale Avenue Retaining Wall Bronx NY	NYC Dept. of Design & Constr. John Pavlik 718-391-1036 347-219-0164 (Cell)	NYC Dept. Of Design & Constr.	\$6,282,165	100%

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Pleasantville NY 10570

Tel: 914  
Fax: 914-

Contracts Completed By Bidder  
January 2017

Project	Owner	Engineer/Const. Mngr.	Contract Value	% Complete
Cablevision Conduit (006) Westchester Installation Fiber Optic Conduit /Facilities Various Locations	Cablevision / Light Path c/o Sciamme Construction Management Sub to Roger & Sons Bldg. Corp. Tony Rodrigues 845-227-6033	SydneyBowne & Son Consulting Engineers 235 E. Jericho Turnpike Mineola NY 11501  John Eisman 516-746-2350	\$3,116,000 Various Locations	100%
Old Oaks Country Club Golf Cart Underpass (112) Off Rte 120 Purchase NY (Design/Build)	Old Oaks Country Club 3100 Purchas Street Purchase NY 10577  Allen Ross 914-945-5100	N/A	\$1,251,250	100%
D258255 (Putnam) (108) Reconstruction of Rte 311 Patterson NY	NYS Dept. of Transportation Region 8 4 Burnett Blvd. Poughkeepsie NY 12603  Ray Fischlein, Area Super 845-575-6000	Lovett Silverman 380 TownLine Road Hauppauge NY 11788  John Lovett & Mike Abu Aoun 631-979-7600	\$2,944,000	100%
New York Athletic Club Travers Island EXC./ BF for Foundation / Site	New York Athletic Club c/o Sciamme Construction Management Sub to Roger & Sons Bldg. Corp. Tony Rodrigues 845-227-6033	N/A	\$450,000	100%

L S Construction Corp.  
34 Livingston Street  
Pleasantville NY 10570

Tel: 914-741-1100  
Fax: 914-741-2150

Contracts Pending By Bidder  
January 2017

Project	Owner	Engineer/Const. Mngr.	Contract Value
None			



S Construction Corp.  
 34 Irvington Street  
 Pleasantville NY 10570

Tel: 914-741-2100  
 Fax: 914-741-2150

Contracts Currently Under Construction By Bidder  
 January 2017

Project	Owner	Engineer/Const. Mngr.	Contract Value	% Complete
HWSRT200C Safe Routes to Transit, Phase III Bronx, NY	NYC DDC 30-30 Thomson Avenue Long Island City NY 11101	NYC DDC John Pavlik 718-391-1512	\$7,470,000.00	99%
SEK20065 Construction of High Level Storm Sewers in Carroll St. btwn Gowanus Canal & 47th Ave. Brooklyn	NYC DDC 30-30 Thomson Avenue Long Island City NY 11101	Tectonic Engineering Saidul Haque 718-732-9094	\$26,842,000.00	5%
HWXS311V Reconstruction of Clifford Place Step Street Borough of the Bronx	NYC DDC 30-30 Thomson Avenue Long Island City NY 11101	Techno Engineering Aomar Achouri 646-431-4866	\$4,358,000.00	0%

## 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 Goals in accordance with the “Notice to All Prospective Contractors” (See Part A, Section 10). The bidder’s request for a waiver must be submitted at least seven (7) calendar days prior to the bid date. Waiver requests submitted after the deadline will not be considered. The form for requesting a waiver 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 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 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 Required 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 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 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 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 6-129(c)(22)). **PLEASE NOTE: If this Contract is a public works project subject to GML §101(5) (i.e., a contract valued at or below \$3M for projects in New York City) or if the Contract is subject to a project labor agreement in accordance with Labor Law §222, and the bidder is required to identify at the time of bid submission its intended subcontractors for the Wicks trades (plumbing and gas fitting; steam heating, hot water heating, ventilating and air conditioning (HVAC); and electric wiring), the Contractor must identify all those to which it intends to award construction subcontracts for any portion of the Wicks trade work at the time of bid submission, regardless of what point in the life of the contract such subcontracts will occur. In identifying intended subcontractors in the bid submission, bidders may satisfy any Participation Goals established for this Contract by proposing one or more subcontractors that are MBEs and/or WBEs for any portion of the Wicks trade work. In the event that the Contractor's selection of a subcontractor is disapproved, the Contractor shall have a reasonable time to propose alternate subcontractors.**

6. MBE and WBE firms must be certified by DSBS in order for the Contractor to credit such firms' participation toward the attainment of the **Participation Goals**. Such certification must occur prior to the firms' commencement of work. A list of MBE and WBE firms may be obtained from the DSBS website at [www.nyc.gov/buycertified](http://www.nyc.gov/buycertified), by emailing DSBS at [buyer@sbs.nyc.gov](mailto: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](http://www.nyc.gov/getcertified), emailing [MWBE@sbs.nyc.gov](mailto:MWBE@sbs.nyc.gov), or calling the DSBS certification helpline at (212) 513-6311. A firm that is certified as both an MBE and a WBE may be counted either toward the goal for MBEs or the goal for WBEs, but not both. No credit shall be given for participation by a graduate MBE or graduate WBE, as defined in Section 6-129(c)(20).

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

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

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

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

(b) To apply for a full or partial waiver of the **Participation Goals**, a bidder, proposer, or contractor, as applicable, must complete Part 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](mailto: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 applicable—that it has legitimate business reasons for proposing the level of subcontracting in its M/WBE Utilization Plan. In making its determination, Agency shall consider factors that shall include, but not be limited to, whether the bidder, proposer or contractor, as applicable, has the capacity and the bona fide intention to perform the Contract without any subcontracting, or to perform the Contract without awarding the amount of subcontracts represented by the **Participation Goals**. In making such determination, Agency may consider whether the M/WBE Utilization Plan is consistent with past subcontracting practices of the bidder, proposer or contractor, as applicable, whether the bidder, proposer or contractor, as applicable, has made efforts to form a joint venture with a certified firm, and whether the bidder, proposer, or contractor, as applicable, has made good faith efforts to identify other portions of the Contract that it intends to subcontract.

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

- (i) The Contractor advertised opportunities to participate in the Contract, where appropriate, in general circulation media, trade and professional association publications and small business media, and publications of minority and women's business organizations;
- (ii) The Contractor provided notice of specific opportunities to participate in the Contract, in a timely manner, to minority and women's business organizations;
- (iii) The Contractor sent written notices, by certified mail or facsimile, in a timely manner, to advise MBEs or WBEs that their interest in the Contract was solicited;
- (iv) The Contractor made efforts to identify portions of the work that could be substituted for portions originally designated for participation by MBEs and/or WBEs in the M/WBE Utilization Plan, and for which the Contractor claims an inability to retain MBEs or WBEs;

- (v) The Contractor held meetings with MBEs and/or WBEs prior to the date their bids or proposals were due, for the purpose of explaining in detail the scope and requirements of the work for which their bids or proposals were solicited;
- (vi) The Contractor made efforts to negotiate with MBEs and/or WBEs as relevant to perform specific subcontracts, or act as suppliers or service providers;
- (vii) Timely written requests for assistance made by the Contractor to Agency's M/WBE liaison officer and to DSBS;
- (viii) Description of how recommendations made by DSBS and Agency were acted upon and an explanation of why action upon such recommendations did not lead to the desired level of participation of MBEs and/or WBEs.

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

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

12. If 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, including but not limited to, by reviewing the percentage of work the Contractor has actually awarded to MBE and/or WBE subcontractors and the payments the Contractor made to such subcontractors.

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 6-129. See §6-129(e)(10). Furthermore, such resulting contract may also be examined by the City's Comptroller to assess compliance with the M/WBE Utilization Plan.

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

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

- (a) entering into an agreement with the Contractor allowing the Contractor to cure the violation;
- (b) revoking the Contractor's pre-qualification to bid or make proposals for future contracts;
- (c) making a finding that the Contractor is in default of the Contract;
- (d) terminating the Contract;
- (e) declaring the Contractor to be in breach of Contract;
- (f) withholding payment or reimbursement;
- (g) determining not to renew the Contract;
- (h) assessing actual and consequential damages;
- (i) assessing liquidated damages or reducing fees, provided that liquidated damages may be based on amounts representing costs of delays in carrying out the purposes of the M/WBE Program, or in meeting the purposes of the Contract, the costs of meeting utilization goals through additional procurements, the administrative costs of investigation and enforcement, or other factors set forth in the Contract;
- (j) exercising rights under the Contract to procure goods, services or construction from another contractor and charge the cost of such contract to the Contractor that has been found to be in noncompliance; or
- (k) taking any other appropriate remedy.

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



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

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

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

Tax ID #: 13-3209931

APT E- 85017B0100  
PIN #: \_\_\_\_\_

**SCHEDULE B - MWBE Utilization Plan**  
**Part I: MWBE Participation Goals**

**Part I to be completed by contracting agency**

**Contract Overview**

APT E- Pin # 85017B0100 FMS Project ID#: HWXS511  
Project Title/ Agency PIN # RECONSTRUCTION OF WEST TREMONT STEP STREET / 8502017HW0043C  
Bid/Proposal Response Date JULY 14, 2017  
Contracting Agency Department of Design and Construction  
Agency Address 30-30 Thomson Ave. City Long Island City State NY Zip Code 11101  
Contact Person Edward Espinoza Title MWBE Liaison & Compliance Analyst  
Telephone # (718) 391-1904 Email EspinozEd@ddc.nyc.gov

**Project Description (attach additional pages if necessary)**

**RECONSTRUCTION OF  
WEST TREMONT STEP STREET  
INCLUDING STREET LIGHTING, ROADWAY RECONSTRUCTION, SEWER, AND TRAFFIC WORK  
Together With All Work Incidental Thereto  
BOROUGH OF THE BRONX  
CITY OF NEW YORK**

**MWBE Participation Goals for Services**

*Enter the percentage amount for each group or for an unspecified goal. Please note that there are no goals for Asian Americans in Professional Services.*

**Prime Contract Industry: Construction**

Group	Percentage
<u>Unspecified*</u>	<u>7%</u>
or	
<u>Black American</u>	<u>UNSPECIFIED*</u>
<u>Hispanic American</u>	<u>UNSPECIFIED*</u>
<u>Asian American</u>	<u>UNSPECIFIED*</u>
<u>Women</u>	<u>UNSPECIFIED*</u>
<b>Total Participation Goals</b>	<b>7% Line 1</b>

*\*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.*

Tax ID #: 13-3209931APT E-  
PIN #:

85017B0100

**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**

Tax ID # 13-3209931 FMS Vendor ID # \_\_\_\_\_  
 Business Name LAWS Construction Corp Contact Person Steven A. Vesio  
 Address 24 Irvington St  
 Telephone # (914) 741-2100 Email bcs@lawscc.com

**Section II: M/WBE Utilization Goal Calculation: Check the applicable box and complete subsection.****PRIME CONTRACTOR ADOPTING AGENCY M/WBE PARTICIPATION GOALS**

☒ For Prime Contractors (including Qualified Joint Ventures and M/WBE firms) adopting Agency 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 Bid/Proposal Value	Agency Total Participation Goals (Line 1, Page 13)	Calculated M/WBE Participation Amount
\$ 5,388,000	7%	\$ 377,160
	X	= Line 2

**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 Bid/Proposal Value	Adjusted Participation Goal (From Partial Waiver)	Calculated M/WBE Participation Amount
\$	X	= Line 3

Tax ID #: 13-3209931

APT E-  
PIN #: \_\_\_\_\_

**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:

☐ MBE ☐ WBE

☐ As a Qualified Joint Venture with an M/WBE partner, in which the value of the M/WBE partner's participation and/or the value of any work subcontracted to other M/WBE firms is at least the amount located on Lines 2 or 3 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 award in subcontracts for services, regardless of M/WBE status? % 11

Enter brief description of the type(s) and dollar value of subcontracts for all any services you plan on subcontracting if awarded this contract. For each item, indicate whether the work is designated for participation by MBEs and/or WBEs and the time frame in which such work is scheduled to begin and end. Use additional sheets if necessary.

1. Granite	323,000-	M/WBE	10/1/17
2. Photo	170,000-		11
3. Electric	100,000-		11
4. T&E Consultant	25,000-		11
5. Tracing	150,000-		11
6. Graphical	50,000-	M/WBE	11
7. Boiler Control	5,000-	M/WBE	11
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			

✓ Scopes of Subcontract Work

Tax ID #: 13-3209931

APT E-  
PIN #:

**Section V: Vendor Certification and Required Affirmations**

I hereby:

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

Signature



Date

7/14/17

Print Name

William S. Vescio

Title

President

## 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.

  √   YES

       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 ("APQ")

Bidder Name: \_\_\_\_\_

Project ID Number: \_\_\_\_\_

The Bidder MUST complete, sign, and submit this Apprenticeship Program Questionnaire with its bid.

1. Does the bidder have any Apprenticeship Program agreement(s) 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).)

\_\_\_\_\_ YES \_\_\_\_\_ NO

2. Has/have the bidder's Apprenticeship Program agreement(s) been registered with, and approved by the New York State Commissioner of Labor ("NYSDOL Commissioner")?

\_\_\_\_\_ YES \_\_\_\_\_ NO

3. Has/have the bidder's Apprenticeship Program successfully passed the two-year Probation period following its initial registration with the New York State Department of Labor ("NYSDOL")?

\_\_\_\_\_ YES \_\_\_\_\_ NO

If the answers to Questions 1, 2, and 3 are "Yes". The bidder shall, in the space below (and/or attached herewith where applicable), provide the contact information for such Apprenticeship Program(s) as well as information demonstrating that such Apprenticeship Program(s) have passed the two-year Probation period following its initial registration with the NYSDOL. (The bidder may attach additional pages if necessary).

- **Where the bidder directly sponsors any such apprenticeship Program(s)**, the bidder shall provide the following:
  - The trade classification(s) covered by such program(s), and the date(s) such program(s) was/were approved by the NYSDOL Commissioner; and/or
  - A copy of a letter(s) from the NYSDOL, on NYSDOL's letterhead, executed by an official thereof, which verifies/verify the trade classification(s) covered by such program(s), and the date(s) such program(s) was/were approved by the NYSDOL Commissioner and the Active status of such program(s).
- **Where the bidder participates in any such Apprenticeship Program(s) through its membership in an employer organization(s) that directly sponsors such program(s) or where the employer association(s) participates in such program(s) through collective bargaining**, the bidder shall provide the following:
  - The contact information for the employer organization(s), and the apprenticeable trade(s) covered pursuant to the bidder's affiliation therewith, and the date such program(s) was/were approved by the NYSDOL Commissioner; or
  - A letter(s) from such employer organization(s), on letterhead of such organization(s), executed by an officer, delegate or official thereof, which verifies/verify the trade classification(s) covered by such program(s) was/were approved by the NYSDOL Commissioner, and that the bidder is both a member in good standing of the identified employer organization and is subject to the provisions of the Apprenticeship Program agreement(s) sponsored thereby.

## APPRENTICESHIP PROGRAM QUESTIONNAIRE ("APQ")

Bidder Name: LAWS Construction Corp

Project ID Number: HUX5511

The Bidder MUST complete, sign, and submit this Apprenticeship Program Questionnaire with its bid.

1. Does the bidder have any Apprenticeship Program agreement(s) 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).)

☒ YES ☐ NO

2. Has/have the bidder's Apprenticeship Program agreement(s) been registered with, and approved by the New York State Commissioner of Labor ("NYSDOL Commissioner")?

☒ YES ☐ NO

3. Has/have the bidder's Apprenticeship Program successfully passed the two-year Probation period following its initial registration with the New York State Department of Labor ("NYSDOL")?

☒ YES ☐ NO

If the answers to Questions 1, 2, and 3 are "Yes". The bidder shall, in the space below (and/or attached herewith where applicable), provide the contact information for such Apprenticeship Program(s) as well as information demonstrating that such Apprenticeship Program(s) have passed the two-year Probation period following its initial registration with the NYSDOL. (The bidder may attach additional pages if necessary).

- Where the bidder directly sponsors any such apprenticeship Program(s), the bidder shall provide the following:

- The trade classification(s) covered by such program(s), and the date(s) such program(s) was/were approved by the NYSDOL Commissioner; and/or
- A copy of a letter(s) from the NYSDOL, on NYSDOL's letterhead, executed by an official thereof, which verifies/verify the trade classification(s) covered by such program(s), and the date(s) such program(s) was/were approved by the NYSDOL Commissioner and the Active status of such program(s).

- Where the bidder participates in any such Apprenticeship Program(s) through its membership in an employer organization(s) that directly sponsors such program(s) or where the employer association(s) participates in such program(s) through collective bargaining, the bidder shall provide the following:

- The contact information for the employer organization(s), and the apprenticeable trade(s) covered pursuant to the bidder's affiliation therewith, and the date such program(s) was/were approved by the NYSDOL Commissioner; or
- A letter(s) from such employer organization(s), on letterhead of such organization(s), executed by an officer, delegate or official thereof, which verifies/verify the trade classification(s) covered by such program(s) was/were approved by the NYSDOL Commissioner, and that the bidder is both a member in good standing of the identified employer organization and is subject to the provisions of the Apprenticeship Program agreement(s) sponsored thereby.



## APPRENTICESHIP PROGRAM QUESTIONNAIRE ("APQ")

Project ID Number: \_\_\_\_\_

- Where the bidder participates in any such Apprenticeship Programs through collective bargaining agreements, the bidder shall provide the following:
  - The contact information for such collective bargaining entity(ies) and the apprenticeable trade(s) covered pursuant to the bidder's affiliation therewith;
  - A letter(s) from such collective bargaining entity(ies), on letterhead of such entity(ies), executed by an officer, delegate or official thereof, which verifies/verify the bidder's status as a signatory/participant in good standing to such collective bargaining entity(ies) Apprenticeship Program Agreements.

Bidder provides funds to various unions for apprenticeship programs when signing agreements with unions

Bidder: LAWS Construction Corp

By: [Signature]  
(Signature of Partner or Corporate Officer)

Title: President

Date: 7/14/17

# SAFETY QUESTIONNAIRE

**BID BOOKLET**  
**MARCH 2017**

Project ID. \_\_\_\_\_

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
<u>2013</u>	<u>.95</u>	<u>          </u>
<u>2014</u>	<u>.94</u>	<u>          </u>
<u>2015</u>	<u>.88</u>	<u>          </u>

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.
- YES    ☒ NO    Contractor has had an incident requiring OSHA notification within 8 hours (all work-related fatalities) or an incident requiring OSHA notification within 24 hours (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 200,000 hours represents the equivalent of 100 employees working forty hours a week, fifty weeks per year.

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

YEAR	TOTAL NUMBERS OF HOURS WORKED BY EMPLOYEES	INCIDENT RATE
<u>2013</u>	<u>122,107</u>	<u>0</u>
<u>2014</u>	<u>57,389</u>	<u>3.49</u>
<u>2015</u>	<u>86,092</u>	<u>9.29</u>

Project ID. \_\_\_\_\_

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

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

\_\_\_ YES ☒ NO Contractor previously audited by the DDC Office of Site Safety.

DDC Project Number(s): \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

\_\_\_ YES ☒ NO Accident on previous DDC Project(s).

DDC Project Number(s): \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

\_\_\_ 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): \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Date: 7/14/17

By: [Signature]  
(Signature of Owner, Partner, Corporate Officer)

Title: President

## 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 27 through 29 of this Bid Booklet. The Project Reference Form consists of 3 parts: (1) Contracts Completed by the Bidder, (2) Contracts Currently Under Construction by the Bidder, and (3) Pending Contracts Not Yet Started by the Bidder.
- (B) **Copy of License:** If required, the bidder must submit a copy of the license under which the bidder will be performing the work. Such license must clearly show the following: (1) Name of the Licensee, (2) License Number, and (3) Expiration date of the License. A copy of the license will be required from bidders for the following contracts: Plumbing Work, Electrical Work and Asbestos Abatement.
- (C) **Financial Information:** If required, the bidder must submit the financial information described below:
- (1) **Audited Financial Statements:** Financial statements (Balance Sheet and Income Statement) of the entity submitting the bid, as audited by an independent auditor licensed to practice as a certified public accountant (CPA). Audited financial statements for the three most recent fiscal years must be submitted. Each such financial statement must include the auditor's standard report.
- If the bidder does not have audited financial statements, it must submit an affidavit attesting to the fact that the bidder does not have such statements. In addition, the bidder must submit the following documentation covering the three most recent fiscal years: signed federal tax returns, unaudited financial statements, and a "certified review letter" from a certified public accountant (CPA) verifying the unaudited financial statements.
- Unless the most recent audited or unaudited financial statement was issued within ninety (90) days, the bidder must submit interim financial information that includes data on financial position and results of operation (income data) for the current fiscal year. Such information may be summarized on a monthly or quarterly basis or at other intervals.
- (2) **Schedule of Aged Accounts Receivable,** including portion due within ninety (90) days.

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

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

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

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

**A. PROJECT REFERENCES – CONTRACTS COMPLETED BY THE BIDDER**

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

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

**B. 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.

Project & Location	Contract Type	Contract Amount (\$000)	Subcontracted to Others (\$000)	Uncompleted Portion (\$000)	Date Scheduled to Complete	Owner Reference & Tel. No.	Architect/Engineer Reference & Tel. No. if different from owner



**C. PROJECT REFERENCES – PENDING CONTRACTS NOT YET STARTED BY THE BIDDER**

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

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

**OFFICE OF THE MAYOR  
BUREAU OF LABOR SERVICES  
CONTRACT CERTIFICATE**

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

Contractor: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Telephone Number: \_\_\_\_\_

Name and Title of Signatory: \_\_\_\_\_  
\_\_\_\_\_

Contracting Agency or Owner: \_\_\_\_\_

Project Number: \_\_\_\_\_

Proposed Contract Amount: \_\_\_\_\_

Description and Address of Proposed Contract: \_\_\_\_\_

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):  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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 TERMINATION OF ANY CONTRACT BETWEEN  
THE CITY AND THE BIDDER OR CONTRACTOR AND BAR THE BIDDER OR CONTRACTOR FROM  
PARTICIPATION IN ANY CITY CONTRACT FOR A PERIOD OF UP TO THREE YEARS. FURTHER,  
SUCH FALSIFICATION MAY RESULT IN CRIMINAL PROSECUTION.**

## **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 §165-a and GML §103-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.

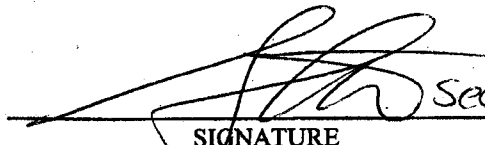
**BIDDER'S CERTIFICATION OF COMPLIANCE WITH  
IRAN DIVESTMENT ACT**

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**

- ☒ 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.
- ☐ 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.

  
\_\_\_\_\_  
SIGNATURE  
  
Steven A Veslivo  
\_\_\_\_\_  
PRINTED NAME  
  
Secretary  
\_\_\_\_\_  
TITLE

Sworn to before me this  
14<sup>th</sup> day of July, 2017

  
\_\_\_\_\_  
Notary Public

Dated: 7/14/17

**DUNCAN C. GRAY III**  
Notary Public, State of New York  
No. 01GR6111642  
Qualified in Westchester County  
Commission Expires June 14, 2020

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

## **CONSTRUCTION**

## **EMPLOYMENT**

## **REPORT**

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:

CONTRACT FUNDING SOURCE	CONTRACTOR	CONTRACT VALUE	SUBMISSION REQUIREMENT
Federal/Federally assisted	Prime and subcontractors	\$10,000 or greater	Construction Employment Report
City and state funded	Prime contractor	\$1,000,000 or greater	
	Subcontractor	\$750,000 or greater	
		Less than \$750,000	Less than \$750,000 Certificate (City/State Only)

**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**

### PART I: 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: 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. Copies 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: 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 complaint(s)	2. Nature of the complaint(s)	3. Position(s) of the complainant(s)	4. Was an investigation conducted? Y/N	5. Current status of the disposition
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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 complainant(s)	2. Administrative agency or court in which action was filed	3. Nature of the complaint(s)	4. Current status	5. If not pending, the 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
- 1a. Are M/WBE goals attached to this project? Yes ✓ No
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      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?      Are you DBE certified? Yes      No
3. Please indicate if you would like assistance from SBS in identifying certified M/WBEs for contracting opportunities: Yes      No ✓
4. Is this project subject to a project labor agreement? Yes      No ✓
5. Are you a Union contractor? Yes      No      If yes, please list which local(s) you affiliated with 14, 15, 155, 282, 731, 1010, 1556
6. Are you a Veteran owned company? Yes      No ✓

PART I: CONTRACTOR/SUBCONTRACTOR INFORMATION

7. 13-3209931 bids@lawscc.com  
Employer Identification Number or Federal Tax I.D. Email Address
8. LAWS Construction Corp  
Company Name
9. 34 Irvington St, Pleasantville, NY 10570  
Company Address and Zip Code
10. William J Vescio (914) 741-2100  
Chief Operating Officer Telephone Number
11. Same  
Designated Equal Opportunity Compliance Officer Telephone Number  
(If same as Item #10, write "same")
12. Same  
Name of Prime Contractor and Contact Person  
(If same as Item #8, write "same")

13. Number of employees in your company: 30-50

14. Contract information:

(a) DXC  
Contracting Agency (City Agency)

(b) \_\_\_\_\_  
Contract Amount

(c) 8502017HW0043C  
Procurement Identification Number (PIN)

(d) \_\_\_\_\_  
Contract Registration Number (CT#)

(e) \_\_\_\_\_  
Projected Commencement Date

(f) \_\_\_\_\_  
Projected Completion Date

(g) Description and location of proposed contract:

Reconstruction of West Tremont Street including  
street lighting, roadway reconstruction, sewer, and  
traffic work

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 ☒ No ☐

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 ☐ No ☒

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 ☐ No ☒ If yes,

Date submitted: \_\_\_\_\_

Agency to which submitted: \_\_\_\_\_

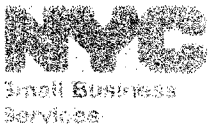
Name of Agency Person: \_\_\_\_\_

Contract No: \_\_\_\_\_

Telephone: \_\_\_\_\_

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 ☐ No ☒

If yes,



careers  
businesses  
neighborhoods

David Bishop  
Commissioner

216CY075

March 10, 2016

Mr. Steve Vescio  
CFO/Secretary  
LAWS Construction Corp.  
34 Irvington Street  
Pleasantville, NY 10570

RE: **New York City Department of Design and Construction Contract; PIN No. 8502015HW0041C; FMS ID HWXS311V1(RE-BID 1); E-PIN No. 85016B0019; Reconstruction of Clifford Place Step Street (Re-Bid); Borough of the Bronx; Contract Value: \$4,358,000.00; Continued Certificate of Approval.**

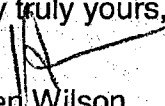
Dear Mr. Vescio:

Please be advised that LAWS Construction Corp. has already received notice of its approval for the three (3) year period indicated in the Department of Small Business Services/Division of Labor Services (DLS) Certificate of Approval dated December 27, 2013, for DLS File No. 213CY314.

As your organization continues to meet the equal employment opportunity requirements of the City of New York, DLS approves the awarding of the above-referenced contract. This approval does not extend the initial three (3) year approval (December 27, 2013 – December 26, 2016) referred to above.

If you have any questions regarding this letter, please call **Mr. Isaac Molho**, Contract Reviewer, at (212) 618-8796 or e-mail him at [imolho@sbs.nyc.gov](mailto:imolho@sbs.nyc.gov).

Very truly yours,

  
Helen Wilson  
Assistant Commissioner  
Division of Labor Services

cc: Rehan Shahrukh (DDC)  
Isaac Molho  
FILE



## THE GENERAL CONTRACTORS ASSOCIATION OF NEW YORK, INC.

Denise M. Richardson  
Executive Director

February 2, 2016

LAWS Construction Corp.  
Attn: Mr. Steven Vescio  
34 Irvington Street  
Pleasantville, NY 10570

Dear Mr. Vescio:

LAWS Construction Corp. is a member in good standing of the General Contractors Association of New York ("GCA"). Through your membership in the GCA, you have authorized the GCA to enter into collective bargaining agreements on your behalf.

As such, your firm is signatory to the collective bargaining agreements and participates in and upholds all provisions of those agreements, including but not limited to participation in the unions established and approved apprenticeship programs.

The General Contractors Association has collective bargaining agreements with the following unions:

- Laborers International Union of North America  
Local 731, Heavy Construction Laborers  
Local 29 Drillers and Blasters  
Local 147 Tunnel Workers  
Local 1010 Asphalt Pavers
- New York District Council of Carpenters  
Local 1556 Dockbuilders/Timbermen
- International Union of Operating Engineers  
Local 14 / 15 Operating Engineers  
Local 15 C Operating Engineers Mechanics & Helpers  
Local 15 D Surveyors
- International Brotherhood of Teamsters Local 282
- Metallic Lathers Local 46

Please contact me if you require additional information.

Sincerely,

Gerard A. Neumann  
Director of Labor Relations

(a) Name and address of OFCCP office.

\_\_\_\_\_  
\_\_\_\_\_

(b) Was a Certificate of Equal Employment Compliance issued within the past 36 months?  
Yes\_\_\_ No\_\_\_

If yes, attach a copy of such certificate.

(c) Were any corrective actions required or agreed to? Yes\_\_\_ No\_\_\_

If yes, attach a copy of such requirements or agreements.

(d) Were any deficiencies found? Yes\_\_\_ No\_\_\_

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 ☒ No\_\_\_

If yes, attach a list of such associations and all applicable CBA's.

(GCA) 60 E. 42<sup>nd</sup> St, New York, NY 10165

## 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 I-9 Form?

- |  |   |
|--|---|
| (a) Prior to job offer                     | Yes <input type="checkbox"/> No <input type="checkbox"/>            |
| (b) After a conditional job offer          | Yes <input type="checkbox"/> No <input type="checkbox"/>            |
| (c) After a job offer                      | Yes <input type="checkbox"/> No <input type="checkbox"/>            |
| (d) Within the first three days on the job | Yes <input type="checkbox"/> No <input type="checkbox"/>            |
| (e) To some applicants                     | Yes <input type="checkbox"/> No <input type="checkbox"/>            |
| (f) To all applicants                      | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| (g) To some employees                      | Yes <input type="checkbox"/> No <input type="checkbox"/>            |
| (h) To all employees                       | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |

22. Explain where and how completed I-9 Forms, with their supportive documentation, are maintained and made accessible.

Employee file in main office

23. Does your firm or any of its collective bargaining agreements require job applicants to take a medical examination? Yes ☒ No ☐

If yes, is the medical examination given: As required by unions

- |                                   |  |
|-----------------------------------|--|
| (a) Prior to a job offer          | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| (b) After a conditional job offer | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| (c) After a job offer             | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| (d) To all applicants             | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| (e) Only to some applicants       | Yes <input type="checkbox"/> No <input type="checkbox"/> |

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 ☒ No ☐

If yes, list the document(s) and page number(s) where these written policies are located.

Provided if LAWS is low bidder

25. Does the company have a current affirmative action plan(s) (AAP)

- ☐ Minorities and Women  
☐ Individuals with handicaps  
☐ Other. Please specify \_\_\_\_\_

26. Does your firm or collective bargaining agreement(s) have an internal grievance procedure with respect to EEO complaints? Yes ☒ No ☐

If yes, please attach a copy of this policy. As specified by unions

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 \_\_\_ No ☒

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 anti-discrimination or affirmative action laws? Yes \_\_\_ No ☒

If yes, attach a log. See instructions.

29. Are there any jobs for which there are physical qualifications? Yes \_\_\_ No ☒

If yes, list the job(s), submit a job description and state the reason(s) for the qualification(s).

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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 \_\_\_ No ☒

If yes, list the job(s), submit a job description and state the reason(s) for the qualification(s).

---

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### SIGNATURE PAGE

I, (print name of authorized official signing) William J. Vesio 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.

LAWS Construction Corp

Contractor's Name

William J. Vesio

President

Name of person who prepared this Employment Report

Title

William J. Vesio

President

Name of official authorized to sign on behalf of the contractor

Title

(914) 741-2100

Telephone Number

[Signature]

7/14/17

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/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 14<sup>th</sup> day of July 20 17

[Signature]  
Notary Public  
DUNCAN C. GRAY III

[Signature]  
Authorized Signature

7/14/17  
Date

Notary Public, State of New York  
No. 01GR6111642

Qualified in Westchester County  
Commission Expires June 14, 2020

Page 6

Revised 8/13

FOR OFFICIAL USE ONLY: File No. \_\_\_\_\_

**FORM CONTRACT BID INFORMATION: USE OF SUBCONTRACTORS/TRADES**

1. Do you plan to subcontract work on this contract? Yes      No      *provided, if LAUS is low bidder*
2. If yes, complete the chart below.

**NOTE: All proposed subcontractors with a subcontract in excess of \$750,000 must complete an Employment Report for review and approval before the contract may be awarded and work commences.**

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

\*If subcontractor is presently unknown, please enter the trade (craft name).

**OWNERSHIP CODES**

- W: White
- B: Black
- H: Hispanic
- A: Asian
- N: Native American
- F: Female

**FORM B: PROJECTED WORKFORCE**

**TRADE CLASSIFICATION CODES**

(J) Journeylevel Workers  
(H) Helper  
(TOT) Total by Column

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.

*Provided if AWS is low bidder*

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):

**MALES**

(1) White Non Hisp.	(2) Black Non Hisp.	(3) Hisp.	(4) Asian	(5) Native Amer.
J				
H				
A				
TRN				
TOT				

**FEMALES**

(6) White Non Hisp.	(7) Black Non Hisp.	(8) Hisp.	(9) Asian	(10) Native Amer.
J				
H				
A				
TRN				
TOT				

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

FORM B PROJECTED WORKFORCE

*Provided by LAWS is as ordered*

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):

\_\_\_\_\_

MALES

FEMALES

	(1) White Non Hisp.	(2) Black Non Hisp.	(3) Hisp.	(4) Asian	(5) Native Amer.	(6) White Non Hisp.	(7) Black Non Hisp.	(8) Hisp.	(9) Asian	(10) Native Amer.
J										
H										
A										
TRN										
TOT										

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

\_\_\_\_\_

\_\_\_\_\_

**FORM C: CURRENT WORKFORCE**

*Provided & LAWS is low bidder*

**TRADE CLASSIFICATION CODES**

- (J) Journeylevel Workers
- (H) Helper
- (TOT) Total by Column

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.

Trade: \_\_\_\_\_

**MALES**

	(1)		(2)		(3)		(4)		(5)	
	White	Black	White	Black	White	Black	White	Black	White	Black
	Non	Hisp.	Non	Hisp.	Non	Hisp.	Non	Hisp.	Non	Hisp.
J										
H										
A										
TRN										
TOT										

**FEMALES**

	(6)		(7)		(8)		(9)		(10)	
	White	Black	White	Black	White	Black	White	Black	White	Black
	Non	Hisp.	Non	Hisp.	Non	Hisp.	Non	Hisp.	Non	Hisp.
J										
H										
A										
TRN										
TOT										

Total (Col. #1-10): \_\_\_\_\_

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

Total Female  
(Col. #6 - 10): \_\_\_\_\_

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

**FORM C. CURRENT WORKFORCE**

*Provided if LMS is low bidder*

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): \_\_\_\_\_

**MALES**

(1) White Non Hisp.	(2) Black Non Hisp.	(3) Hisp.	(4) Asian	(5) Native Amer.

J

H

A

TRN

TOT

**FEMALES**

(6) White Non Hisp.	(7) Black Non Hisp.	(8) Hisp.	(9) Asian	(10) Native Amer.

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

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ATTACH TO CONTRACT DOCUMENTS

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

PROJECT ID: HWX5511

RECONSTRUCTION OF  
WEST TREMONT STREET

INCLUDING STREET LIGHTING, ROADWAY RECONSTRUCTION, SEWER, AND TRAFFIC WORK

Together With All Work Incidental Thereto

BOROUGH OF THE BRONX  
CITY OF NEW YORK

ADDENDUM NO. 1

DATED: JULY 6, 2017

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. Refer to the Bid and Contract Documents, VOLUME 1 OF 3, Attachment 1 - Bid Information on Page A-1;  
Change the dates shown for Submission of Bids and for Bid Opening from "July 14, 2017" to read "July 18, 2017".
2. Refer to the Bid and Contract Documents, VOLUME 1 OF 3, SCHEDULE B - M/WBE Utilization Plan on Page 13;  
Change the date shown for Bid/Proposal Response Date from "July 14, 2017" to read "July 18, 2017".
3. For additional information, see the attached one (1) page of "Questions Submitted by Bidders and DDC's Responses".

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 Attachment.

THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BID

*LAUS Construction Corp*  
Name of Bidder

By: *[Signature]*

A1-1

*Mohsen Zargarelahi*  
for MOHSEN ZARGARELAHI, P.E.  
Assistant Commissioner

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

# ADDENDA CONTROL SHEET

BID OPENING DATE: JULY 18, 2017

PROJECT NO.: HWXS511

DESCRIPTION: RECONSTRUCTION OF WEST TREMONT STEP STREET

Addendum		Addendum Contains:				
No.	Date	Revised Bid Date/Time	Revised Bid Schedule	Questions & Responses	Additional Amendments	Drawings (number)
1	7/6/2017	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
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		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)

The Table above is a guide. Refer to the referenced Addendum for specific information.



ATTACH TO CONTRACT DOCUMENTS

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

PROJECT ID: HWXS511

RECONSTRUCTION OF  
WEST TREMONT STEP STREET

INCLUDING STREET LIGHTING, ROADWAY RECONSTRUCTION, SEWER, AND TRAFFIC WORK

Together With All Work Incidental Thereto

BOROUGH OF THE BRONX  
CITY OF NEW YORK

ADDENDUM NO. 1

DATED: JULY 6, 2017

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. Refer to the Bid and Contract Documents, VOLUME 1 OF 3, Attachment 1 - Bid Information on Page A-1;  
Change the dates shown for Submission of Bids and for Bid Opening from "July 14, 2017" to read "July 18, 2017".
2. Refer to the Bid and Contract Documents, VOLUME 1 OF 3, SCHEDULE B - M/WBE Utilization Plan on Page 13;  
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3. For additional information, see the attached one (1) page of "Questions Submitted by Bidders and DDC's Responses".

END OF ADDENDUM NO. 1

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THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BID

*Mohsen Zargarelahi*  
for MOHSEN ZARGARELAHI, P.E.  
Assistant Commissioner

\_\_\_\_\_  
Name of Bidder

By: \_\_\_\_\_

Questions Submitted by Bidders and DDC's Responses

QUESTION #1 Please clarify the Project Safety Representative and the Dedicated, Full-time project safety manager as mentioned in Schedule A. Can One PERSON cover the requirements for both? Are the required specifically for the fact that this is a JOINT BID?

DDC'S RESPONSE: The same person may be the Project Safety Representative and the Dedicated Full Time Project Safety Manager. This is independent of Joint Bid requirements.

QUESTION #2: I have found an apparent discrepancy in the reporting requirements for vibration monitoring. Section 5.37 (Construction Report), Subsection B (Reports During Construction) calls for weekly submission of reports. Section 9.71 WBB (Vibration Monitoring of Existing Buildings), bottom of Subsection 9.71WBB.5 (Methods) calls for daily submission of reports. Can you please clarify.

DDC'S RESPONSE: Please read the "INTENT" of SECTION 5.37 and 9.71 WBB which serve different purposes. The reporting time period for each specification is also different.

ATTACH TO CONTRACT DOCUMENTS

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

PROJECT ID: HWX5511

RECONSTRUCTION OF  
WEST TREMONT STEP STREET

INCLUDING STREET LIGHTING, ROADWAY RECONSTRUCTION, SEWER, AND TRAFFIC WORK

Together With All Work Incidental Thereto

BOROUGH OF THE BRONX  
CITY OF NEW YORK

ADDENDUM NO. 2

DATED: JULY 11, 2017

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. For additional information, see the attached one (1) page of "Questions Submitted by Bidders and DDC's Responses".

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 Attachment.

THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BID

*LAWS Construction Co.*  
Name of Bidder  
By: *M. M. M.*

*for Purnima Dharai*  
for MOHSEN ZARGARELAHI, P.E.  
Assistant Commissioner

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

# ADDENDA CONTROL SHEET

BID OPENING DATE: JULY 18, 2017

PROJECT NO.: HWXS511

DESCRIPTION: RECONSTRUCTION OF WEST TREMONT STEP STREET

Addendum		Addendum Contains:				
No.	Date	Revised Bid Date/Time	Revised Bid Schedule	Questions & Responses	Additional Ammendments	Drawings (number)
1	7/6/2017	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
2	7/11/17	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
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		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
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		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)

The Table above is a guide. Refer to the referenced Addendum for specific information.

ATTACH TO CONTRACT DOCUMENTS

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

PROJECT ID: HWXS511

RECONSTRUCTION OF  
WEST TREMONT STEP STREET

INCLUDING STREET LIGHTING, ROADWAY RECONSTRUCTION, SEWER, AND TRAFFIC WORK

Together With All Work Incidental Thereto

BOROUGH OF THE BRONX  
CITY OF NEW YORK

ADDENDUM NO. 2

DATED: JULY 11, 2017

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. For additional information, see the attached one (1) page of "Questions Submitted by Bidders and DDC's Responses".

**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 Attachment.

**THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BID**

*for Purnima Dharai*  
MOHSEN ZARGARELAHI, P.E.  
Assistant Commissioner

\_\_\_\_\_  
Name of Bidder

By: \_\_\_\_\_

Questions Submitted by Bidders and DDC's Responses

QUESTION #1

Per Schedule A, page SA-1, the bidder / contractor is required to provide a dedicated, full time project safety manager. Please provide a specification which outlines the minimum safety / experience requirements that this Project Safety Manager should have

DDC'S RESPONSE: Please refer to the Bid Documents Volume 2 of 3, "Information for Bidders", Section "City of New York Department of Design and Construction Safety Requirements".

ATTACH TO CONTRACT DOCUMENTS

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

PROJECT ID: HWXS511

RECONSTRUCTION OF  
WEST TREMONT STEP STREET

INCLUDING STREET LIGHTING, ROADWAY RECONSTRUCTION, SEWER, AND TRAFFIC WORK

Together With All Work Incidental Thereto

BOROUGH OF THE BRONX  
CITY OF NEW YORK

ADDENDUM NO. 3

DATED: JULY 14, 2017

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. Refer to the Bid and Contract Documents, VOLUME 1 OF 3, Attachment 1 - Bid Information on Page A-1;  
Change the dates shown for Submission of Bids and for Bid Opening from "July 18, 2017" to read "July 25, 2017".
2. Refer to the Bid and Contract Documents, VOLUME 1 OF 3, SCHEDULE B - M/WBE Utilization Plan on Page 13;  
Change the date shown for Bid/Proposal Response Date from "July 18, 2017" to read "July 25, 2017".
3. Refer to the Bid and Contract Documents, VOLUME 2 OF 3, Sections "OFFICE OF THE COMPTROLLER, CITY OF NEW YORK \$220 PREVAILING WAGE SCHEDULE and OFFICE OF THE COMPTROLLER, CITY OF NEW YORK \$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE" marked "PRELIMINARY" Published on 6/1/2017;  
Delete Sections "OFFICE OF THE COMPTROLLER, CITY OF NEW YORK \$220 PREVAILING WAGE SCHEDULE and OFFICE OF THE COMPTROLLER, CITY OF NEW YORK \$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE" marked "PRELIMINARY" Published on 6/1/2017;  
Insert attached Sections "OFFICE OF THE COMPTROLLER, CITY OF NEW YORK \$220 PREVAILING WAGE SCHEDULE and OFFICE OF THE COMPTROLLER, CITY OF NEW YORK \$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE" Published on 7/1/2017.

END OF ADDENDUM NO. 3

By signing in the space provided below, the bidder acknowledges receipt of this Addendum consisting of TWO (2) pages, and ONE HUNDRED TWENTY FOUR (124) pages Attachment.

A3-1

THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BID

LARS Construction Corp/  
Name of Bidder

By: Mohsen Zargarelahi

Mohsen Zargarelahi for  
MOHSEN ZARGARELAHI, P.E.  
Assistant Commissioner



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

# ADDENDA CONTROL SHEET

BID OPENING DATE: JULY 25, 2017

PROJECT NO.: HWXS511

DESCRIPTION: RECONSTRUCTION OF WEST TREMONT STEP STREET

Addendum		Addendum Contains:				
No.	Date	Revised Bid Date/Time	Revised Bid Schedule	Questions & Responses	Additional Ammendments	Drawings (number)
1	7/6/2017	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
2	7/11/2017	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
3	7/14/2017	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> (0)
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		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)
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		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (0)

The Table above is a guide. Refer to the referenced Addendum for specific information.

ATTACH TO CONTRACT DOCUMENTS

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

PROJECT ID: HWXS511

RECONSTRUCTION OF  
WEST TREMONT STEP STREET

INCLUDING STREET LIGHTING, ROADWAY RECONSTRUCTION, SEWER, AND TRAFFIC WORK

Together With All Work Incidental Thereto

BOROUGH OF THE BRONX  
CITY OF NEW YORK

ADDENDUM NO. 3

DATED: JULY 14, 2017

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. Refer to the Bid and Contract Documents, VOLUME 1 OF 3, Attachment 1 - Bid Information on Page A-1;  
Change the dates shown for Submission of Bids and for Bid Opening from "July 18, 2017" to read "July 25, 2017".
2. Refer to the Bid and Contract Documents, VOLUME 1 OF 3, SCHEDULE B - M/WBE Utilization Plan on Page 13;  
Change the date shown for Bid/Proposal Response Date from "July 18, 2017" to read "July 25, 2017".
3. Refer to the Bid and Contract Documents, VOLUME 2 OF 3, Sections "OFFICE OF THE COMPTROLLER, CITY OF NEW YORK \$220 PREVAILING WAGE SCHEDULE and OFFICE OF THE COMPTROLLER, CITY OF NEW YORK \$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE" marked "PRELIMINARY" Published on 6/1/2017;  
Delete Sections "OFFICE OF THE COMPTROLLER, CITY OF NEW YORK \$220 PREVAILING WAGE SCHEDULE and OFFICE OF THE COMPTROLLER, CITY OF NEW YORK \$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE" marked "PRELIMINARY" Published on 6/1/2017;  
Insert attached Sections "OFFICE OF THE COMPTROLLER, CITY OF NEW YORK \$220 PREVAILING WAGE SCHEDULE and OFFICE OF THE COMPTROLLER, CITY OF NEW YORK \$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE" Published on 7/1/2017.

END OF ADDENDUM NO. 3

By signing in the space provided below, the bidder acknowledges receipt of this Addendum consisting of TWO (2) pages, and ONE HUNDRED TWENTY FOUR (124) pages Attachment.

THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BID

Mohsen Zargarelahi for

MOHSEN ZARGARELAHI, P.E.  
Assistant Commissioner

\_\_\_\_\_  
Name of Bidder

By: \_\_\_\_\_

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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 §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) 669-4443. 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 651, 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 §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](http://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](http://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) 669-4443, Monday through Friday between the hours of 9 a.m. and 5 p.m.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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 applicable to work performed outside of the regular workday. More information is available at the Mayor's Office of Contract Services (MOCS) web page at <http://www.nyc.gov/html/mocs/html/vendors/pla.shtml>.

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 fringe benefits which cost the employer no less than the prevailing supplemental benefits rate; or
- 2) Supplement the employee's hourly wage by an amount no less than the prevailing supplemental benefits rate; or
- 3) Provide a combination of bona fide fringe benefits and wage supplements which cost the employer no less than the prevailing supplemental benefits rate in total.

Although prevailing wage laws do not require employers to provide bona fide fringe benefits (as opposed to wage supplements) to their employees, other laws may. For example, the Employee Retirement Income Security Act, 29 U.S.C. § 1001 et seq., the Patient Protection and Affordable Care Act, 42 U.S.C. § 18001 et seq., and the New York City Paid Sick Leave Law, N.Y.C. Admin. Code § 20-911 et seq., require certain employers to provide certain benefits to their employees. Labor agreements to which employers are a party may also require certain benefits. The Comptroller's Office does not enforce these laws or agreements.

**Employers must provide prevailing supplemental benefits at the straight time rate for each hour worked unless otherwise noted in the classification.**

Wasył Kinach, P.E.  
Director of Classifications  
Bureau of Labor Law

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

## **ASBESTOS HANDLER**

(Hazardous Material; Disturbs, removes, encapsulates, repairs, or encloses friable asbestos material)

### **Asbestos Handler**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$36.00**

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.

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)

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## **BLASTER**

### **Blaster**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$46.27**

Supplemental Benefit Rate per Hour: **\$47.99**

### **Blaster (Hydraulic)**

Effective Period: 7/1/2017 - 6/30/2018



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

Wage Rate per Hour: \$47.15  
Supplemental Benefit Rate per Hour: \$47.99

**Blaster - Trac Drill Hydraulic**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$41.29  
Supplemental Benefit Rate per Hour: \$47.99

**Blaster - Wagon: Air Trac: Quarry Bar: Drillrunners**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$40.46  
Supplemental Benefit Rate per Hour: \$47.99

**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: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$39.34  
Supplemental Benefit Rate per Hour: \$47.99

**Blaster - Powder Carriers**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$35.17  
Supplemental Benefit Rate per Hour: \$47.99

**Blaster - Hydraulic Trac Drill Chuck Tender**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$33.81  
Supplemental Benefit Rate per Hour: \$47.99

**Blaster - Chuck Tender & Nipper**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$33.00  
Supplemental Benefit Rate per Hour: \$47.99

**Blaster - Magazine Keepers: (Watch Person)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$18.22  
Supplemental Benefit Rate per Hour: \$47.99

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

### 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 two hours of overtime Monday through Friday, the first ten hours, the first ten hours of work on Saturday and for Make-up Time. Double time for all hours over ten Monday through Saturday (except make-up hours) and for all hours worked on Sunday and Holidays.

### Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Thanksgiving Day

Christmas Day

### Paid Holidays

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 ½ hour unpaid lunch. When three (3) shifts are employed, each shift will work seven and one-half (7 ½) hours, but will be paid for eight (8) hours, since only one-half (½) 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)

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## BOILERMAKER

### Boilermaker

Effective Period: 7/1/2017 - 12/31/2017

Wage Rate per Hour: \$55.23

Supplemental Benefit Rate per Hour: \$42.96

Supplemental Note: For time and one half overtime - \$63.82 For double overtime - \$84.68

Effective Period: 1/1/2018 - 6/30/2018

Wage Rate per Hour: \$57.17

Supplemental Benefit Rate per Hour: \$43.62

Supplemental Note: For time and one half overtime - \$64.81 For double overtime - \$86.00

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 (7 ½) hours and receive eight hours at the regular straight time hourly rate plus twenty-five cents (\$0.25) per hour. The third shift shall work seven (7) hours and receive eight hours at the regular straight time hourly rate plus fifty cents (\$0.50) per hour. A thirty (30) minute lunch period shall not be considered as time worked. Work in excess of the above shall be paid overtime at the appropriate new construction work or repair work overtime wage and supplemental benefit hourly rate.

(Local #5)

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## BRICKLAYER

### Bricklayer

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$55.10

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: \$31.20

**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

President'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.

(Bricklayer District Council)

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**CARPENTER - BUILDING COMMERCIAL**

**Building Commercial**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$52.50

Supplemental Benefit Rate per Hour: \$46.28

**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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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.

(Carpenters District Council)

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**CARPENTER - HEAVY CONSTRUCTION WORK**  
(Construction of Engineering Structures and Building Foundations)

**Heavy Construction Work**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$52.63

Supplemental Benefit Rate per Hour: \$49.66

**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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**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)

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**CARPENTER - HIGH RISE CONCRETE FORMS**  
(Excludes Engineering Structures and Building Foundations)

**Carpenter High Rise A**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$50.78**

Supplemental Benefit Rate per Hour: **\$41.49**

**Carpenter High Rise B**

Carpenter High Rise B worker is excluded from high risk operations such as erection decking, perimeter debris netting, leading edge work, self-climbing form systems, and the installation of cocoon systems unless directly supervised by a Carpenter High Rise A worker.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$39.07**

Supplemental Benefit Rate per Hour: **\$16.65**

**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**

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Presidential Election Day  
Thanksgiving Day  
Christmas Day

**Paid Holidays**

None

**Shift Rates**

The second shift wage rate shall be 113% of the straight time hourly wage rate. There must be a first shift in order to work a second shift.

(Carpenters District Council)

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**CARPENTER - SIDEWALK SHED, SCAFFOLD AND HOIST**

**Carpenter - Hod Hoist**

(Assisted by Mason Tender)

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$50.50**

Supplemental Benefit Rate per Hour: **\$39.46**

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

**Paid Holidays**

None

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

### Shift Rates

The second shift will receive one hour at the double time rate of pay for the last hour of the shift; eight hours pay for seven hours of work, nine hours pay for eight hours of work. There must be a first shift in order to work a second shift.

(Carpenters District Council)

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## CEMENT & CONCRETE WORKER

### Cement & Concrete Worker

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$42.48

Supplemental Benefit Rate per Hour: \$26.00

Supplemental Note: \$29.50 on Saturdays; \$33.00 on Sundays & Holidays

### Cement & Concrete Worker - (Hired after 2/6/2016)

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$32.00

Supplemental Benefit Rate per Hour: \$18.00

Supplemental Note: \$19.50 on Saturdays; \$21.00 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



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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)

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## CEMENT MASON

### Cement Mason

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$42.62

Supplemental Benefit Rate per Hour: \$38.96

Supplemental Note: For time and one half overtime - \$48.21; For double overtime - \$57.46

### Overtime Description

Time and one-half the regular rate after an 8 hour day, double time the regular rate after 10 hours. Time and one-half the regular rate on Saturday, double time the regular rate after 10 hours. Double time the regular rate on Sunday.

### 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) (BCA)

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## **CORE DRILLER**

### **Core Driller**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$38.82**

Supplemental Benefit Rate per Hour: **\$24.66**

### **Core Driller Helper**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$30.96**

Supplemental Benefit Rate per Hour: **\$24.66**

### **Core Driller Helper(Third year in the industry)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$27.86**

Supplemental Benefit Rate per Hour: **\$24.66**

### **Core Driller Helper (Second year in the industry)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$24.77**

Supplemental Benefit Rate per Hour: **\$24.66**

### **Core Driller Helper (First year in the industry)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$21.67**

Supplemental Benefit Rate per Hour: **\$24.66**

## **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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

Labor Day  
Thanksgiving Day  
Christmas Day

### Shift Rates

The shift day shall be the continuous eight and one-half (8½) 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 (½) 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 (7 ½) hours paid for eight (8) hours of labor and be permitted one-half (½) hour for mealtime.

(Carpenters District Council)

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## DERRICKPERSON AND RIGGER

### Derrick Person & Rigger

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$46.86

Supplemental Benefit Rate per Hour: \$51.40

Supplemental Note: The above supplemental rate applies for work performed in Manhattan, Bronx, Brooklyn and Queens. \$52.82 - For work performed in Staten Island.

### Derrick Person & Rigger - Site Work

Assists the Stone Mason-Setter in the setting of stone

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$40.29

Supplemental Benefit Rate per Hour: \$39.23

### 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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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)

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**DIVER**

**Diver (Marine)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$66.66

Supplemental Benefit Rate per Hour: \$49.66

**Diver Tender (Marine)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$47.34

Supplemental Benefit Rate per Hour: \$49.66

**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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

### Shift Rates

When three shifts are utilized each shift shall work seven and one half-hours (7 1/2 hours) and paid for 8 hours, allowing for one half hour for lunch.

(Carpenters District Council)

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## DOCKBUILDER - PILE DRIVER

### Dockbuilder - Pile Driver

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$52.63

Supplemental Benefit Rate per Hour: \$49.66

### 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)

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## **DRIVER: TRUCK (TEAMSTER)**

### **Driver - Dump Truck**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$41.18**

Supplemental Benefit Rate per Hour: **\$44.79**

Supplemental Note: Over 40 hours worked: at time and one half rate - \$19.94; at double time rate - \$26.58

### **Driver - Tractor Trailer**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$42.22**

Supplemental Benefit Rate per Hour: **\$45.40**

Supplemental Note: Over 40 hours worked: at time and one half rate - \$17.55; at double time rate - \$23.40

### **Driver - Euclid & Turnapull Operator**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$42.78**

Supplemental Benefit Rate per Hour: **\$45.40**

Supplemental Note: Over 40 hours worked: at time and one half rate - \$17.55 at double time rate - \$23.40

## **Overtime Description**

For Paid Holidays: Holiday pay for all holidays shall be prorated based two hours per day for each day worked in the holiday week, not to exceed 8 hours of holiday pay. For Thanksgiving week, the prorated share shall be 5 1/3 hours of holiday pay for each day worked in Thanksgiving week.

## **Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

## **Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

## **Paid Holidays**

New Year's Day

President's Day

Memorial Day

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

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 for one half hour for lunch and receive 9 hours pay for 8 hours of work.

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### Driver Redi-Mix (Sand & Gravel)

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$38.40

Supplemental Benefit Rate per Hour: \$42.12

Supplemental Note: Over 40 hours worked: time and one half rate \$15.99, double time rate \$21.33

### 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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Election Day  
Thanksgiving Day  
Christmas Day

(Local #282)

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## **ELECTRICIAN**

(Including all low voltage cabling carrying data; video; and voice in combination with data and or video.)

### **Electrician "A" (Regular Day / Day Shift)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: \$56.00

Supplemental Benefit Rate per Hour: \$54.35

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: \$56.00

Supplemental Benefit Rate per Hour: \$55.72

### **Electrician "A" (Regular Day Overtime after 7 hrs / Day Shift Overtime after 8 hrs)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: \$84.00

Supplemental Benefit Rate per Hour: \$57.86

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: \$84.00

Supplemental Benefit Rate per Hour: \$59.23

### **Electrician "A" (Swing Shift)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: \$65.71

Supplemental Benefit Rate per Hour: \$61.94

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: \$65.71

Supplemental Benefit Rate per Hour: \$63.52

### **Electrician "A" (Swing Shift Overtime After 7.5 hours)**

Effective Period: 7/1/2017 - 5/9/2018



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

Wage Rate per Hour: \$98.57

Supplemental Benefit Rate per Hour: \$66.05

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: \$98.57

Supplemental Benefit Rate per Hour: \$67.64

**Electrician "A" (Graveyard Shift)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: \$73.60

Supplemental Benefit Rate per Hour: \$68.33

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: \$73.60

Supplemental Benefit Rate per Hour: \$70.09

**Electrician "A" (Graveyard Shift Overtime After 7 hours)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: \$110.40

Supplemental Benefit Rate per Hour: \$72.95

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: \$110.40

Supplemental Benefit Rate per Hour: \$74.70

**Overtime**

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

**Overtime Holidays**

Time and one half the regular rate for work on a holiday.

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

**Paid Holidays**

None

**Shift Rates**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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 \$25.67 and effective 5/10/18 \$25.92.

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### **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: 7/1/2017 - 5/9/2018

Wage Rate per Hour: \$28.50

Supplemental Benefit Rate per Hour: \$22.10

First and Second Year "M" Wage Rate Per Hour: \$24.00

First and Second Year "M" Supplemental Rate: \$19.80

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: \$29.00

Supplemental Benefit Rate per Hour: \$22.65

First and Second Year "M" Wage Rate Per Hour: \$24.50

First and Second Year "M" Supplemental Rate: \$20.30

### **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: 7/1/2017 - 5/9/2018

Wage Rate per Hour: \$42.75

Supplemental Benefit Rate per Hour: \$23.89

First and Second Year "M" Wage Rate Per Hour: \$36.00

First and Second Year "M" Supplemental Rate: \$21.30

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: \$43.50

Supplemental Benefit Rate per Hour: \$24.47

First and Second Year "M" Wage Rate Per Hour: \$36.75

First and Second Year "M" Supplemental Rate: \$21.84

### **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.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**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)

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**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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$32.40

Supplemental Benefit Rate per Hour: \$16.10

Supplemental Note: \$14.60 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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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)

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**ELECTRICIAN-STREET LIGHTING WORKER**

**Electrician - Electro Pole Electrician**

Effective Period: 7/1/2017 - 5/15/2018

Wage Rate per Hour: \$56.00

Supplemental Benefit Rate per Hour: \$56.26

Effective Period: 5/16/2018 - 6/30/2018

Wage Rate per Hour: \$56.00

Supplemental Benefit Rate per Hour: \$57.63

**Electrician - Electro Pole Foundation Installer**

Effective Period: 7/1/2017 - 5/15/2018

Wage Rate per Hour: \$41.54

Supplemental Benefit Rate per Hour: \$41.02

Effective Period: 5/16/2018 - 6/30/2018

Wage Rate per Hour: \$42.16

Supplemental Benefit Rate per Hour: \$42.19

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**Electrician - Electro Pole Maintainer**

Effective Period: 7/1/2017 - 5/16/2018

Wage Rate per Hour: \$35.58

Supplemental Benefit Rate per Hour: \$36.89

Effective Period: 5/17/2018 - 6/30/2018

Wage Rate per Hour: \$36.11

Supplemental Benefit Rate per Hour: \$37.93

**Overtime Description**

Electrician - Electro Pole Electrician: Time and one half the regular rate after a 7 hour day and after 5 consecutive days worked per week.

Electrician - Electro Pole Foundation Installer: Time and one half the regular rate after 8 hours within a 24 hour period and Saturday and Sunday.

Electrician - Electro Pole Maintainer: Time and one half the regular rate after a 7 hour day and after 5 consecutive days worked per week. Saturdays and Sundays may be used as a make-up day at straight time when a day is lost during the week to inclement weather.

**Overtime Holidays**

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

**Paid Holidays**

None

(Local #3)

---

**ELEVATOR CONSTRUCTOR**

**Elevator Constructor**

Effective Period: 7/1/2017 - 3/16/2018

Wage Rate per Hour: \$62.64

Supplemental Benefit Rate per Hour: \$34.25

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Effective Period: 3/17/2018 - 6/30/2018

Wage Rate per Hour: \$64.48

Supplemental Benefit Rate per Hour: \$35.85

### 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)

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## ELEVATOR REPAIR & MAINTENANCE

### Elevator Service/Modernization Mechanic

Effective Period: 7/1/2017 - 3/16/2018

Wage Rate per Hour: \$49.14

Supplemental Benefit Rate per Hour: \$34.11

Effective Period: 3/17/2018 - 6/30/2018

Wage Rate per Hour: \$50.49

Supplemental Benefit Rate per Hour: \$35.71

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

### **Overtime Description**

For Scheduled Service Work: Double time - work scheduled in advance by two or more workers performed on Sundays, Holidays, and between midnight and 7:00am.

### **Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Time and one half the regular rate for work on a holiday plus the day's pay.

### **Paid Holidays**

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

### **Shift Rates**

Afternoon shift - regularly hourly rate plus a (15%) fifteen percent differential. Graveyard shift - time and one half the regular rate.

### **Vacation**

Employer contributes 8% of regular basic hourly rate as vacation pay for employees with more than 15 years of service, and 6% for employees with 5 to 15 years of service, and 4% for employees with less than 5 years of service.

(Local #1)

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## **ENGINEER**

### **Engineer - Heavy Construction Operating Engineer I**

Cherry pickers 20 tons and over and Loaders (rubber tired and/or tractor type with a manufacturer's minimum rated capacity of six cubic yards and over).

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$67.32

Supplemental Benefit Rate per Hour: \$36.87

Supplemental Note: \$66.34 on overtime

Shift Wage Rate: \$107.71

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**Engineer - Heavy Construction Operating Engineer II**

Backhoes, Basin Machines, Groover, Mechanical Sweepers, Bobcat, Boom Truck, Barrier Transport (Barrier Mover) & machines of similar nature. Operation of Churn Drills and machines of a similar nature, Stetco Silent Hoist and machines of similar nature, Vac-Alls, Meyers Machines, John Beam and machines of a similar nature, Ross Carriers and Travel Lifts and machines of a similar nature, Bulldozers, Scrapers and Turn-a-Pulls: Tugger Hoists (Used exclusively for handling excavated material); Tractors with attachments, Hyster and Roustabout Cranes, Cherrypickers. Austin Western, Grove and machines of a similar nature, Scoopmobiles, Monorails, Conveyors, Trenchers: Loaders-Rubber Tired and Tractor: Barber Greene and Eimco Loaders and Eimco Backhoes; Mighty Midget and similar breakers and Tampers, Curb and Gutter Pavers and Motor Patrol, Motor Graders and all machines of a similar nature. Locomotives 10 Tons or under. Mini-Max, Break-Tech and machines of a similar nature; Milling machines, robotic and demolition machines and machines of a similar nature, shot blaster, skid steer machines and machines of a similar nature including bobcat, pile rig rubber-tired excavator (37,000 lbs. and under), 2 man auger.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$65.31

Supplemental Benefit Rate per Hour: \$36.87

Supplemental Note: \$66.34 on overtime

Shift Wage Rate: \$104.50

**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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$61.93

Supplemental Benefit Rate per Hour: \$36.87

Supplemental Note: \$66.34 on overtime

Shift Wage Rate: \$99.09

**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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$65.00

Supplemental Benefit Rate per Hour: \$36.87

Supplemental Note: \$66.34 on overtime

Shift Wage Rate: \$104.00



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§220 PREVAILING WAGE SCHEDULE

**Engineer - Heavy Construction Maintenance Engineer II**

On Base Mounted Tower Cranes

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$85.53

Supplemental Benefit Rate per Hour: \$36.87

Supplemental Note: \$66.34 on overtime

Shift Wage Rate: \$136.85

**Engineer - Heavy Construction Maintenance Engineer III**

On Generators, Light Towers

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$42.73

Supplemental Benefit Rate per Hour: \$36.87

Supplemental Note: \$66.34 on overtime

Shift Wage Rate: \$68.37

**Engineer - Heavy Construction Maintenance Engineer IV**

On Pumps and Mixers including mud sucking

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$43.86

Supplemental Benefit Rate per Hour: \$36.87

Supplemental Note: \$66.34 on overtime

Shift Wage Rate: \$70.18

**Engineer - Heavy Construction Oilers I**

Gradalls, Cold Planer Grader, Concrete Pumps, Driving Truck Cranes, Driving and Operating Fuel and Grease Trucks.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$58.57

Supplemental Benefit Rate per Hour: \$36.87

Supplemental Note: \$66.34 on overtime

Shift Wage Rate: \$93.71

**Engineer - Heavy Construction Oilers II**

All gasoline, electric, diesel or air operated Shovels, Draglines, Backhoes, Keystones, Pavers, Gunitite Machines, Battery of Compressors, Crawler Cranes, two-person Trenching Machines.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$40.36

Supplemental Benefit Rate per Hour: \$36.87

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Supplemental Note: \$66.34 on overtime  
Shift Wage Rate: \$64.58

**Engineer - Steel Erection Maintenance Engineers**

Derrick, Travelers, Tower, Crawler Tower and Climbing Cranes

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$61.13  
Supplemental Benefit Rate per Hour: \$35.41  
Supplemental Note: \$63.67 on overtime  
Shift Wage Rate: \$97.81

**Engineer - Steel Erection Oiler I**

On a Truck Crane

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$57.21  
Supplemental Benefit Rate per Hour: \$35.41  
Supplemental Note: \$63.67 on overtime  
Shift Wage Rate: \$91.54

**Engineer - Steel Erection Oiler II**

On a Crawler Crane

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$43.54  
Supplemental Benefit Rate per Hour: \$35.41  
Supplemental Note: \$63.67 on overtime  
Shift Wage Rate: \$69.66

**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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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

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**Engineer - Building Work Maintenance Engineers I**

Installing, repairing, maintaining, dismantling (of all equipment including: Steel Cutting and Bending Machines, Mechanical Heaters, Mine Hoists, Climbing Cranes, Tower Cranes, Linden Peine, Lorain, Liebherr, Mannes, or machines of a similar nature, Well Point Systems, Deep Well Pumps, Concrete Mixers with loading Device, Concrete Plants, Motor Generators when used for temporary power and lights), skid steer machines of a similar nature including bobcat.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$58.30**

Supplemental Benefit Rate per Hour: **\$35.41**

Supplemental Note: \$63.67 on overtime

**Engineer - Building Work Maintenance Engineers II**

On Pumps, Generators, Mixers and Heaters

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$45.28**

Supplemental Benefit Rate per Hour: **\$35.41**

Supplemental Note: \$63.67 on overtime

**Engineer - Building Work Oilers I**

All gasoline, electric, diesel or air operated Gradealls: Concrete Pumps, Overhead Cranes in Power Houses: Their duties shall be to assist the Engineer in oiling, greasing and repairing of all machines; Driving Truck Cranes: Driving and Operating Fuel and Grease Trucks, Cherrypickers (hydraulic cranes) over 70,000 GVW, and machines of a similar nature.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$55.42**

Supplemental Benefit Rate per Hour: **\$35.41**

Supplemental Note: \$63.67 on overtime

**Engineer - Building Work Oilers II**

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

Effective Period: 7/1/2017 - 6/30/2018

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Wage Rate per Hour: **\$41.16**

Supplemental Benefit Rate per Hour: **\$35.41**

Supplemental Note: \$63.67 on overtime

**Overtime Description**

On jobs of more than one shift, if an Employee fails to report for work through any cause over which the Employer has no control, the Employee on duty will continue to work at the rate of single time.

**Overtime**

Double time the regular rate after an 8 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

Double time the regular rate for work on the following holiday(s).

**Paid Holidays**

New Year's Day

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)

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**ENGINEER - CITY SURVEYOR AND CONSULTANT**

**Party Chief**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$38.18**

Supplemental Benefit Rate per Hour: **\$20.15**

Supplemental Note: Overtime Benefit Rate - \$27.65 per hour (time & one half) \$35.15 per hour (double time).

**Instrument Person**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$31.47**

Supplemental Benefit Rate per Hour: **\$20.15**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Supplemental Note: Overtime Benefit Rate - \$27.65 per hour (time & one half) \$35.15 per hour (double time).

**Rodperson**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$27.24

Supplemental Benefit Rate per Hour: \$20.15

Supplemental Note: Overtime Benefit Rate - \$27.65 per hour (time & one half) \$35.15 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

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)

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**ENGINEER - FIELD (BUILDING CONSTRUCTION)**  
(Construction of Building Projects, Concrete Superstructures, etc.)

**Field Engineer - BC Party Chief**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$60.10

Supplemental Benefit Rate per Hour: \$32.15

Supplemental Note: Overtime Benefit Rate - \$44.90 per hour (time & one half) \$57.65 per hour (double time).

**Field Engineer - BC Instrument Person**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$46.69

Supplemental Benefit Rate per Hour: \$32.15

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Supplemental Note: Overtime Benefit Rate - \$44.90 per hour (time & one half) \$57.65 per hour (double time).

**Field Engineer - BC Rodperson**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$30.20

Supplemental Benefit Rate per Hour: \$32.15

Supplemental Note: Overtime Benefit Rate - \$44.90 per hour (time & one half) \$57.65 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)

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**ENGINEER - FIELD (HEAVY CONSTRUCTION)**  
(Construction of Roads, Tunnels, Bridges, Sewers, Building Foundations,  
Engineering Structures etc.)

**Field Engineer - HC Party Chief**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$70.25

Supplemental Benefit Rate per Hour: \$34.18

Supplemental Note: Overtime benefit rate - \$47.82 per hour (time & one half), \$61.46 per hour (double time).

**Field Engineer - HC Instrument Person**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$51.64

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§220 PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: **\$34.18**

Supplemental Note: Overtime benefit rate - \$47.82 per hour (time & one half), \$61.46 per hour (double time).

**Field Engineer - HC Rodperson**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$43.37**

Supplemental Benefit Rate per Hour: **\$34.18**

Supplemental Note: Overtime benefit rate - \$47.82 per hour (time & one half), \$61.46 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)

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**ENGINEER - FIELD (STEEL ERECTION)**

**Field Engineer - Steel Erection Party Chief**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$63.64**

Supplemental Benefit Rate per Hour: **\$33.04**

Supplemental Note: Overtime benefit rate - \$46.11 per hour (time & one half), \$59.18 per hour (double time).

**Field Engineer - Steel Erection Instrument Person**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$49.59**

Supplemental Benefit Rate per Hour: **\$33.04**

Supplemental Note: Overtime benefit rate - \$46.11 per hour (time & one half), \$59.18 per hour (double time).

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**Field Engineer - Steel Erection Rodperson**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$33.20

Supplemental Benefit Rate per Hour: \$33.04

Supplemental Note: Overtime benefit rate - \$46.11 per hour (time & one half), \$59.18 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)

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**ENGINEER - OPERATING**

**Operating Engineer - Road & Heavy Construction I**

Back Filling Machines, Cranes, Mucking Machines and Dual Drum Paver.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$76.60

Supplemental Benefit Rate per Hour: \$31.10

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$122.56

**Operating Engineer - Road & Heavy Construction II**

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



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$79.28  
Supplemental Benefit Rate per Hour: \$31.10  
Supplemental Note: \$56.50 overtime hours  
Shift Wage Rate: \$126.85

**Operating Engineer - Road & Heavy Construction III**

Mine Hoists, Cranes, etc. (Used as Mine Hoists)

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$81.80  
Supplemental Benefit Rate per Hour: \$31.10  
Supplemental Note: \$56.50 overtime hours  
Shift Wage Rate: \$130.88

**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: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$79.85  
Supplemental Benefit Rate per Hour: \$31.10  
Supplemental Note: \$56.50 overtime hours  
Shift Wage Rate: \$127.76

**Operating Engineer - Road & Heavy Construction V**

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

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$78.29  
Supplemental Benefit Rate per Hour: \$31.10  
Supplemental Note: \$56.50 overtime hours  
Shift Wage Rate: \$125.26

**Operating Engineer - Road & Heavy Construction VI**

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

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$74.42  
Supplemental Benefit Rate per Hour: \$31.10  
Supplemental Note: \$56.50 overtime hours  
Shift Wage Rate: \$119.07

**Operating Engineer - Road & Heavy Construction VII**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Barrier Movers , Barrier Transport and Machines of a Similar Nature.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$60.22

Supplemental Benefit Rate per Hour: \$31.10

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$96.35

**Operating Engineer - Road & Heavy Construction VIII**

Utility Compressors

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$46.88

Supplemental Benefit Rate per Hour: \$31.10

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$58.92

**Operating Engineer - Road & Heavy Construction IX**

Horizontal Boring Rig

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$70.79

Supplemental Benefit Rate per Hour: \$31.10

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$113.26

**Operating Engineer - Road & Heavy Construction X**

Elevators (manually operated as personnel hoist).

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$65.12

Supplemental Benefit Rate per Hour: \$31.10

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$104.19

**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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$50.73

Supplemental Benefit Rate per Hour: \$31.10

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$81.17

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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**Operating Engineer - Road & Heavy Construction XII**

All Drills and Machines of a similar nature.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$75.19

Supplemental Benefit Rate per Hour: \$31.10

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$120.30

**Operating Engineer - Road & Heavy Construction XIII**

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

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$72.84

Supplemental Benefit Rate per Hour: \$31.10

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$116.54

**Operating Engineer - Road & Heavy Construction XIV**

Concrete Mixer

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$69.67

Supplemental Benefit Rate per Hour: \$31.10

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$111.47

**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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$47.18

Supplemental Benefit Rate per Hour: \$31.10

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$75.49

**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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$66.56

Supplemental Benefit Rate per Hour: \$31.10

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Supplemental Note: \$56.50 overtime hours  
Shift Wage Rate: \$106.50

**Operating Engineer - Road & Heavy Construction XVII**

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

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$67.07  
Supplemental Benefit Rate per Hour: \$31.10  
Supplemental Note: \$56.50 overtime hours  
Shift Wage Rate: \$107.31

**Operating Engineer - Road & Heavy Construction XVIII**

Tower Crane

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$95.98  
Supplemental Benefit Rate per Hour: \$31.10  
Supplemental Note: \$56.50 overtime hours  
Shift Wage Rate: \$153.57

**Operating Engineer - Paving I**

Asphalt Spreaders, Autogrades (C.M.I.), Roto/Mil  
Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$74.42  
Supplemental Benefit Rate per Hour: \$31.10  
Supplemental Note: \$56.50 overtime hours  
Shift Wage Rate: \$119.07

**Operating Engineer - Paving II**

Asphalt Roller

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$72.50  
Supplemental Benefit Rate per Hour: \$31.10  
Supplemental Note: \$56.50 overtime hours  
Shift Wage Rate: \$116.00

**Operating Engineer - Paving III**

Asphalt Plants

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$61.43

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Supplemental Benefit Rate per Hour: **\$31.10**  
Supplemental Note: \$56.50 overtime hours  
Shift Wage Rate: **\$98.29**

**Operating Engineer - Concrete I**

Cranes

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$79.50**  
Supplemental Benefit Rate per Hour: **\$31.10**  
Supplemental Note: \$56.50 overtime hours

**Operating Engineer - Concrete II**

Compressors

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$47.54**  
Supplemental Benefit Rate per Hour: **\$31.10**  
Supplemental Note: \$56.50 overtime hours

**Operating Engineer - Concrete III**

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

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$63.66**  
Supplemental Benefit Rate per Hour: **\$31.10**  
Supplemental Note: \$56.50 overtime hours

**Operating Engineer - Steel Erection I**

Three Drum Derricks

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$82.23**  
Supplemental Benefit Rate per Hour: **\$31.10**  
Supplemental Note: \$56.50 overtime hours  
Shift Wage Rate: **\$131.57**

**Operating Engineer - Steel Erection II**

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

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$79.04**  
Supplemental Benefit Rate per Hour: **\$31.10**  
Supplemental Note: \$56.50 overtime hours  
Shift Wage Rate: **\$126.46**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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**Operating Engineer - Steel Erection III**

Compressors, Welding Machines.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$47.14

Supplemental Benefit Rate per Hour: \$31.10

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$75.42

**Operating Engineer - Steel Erection IV**

Compressors - Not Combined with Welding Machine.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$44.91

Supplemental Benefit Rate per Hour: \$31.10

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$71.86

**Operating Engineer - Building Work I**

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

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$62.87

Supplemental Benefit Rate per Hour: \$31.10

Supplemental Note: \$56.50 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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$47.01

Supplemental Benefit Rate per Hour: \$31.10

Supplemental Note: \$56.50 overtime hours

**Operating Engineer - Building Work III**

Double Drum

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$71.60

Supplemental Benefit Rate per Hour: \$31.10

Supplemental Note: \$56.50 overtime hours

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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**Operating Engineer - Building Work IV**

Stone Derrick, Cranes, Hydraulic Cranes Boom Trucks.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$75.87

Supplemental Benefit Rate per Hour: \$31.10

Supplemental Note: \$56.50 overtime hours

**Operating Engineer - Building Work V**

Dismantling and Erection of Cranes, Relief Engineer.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$69.88

Supplemental Benefit Rate per Hour: \$31.10

Supplemental Note: \$56.50 overtime hours

**Operating Engineer - Building Work VI**

4 Pole Hoist, Single Drum Hoists.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$69.14

Supplemental Benefit Rate per Hour: \$31.10

Supplemental Note: \$56.50 overtime hours

**Operating Engineer - Building Work VII**

Rack & Pinion and House Cars

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$54.92

Supplemental Benefit Rate per Hour: \$31.10

Supplemental Note: \$56.50 overtime hours

For New House Car projects Wage Rate per Hour \$43.77

**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).

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

### **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

### **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)

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## **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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$50.50

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



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Presidential Election Day  
Thanksgiving Day  
Day after Thanksgiving  
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**

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)

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**GLAZIER**

(New Construction, Remodeling, and Alteration)

**Glazier**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$44.70**

Supplemental Benefit Rate per Hour: **\$40.99**

Supplemental Note: Supplemental Benefit Overtime Rate: \$50.09

**Overtime Description**

An optional 8th hour can be worked at straight time rate. If 9th hour is worked, then both hours or more (8th & 9th 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

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**Paid Holidays**

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.

(Local #1281)

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**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 \$127,628. 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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$24.13

Supplemental Benefit Rate per Hour: \$21.12

**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)

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## HEAT AND FROST INSULATOR

### Heat & Frost Insulator

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$58.38

Supplemental Benefit Rate per Hour: \$39.46

### 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

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Triple time the regular rate for work on the following holiday(s).

Labor Day

### Paid Holidays

None

### Shift Rates

The first shift shall work seven hours at the regular straight time rate. The second and third shift shall work seven hours the regular straight time hourly rate plus a fourteen percent wage and benefit premium.

Off hour work in occupied or retail buildings may be worked on weekdays with an 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.

(Local #12) (BCA)

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OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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**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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$36.33

Supplemental Benefit Rate per Hour: \$29.22

**House Wrecker - Tier B**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$25.56

Supplemental Benefit Rate per Hour: \$21.63

**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)

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**IRON WORKER - ORNAMENTAL**

**Iron Worker - Ornamental**

Effective Period: 7/1/2017 - 6/30/2018

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Wage Rate per Hour: **\$44.20**

Supplemental Benefit Rate per Hour: **\$51.57**

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)

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## IRON WORKER - STRUCTURAL

### Iron Worker - Structural

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$50.05**

Supplemental Benefit Rate per Hour: **\$72.53**

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

### Overtime Description

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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

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

### Paid Holidays

1/2 day on Christmas Eve if work is performed in the A.M.

1/2 day on New Year's Eve if work is performed in the A.M.

### Shift Rates

Monday through Friday - First Shift: First eight hours are paid at straight time, the 9th & 10th hours are paid at time and a half, double time paid thereafter. Second and third Shifts: First eight hours are paid at time and one-half, double time thereafter. Saturdays: All shifts, first eight hours paid at time and one-half, double time thereafter: Sunday all shifts are paid at double time.

(Local #40 & #361)

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## LABORER

(Foundation, Concrete, Excavating, Street Pipe Layer and Common)

### Laborer

Excavation and foundation work for buildings, heavy construction, engineering work, and hazardous waste removal in connection with the above work. Landscaping tasks in connection with heavy construction work, engineering work and building projects. Projects include, but are not limited to pollution plants, sewers, parks, subways, bridges, highways, etc.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$41.50

Supplemental Benefit Rate per Hour: \$40.63

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.

### **Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Thanksgiving Day  
Christmas Day

### **Paid Holidays**

Labor Day  
Thanksgiving Day

### **Shift Rates**

When two shifts are employed, single time rate shall be paid for each shift. When three shifts are found necessary, each shift shall work seven and one half hours (7 ½), but shall be paid for eight (8) hours of labor, and be permitted one half hour for lunch.

(Local #731)

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## **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: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$28.75  
Supplemental Benefit Rate per Hour: \$15.55

### **Landscaper (3 - 6 years experience)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$27.75  
Supplemental Benefit Rate per Hour: \$15.55

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**Landscaper (up to 3 years experience)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$25.25

Supplemental Benefit Rate per Hour: \$15.55

**Groundperson**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$25.25

Supplemental Benefit Rate per Hour: \$15.55

**Tree Remover / Pruner**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$33.75

Supplemental Benefit Rate per Hour: \$15.55

**Landscaper Sprayer (Pesticide Applicator)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$23.75

Supplemental Benefit Rate per Hour: \$15.55

**Watering - Plant Maintainer**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$18.72

Supplemental Benefit Rate per Hour: \$15.55

**Overtime Description**

For all overtime work performed, supplemental benefits shall include an additional seventy-five (\$0.75) cents per hour.

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Time and one half the regular rate for work on a holiday plus the day's pay.

**Paid Holidays**

New Year's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

**Shift Rates**



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

Work performed on a 4pm to 12am shift has a 15% differential. Work performed on a 12am to 8am shift has a 20% differential.

(Local #175)

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## MARBLE MECHANIC

### Marble Setter

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$52.74**

Supplemental Benefit Rate per Hour: **\$38.67**

### Marble Finisher

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$41.46**

Supplemental Benefit Rate per Hour: **\$36.64**

### Marble Polisher

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$37.93**

Supplemental Benefit Rate per Hour: **\$28.33**

## 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.

## 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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Christmas Day

**Paid Holidays**

None

(Local #7)

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**MASON TENDER**

**Mason Tender**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$37.90

Supplemental Benefit Rate per Hour: \$30.59

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

**Paid Holidays**

None

**Shift Rates**

The Employer may work two (2) shifts with the first shift at the straight time wage rate and the second shift receiving eight (8) hours paid for seven (7) hours work at the straight time wage rate.

(Local #79)

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## **MASON TENDER (INTERIOR DEMOLITION WORKER)**

### **Mason Tender Tier A**

Tier A Interior Demolition Worker performs all burning, chopping, and other technically skilled tasks related to interior demolition work.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$36.19**

Supplemental Benefit Rate per Hour: **\$24.25**

### **Mason Tender Tier B**

Tier B Interior Demolition Worker performs manual work and work incidental to demolition work, such as loading and carting of debris from the work site to an area where it can be loaded in to bins/trucks for removal. Also performs clean-up of the site when demolition is completed.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$25.38**

Supplemental Benefit Rate per Hour: **\$18.57**

### **Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Sunday.

### **Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

### **Paid Holidays**

None

(Local #79)

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## **METALLIC LATHER**

### **Metallic Lather**

Effective Period: 7/1/2017 - 6/30/2018

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Wage Rate per Hour: \$46.28

Supplemental Benefit Rate per Hour: \$42.92

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

Memorial Day

Independence Day

Labor Day

Columbus Day

Thanksgiving Day

Christmas Day

### Paid Holidays

1/2 day on Christmas Eve if work is performed in the A.M.

1/2 day on New Year's Eve if work is performed in the A.M.

### Shift Rates

There will be no shift differential paid on the first shift if more than one shift is employed. The shift differential will remain \$12/hour on the second and third shift for the first eight (8) hours if worked. There will be no pyramiding on overtime worked on second and third shifts. The time and one half (1.5x) rate will be against the base wage rate, not the shift differential

(Local #46)

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## MILLWRIGHT

### Millwright

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$51.50

Supplemental Benefit Rate per Hour: \$52.41

### Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

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)

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## MOSAIC MECHANIC

### Mosaic Mechanic - Mosaic & Terrazzo Mechanic

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$46.86

Supplemental Benefit Rate per Hour: \$40.65

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$51.67 per hour.

### Mosaic Mechanic - Mosaic & Terrazzo Finisher

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$45.26

Supplemental Benefit Rate per Hour: \$40.63

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$51.65 per hour.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**Mosaic Mechanic - Machine Operator Grinder**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$45.26**

Supplemental Benefit Rate per Hour: **\$40.63**

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$51.65 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)

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**PAINTER**

**Painter - Brush & Roller**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$42.50**

Supplemental Benefit Rate per Hour: **\$28.62**

Supplemental Note: \$ 33.25 on overtime

**Spray & Scaffold / Decorative / Sandblast**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$45.50**

Supplemental Benefit Rate per Hour: **\$28.62**

Supplemental Note: \$ 33.25 on overtime

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**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)

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**PAINTER - METAL POLISHER**

**METAL POLISHER**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$29.73**

Supplemental Benefit Rate per Hour: **\$7.06**

**METAL POLISHER - NEW CONSTRUCTION**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$30.68**

Supplemental Benefit Rate per Hour: **\$7.06**

**METAL POLISHER - SCAFFOLD OVER 34 FEET**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$33.23**

Supplemental Benefit Rate per Hour: **\$7.06**

**Overtime Description**

All work performed on Saturdays shall be paid at time-in-a half. The exception being; for suspended scaffold work and work deemed as a construction project; an eight (8) hour shift lost during the week due to

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

circumstances beyond the control of the employer, up to a maximum of eight (8) hours per week, may be worked on Saturday at the straight time rate.

### Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Triple time the regular rate for work on the following holiday(s).

### Paid Holidays

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

### Shift Rates

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

Local 8A-28A

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## PAINTER - STRIPER

### Striper (paint)

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$35.00

Supplemental Benefit Rate per Hour: \$12.37

Supplemental Note: Overtime Supplemental Benefit rate - \$8.02; New Hire Rate (0-3 months) - \$0.00

### Lineperson (thermoplastic)

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$39.00

Supplemental Benefit Rate per Hour: \$12.37

Supplemental Note: Overtime Supplemental Benefit rate - \$8.02; New Hire Rate (0-3 months) - \$0.00

### Overtime



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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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: 250 hours worked - 1 day vacation; 500 hours worked - 2 days vacation; 750 hours worked - 3 days vacation; 900 hours worked - 4 days vacation; 1,000 hours worked - 5 days vacation. Employees with two to five years service receive two weeks vacation. Employees with five to twenty years service receive three weeks vacation. Employees with twenty to twenty-five years service receive four weeks vacation. Employees with 25 or more years service receive five weeks vacation. 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)

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**PAINTER - STRUCTURAL STEEL**

**Painters on Structural Steel**

Effective Period: 7/1/2017 - 9/30/2017

Wage Rate per Hour: **\$49.50**

Supplemental Benefit Rate per Hour: **\$37.08**

Effective Period: 10/1/2017 - 6/30/2018

Wage Rate per Hour: **\$50.00**

Supplemental Benefit Rate per Hour: **\$38.33**

**Painter - Power Tool**

Effective Period: 7/1/2017 - 9/30/2017

Wage Rate per Hour: **\$55.50**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: **\$37.08**

Overtime Wage Rate: \$6.00 above the "Painters on Structural Steel" overtime rate.

Effective Period: 10/1/2017 - 6/30/2018

Wage Rate per Hour: **\$56.00**

Supplemental Benefit Rate per Hour: **\$38.33**

Overtime Wage Rate: \$6.00 above the "Painters on Structural Steel" overtime rate.

### Overtime Description

Supplemental Benefits shall be paid for each hour worked, up to forty (40) hours per week for the period of May 1st to November 15th or up to fifty (50) hours per week for the period of November 16th to April 30th.

### Overtime

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

### Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

### Paid Holidays

None

### Shift Rates

Regular hourly rates plus a ten per cent (10%) differential

(Local #806)

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## PAPERHANGER

### Paperhanger

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$44.89**

Supplemental Benefit Rate per Hour: **\$31.13**

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.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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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)

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## PAVER AND ROADBUILDER

### Paver & Roadbuilder - Formsetter

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$45.85

Supplemental Benefit Rate per Hour: \$40.98

### 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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$41.98

Supplemental Benefit Rate per Hour: \$40.98

### Production Paver & Roadbuilder - Screed Person

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$46.45

Supplemental Benefit Rate per Hour: \$40.98

**Production Paver & Roadbuilder - Raker**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$45.85

Supplemental Benefit Rate per Hour: \$40.98

**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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$42.37

Supplemental Benefit Rate per Hour: \$40.98

**Overtime Description**

If an employee works New Year's Day or Christmas Day, they receive the single time rate plus 25%.

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

Memorial Day

Independence Day

Labor Day

Columbus Day

Thanksgiving Day

**Shift Rates**

When two shifts are employed, the work period for each shift shall be a continuous eight (8) hours. When three shifts are employed, each shift will work seven and one half (7 ½) hours but will be paid for eight (8) hours since only one half (1/2) hour is allowed for meal time.

When two or more shifts are employed, single time will be paid for each shift.

Night Work - On night work, the first eight (8) hours of work will be paid for at the single time rate, except that production paving work shall be paid at 10% over the single time rate for the screed person, rakers and shovelers directly involved only. This differential is to be paid when there is only one shift and the shift works at night. All other workers will be exempt. Hours worked over eight (8) hours during said shift shall be paid for at the time and one-half rate.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

(Local #1010)

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## PLASTERER

### Plasterer

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$44.93

Supplemental Benefit Rate per Hour: \$25.15

### Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

### Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

### Paid Holidays

None

### Shift Rates

When it is not possible to conduct 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 second shift shall be allowed one-half (½) hour to eat with this time being included in the seven (7) hours of work.

(Local #262)

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## **PLASTERER - TENDER**

### **Plasterer - Tender**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$37.90

Supplemental Benefit Rate per Hour: \$30.59

### **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)

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## **PLUMBER**

### **Plumber**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$67.25

Supplemental Benefit Rate per Hour: \$31.80

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

### **Plumber - Temporary Services**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$53.88

Supplemental Benefit Rate per Hour: \$25.36

### 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 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)

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## PLUMBER (MECHANICAL EQUIPMENT AND SERVICE)

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

### Plumber

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$41.20

Supplemental Benefit Rate per Hour: \$15.41

**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)

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**PLUMBER (RESIDENTIAL RATES FOR 1, 2 AND 3 FAMILY HOME  
CONSTRUCTION)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$46.66

Supplemental Benefit Rate per Hour: \$22.95

**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



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

**Paid Holidays**

None

**Shift Rates**

30% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shifts Monday to Friday.  
50% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shift work performed on weekends. For shift work on holidays, double time wages and fringe benefits shall be paid.

(Plumbers Local #1)

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**PLUMBER: PUMP & TANK**  
**Oil Trades (Installation and Maintenance)**

**Plumber - Pump & Tank**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$64.22

Supplemental Benefit Rate per Hour: \$23.21

**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**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

All work outside the regular workday (8:00 A.M. to 3:30 P.M.) is to be paid at time and one half the regular hourly rate

(Plumbers Local #1)

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**POINTER, WATERPROOFER, CAULKER, SANDBLASTER,  
STEAMBLASTER**  
(Exterior Building Renovation)

**Journey person**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$52.57

Supplemental Benefit Rate per Hour: \$25.80

**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)

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OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

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## ROOFER

### Roofer

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$41.50

Supplemental Benefit Rate per Hour: \$32.27

### Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

### Overtime Holidays

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

### Paid Holidays

None

### Shift Rates

Second shift - Regular hourly rate plus a 10% differential. Third shift - Regular hourly rate plus a 15% differential.

(Local #8)

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## SHEET METAL WORKER

### Sheet Metal Worker

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$48.90

Supplemental Benefit Rate per Hour: \$48.00

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.)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$39.12

Supplemental Benefit Rate per Hour: \$48.00

**Sheet Metal Worker - Duct Cleaner**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$12.90

Supplemental Benefit Rate per Hour: \$8.07

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

**Paid Holidays**

None

**Shift Rates**

Work that can only be performed outside regular working hours (eight hours of work between 7:30 A.M. and 3:30 P.M.) - First shift (work between 3:30 P.M. and 11:30 P.M.) - 10% differential above the established hourly rate.

Second shift (work between 11:30 P.M. and 7:30 A.M.) - 15% differential above the established hourly rate.

For Fan Maintenance: On all full shifts of fan maintenance work the straight time hourly rate of pay will be paid for each shift, including nights, Saturdays, Sundays, and holidays.

(Local #28)

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**SHEET METAL WORKER - SPECIALTY**  
**(Decking & Siding)**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**Sheet Metal Specialty Worker**

The first worker to perform this work must be paid at the rate of the Sheet Metal Worker. The second and third workers shall be paid the Specialty Worker Rate. The ratio of One Sheet Metal Worker, then Two Specialty Workers shall be utilized thereafter.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$44.57**

Supplemental Benefit Rate per Hour: **\$25.02**

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)

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**SHIPYARD WORKER**

**Shipyard Mechanic - First Class**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$28.12**

Supplemental Benefit Rate per Hour: **\$3.03**

**Shipyard Mechanic - Second Class**

Effective Period: 7/1/2017 - 6/30/2018

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

Wage Rate per Hour: \$23.35  
Supplemental Benefit Rate per Hour: \$2.85

**Shipyard Laborer - First Class**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$20.96  
Supplemental Benefit Rate per Hour: \$2.76

**Shipyard Laborer - Second Class**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$15.24  
Supplemental Benefit Rate per Hour: \$2.54

**Shipyard Dockhand - First Class**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$22.89  
Supplemental Benefit Rate per Hour: \$2.83

**Shipyard Dockhand - Second Class**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$16.51  
Supplemental Benefit Rate per Hour: \$2.58

**Overtime Description**

Work performed on holiday is paid double time the regular hourly wage rate plus holiday pay.

**Overtime**

Time and one half the regular rate after an 8 hour day.  
Time and one half the regular rate for Saturday.  
Double time the regular rate for Sunday.  
Time and one half the regular hourly rate after 40 hours in any work week.

**Paid Holidays**

New Year's Day  
Martin Luther King Jr. Day  
President's Day  
Good Friday  
Memorial Day  
Independence Day  
Labor Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

Based on Survey Data

## **SIGN ERECTOR**

**(Sheet Metal, Plastic, Electric, and Neon)**

### **Sign Erector**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$47.67**

Supplemental Benefit Rate per Hour: **\$50.67**

### **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)

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## **STEAMFITTER**

### **Steamfitter I**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$55.50**

Supplemental Benefit Rate per Hour: **\$55.29**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Supplemental Note: Overtime supplemental benefit rate: \$109.84

**Steamfitter -Temporary Services**

The steamfitters shall not do any other work and shall not be permitted to work more than one shift in a twenty-four hour day. When steamfitters are present during the regular working day, no temporary services steamfitter will be required

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$42.18

Supplemental Benefit Rate per Hour: \$44.84

**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.

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**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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$55.50

Supplemental Benefit Rate per Hour: \$55.29

Supplemental Note: Overtime supplemental benefit rate: \$109.84

**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 twenty-four hour day. When steamfitters are present during the regular working day, no temporary services steamfitter will be required.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$42.18

Supplemental Benefit Rate per Hour: \$44.84

### Overtime

Double time the regular rate after an 8 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

### Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

### Paid Holidays

None

### Shift Rates

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

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## STEAMFITTER - REFRIGERATION AND AIR CONDITIONER (Maintenance and Installation Service Person)

### Refrigeration and Air Conditioner Mechanic

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$39.50  
Supplemental Benefit Rate per Hour: \$15.81

**Refrigeration and Air Conditioner Service Person V**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$32.46  
Supplemental Benefit Rate per Hour: \$14.16

**Refrigeration and Air Conditioner Service Person IV**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$26.89  
Supplemental Benefit Rate per Hour: \$12.80

**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: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$23.08  
Supplemental Benefit Rate per Hour: \$11.79

**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: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$19.14  
Supplemental Benefit Rate per Hour: \$10.85

**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: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$14.00  
Supplemental Benefit Rate per Hour: \$9.76

**Overtime**

Time and one half the regular rate after an 8 hour day.  
Time and one half the regular rate for Saturday.  
Double time the regular rate for Sunday.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day  
Independence Day  
Labor Day  
Veteran's Day  
Thanksgiving Day  
Christmas Day

Double time and one half the regular rate for work on the following holiday(s).

Martin Luther King Jr. Day  
President's Day  
Memorial Day  
Columbus Day

**Paid Holidays**

New Year's Day  
Martin Luther King Jr. Day  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Veteran's Day  
Thanksgiving Day  
Christmas Day

(Local #638B)

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**STONE MASON - SETTER**

**Stone Mason - Setter**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$53.62

Supplemental Benefit Rate per Hour: \$41.65

**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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Memorial Day  
Independence Day  
Labor Day  
Thanksgiving Day  
Christmas Day

### **Paid Holidays**

1/2 day on Christmas Eve if work is performed in the A.M.

### **Shift Rates**

For all work outside the regular workday (8:00 A.M. to 3:30 P.M. Monday through Friday), the pay shall be straight time plus a ten percent (10%) differential.

(Bricklayers District Council)

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## **TAPER**

### **Drywall Taper**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$47.82

Supplemental Benefit Rate per Hour: \$22.68

### **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.

(Local #1974)

## **TELECOMMUNICATION WORKER**

**(Voice Installation Only)**

### **Telecommunication Worker**

Effective Period: 7/1/2017 - 6/30/2018

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

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**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

For any workday that starts before 8A.M. or ends after 6P.M. there is a 10% differential for the applicable worker's hourly rate.

### **Vacation**

After 6 months.....one week.  
After 12 months but less than 7 years.....two weeks.  
After 7 or more but less than 15 years.....three weeks.  
After 15 years or more but less than 25 years.....four weeks.

(C.W.A.)

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## **TILE FINISHER**

### **Tile Finisher**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$41.13

Supplemental Benefit Rate per Hour: \$31.18

### **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

### **Shift Rates**

Off shift work day (work performed outside the regular 8:00 A.M. to 3:30 P.M. workday): shift differential of one and one quarter (1¼) times the regular straight time rate of pay for the seven hours of actual off-shift work.

(Local #7)

## **TILE LAYER - SETTER**

### **Tile Layer - Setter**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$53.19**

Supplemental Benefit Rate per Hour: **\$35.35**

### **Overtime**

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

### **Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

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

(Local #7)

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## **TIMBERPERSON**

### **Timberperson**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$48.00**

Supplemental Benefit Rate per Hour: **\$49.16**

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.

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.

(Local #1536)

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## **TUNNEL WORKER**

### **Blasters, Mucking Machine Operators (Compressed Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$62.37

Supplemental Benefit Rate per Hour: \$52.39

### **Tunnel Workers (Compressed Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$60.21

Supplemental Benefit Rate per Hour: \$50.65

### **Top Nipper (Compressed Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Wage Rate per Hour: \$59.11  
Supplemental Benefit Rate per Hour: \$49.74

**Outside Lock Tender, Outside Gauge Tender, Muck Lock Tender (Compressed Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$58.04  
Supplemental Benefit Rate per Hour: \$48.81

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

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$58.04  
Supplemental Benefit Rate per Hour: \$48.81

**Changehouse Attendant: Powder Watchperson (Compressed Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$50.87  
Supplemental Benefit Rate per Hour: \$46.11

**Blasters (Free Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$59.52  
Supplemental Benefit Rate per Hour: \$50.03

**Tunnel Workers (Free Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$56.97  
Supplemental Benefit Rate per Hour: \$47.89

**All Others (Free Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$52.63  
Supplemental Benefit Rate per Hour: \$44.29

**Microtunneling (Free Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$45.58  
Supplemental Benefit Rate per Hour: \$38.31

**Overtime Description**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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)

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**WELDER**

**TO BE PAID AT THE RATE OF THE JOURNEYPEPERSON IN THE TRADE  
PERFORMING THE WORK.**

## **OFFICE OF THE COMPTROLLER**

### **CITY OF NEW YORK**

## **220 APPRENTICESHIP PREVAILING WAGE SCHEDULE**

### **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 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.

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## **ASBESTOS HANDLER**

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

### **Asbestos Handler (First 1000 Hours)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 78% of Journeyperson's rate

Supplemental Benefit Rate Per Hour: \$14.25

### **Asbestos Handler (Second 1000 Hours)**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Benefit Rate Per Hour: \$14.25

### **Asbestos Handler (Third 1000 Hours)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 83% of Journeyperson's rate

Supplemental Benefit Rate Per Hour: \$14.25

### **Asbestos Handler (Fourth 1000 Hours)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 89% of Journeyperson's rate

Supplemental Benefit Rate Per Hour: \$14.25

(Local #78)

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## **BOILERMAKER**

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

### **Boilermaker (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Benefit Rate Per Hour: \$30.84

Effective 1/1/2018 - Supplemental Benefit Rate Per Hour: \$31.26

### **Boilermaker (Second Year: 1st Six Months)**

Effective Period: 7/1/2017 - 6/30/2018

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$32.57  
Effective 1/1/2018 - Supplemental Benefit Rate Per Hour: \$33.02

**Boilermaker (Second Year: 2nd Six Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$34.29  
Effective 1/1/2018 - Supplemental Benefit Rate Per Hour: \$34.78

**Boilermaker (Third Year: 1st Six Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$36.03  
Effective 1/1/2018 - Supplemental Benefit Rate Per Hour: \$36.56

**Boilermaker (Third Year: 2nd Six Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 85% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$37.76  
Effective 1/1/2018 - Supplemental Benefit Rate Per Hour: \$38.32

**Boilermaker (Fourth Year: 1st Six Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 90% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$39.51  
Effective 1/1/2018 - Supplemental Benefit Rate Per Hour: \$40.09

**Boilermaker (Fourth Year: 2nd Six Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 95% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$41.22  
Effective 1/1/2018 - Supplemental Benefit Rate Per Hour: \$41.84

(Local #5)

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**BRICKLAYER**

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

**Bricklayer (First 750 Hours)**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$18.80

**Bricklayer (Second 750 Hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 60% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$18.80

**Bricklayer (Third 750 Hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$18.80

**Bricklayer (Fourth 750 Hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$18.80

**Bricklayer (Fifth 750 Hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 90% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$18.80

**Bricklayer (Sixth 750 Hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 95% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$18.80

(Bricklayer District Council)

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**CARPENTER**

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

**Carpenter (First Year)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 40% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour For Building Apprentice: \$31.34

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate Per Hour For Heavy Apprentice: \$33.03

**Carpenter (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Benefit Rate Per Hour For Building Apprentice: \$31.34

Supplemental Benefit Rate Per Hour For Heavy Apprentice: \$33.03

**Carpenter (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Benefit Rate Per Hour For Building Apprentice: \$31.34

Supplemental Benefit Rate Per Hour For Heavy Apprentice: \$33.03

**Carpenter (Fourth Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Benefit Rate Per Hour For Building Apprentice: \$31.34

Supplemental Benefit Rate Per Hour For Heavy Apprentice: \$33.03

(Carpenters District Council)

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**CARPENTER - HIGH RISE CONCRETE FORMS**  
(Ratio of Apprentice to Journeyperson: 1 to 1, 2 to 5)

**Carpenter - High Rise (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$16.86

Supplemental Benefit Rate per Hour: \$16.20

**Carpenter - High Rise (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$23.16

Supplemental Benefit Rate per Hour: \$16.33

**Carpenter - High Rise (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$29.61



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Supplemental Benefit Rate per Hour: \$16.46

**Carpenter - High Rise (Fourth Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$37.07

Supplemental Benefit Rate per Hour: \$16.61

(Carpenters District Council)

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**CEMENT MASON**

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

**Cement Mason (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

**Cement Mason (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

**Cement Mason (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

(Local #780)

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**CEMENT AND CONCRETE WORKER**

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

**Cement & Concrete Worker (First 1333 hours)**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Benefit Rate Per Hour: \$17.75

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**Cement & Concrete Worker (Second 1333 hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$23.03

**Cement & Concrete Worker (Last 1334 hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$24.30

**Cement & Concrete Worker (Hired after 2/6/2016 - First 1334 hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: \$16.96  
Supplemental Benefit Rate Per Hour: \$11.80

**Cement & Concrete Worker (Hired after 2/6/2016 - Second 1334 hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: \$22.08  
Supplemental Benefit Rate Per Hour: \$16.49

**Cement & Concrete Worker (Hired after 2/6/2016 - Last 1334 hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: \$27.20  
Supplemental Benefit Rate Per Hour: \$17.33

(Cement Concrete Workers District Council)

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**DERRICKPERSON & RIGGER (STONE)**  
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

**Derrickperson & Rigger (stone) - First Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: 50% of Journeyperson's rate

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

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 70% of Journeyperson's rate

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

**Derrickperson & Rigger (stone) - Second Year: 2nd Six Months**

Effective Period: 7/1/2017 - 6/30/2018

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: 7/1/2017 - 6/30/2018

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

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

(Local #197)

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**DOCKBUILDER/PILE DRIVER**

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

**Dockbuilder/Pile Driver (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Benefit Rate Per Hour: \$33.03

**Dockbuilder/Pile Driver (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Benefit Rate Per Hour: \$33.03

**Dockbuilder/Pile Driver (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Benefit Rate Per Hour: \$33.03

**Dockbuilder/Pile Driver (Fourth Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Benefit Rate Per Hour: \$33.03

(Carpenters District Council)

## **ELECTRICIAN**

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

### **Electrician (First Term: 0-6 Months)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: \$14.00

Supplemental Benefit Rate per Hour: \$12.37

Overtime Supplemental Rate Per Hour: \$13.29

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: \$14.50

Supplemental Benefit Rate per Hour: \$12.63

Overtime Supplemental Rate Per Hour: \$13.58

### **Electrician (First Term: 7-12 Months)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: \$15.00

Supplemental Benefit Rate per Hour: \$12.88

Overtime Supplemental Rate Per Hour: \$13.87

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: \$15.50

Supplemental Benefit Rate per Hour: \$13.14

Overtime Supplemental Rate Per Hour: \$14.16

### **Electrician (Second Term: 0-6 Months)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: \$16.00

Supplemental Benefit Rate per Hour: \$13.39

Overtime Supplemental Rate Per Hour: \$14.44

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: \$16.50

Supplemental Benefit Rate per Hour: \$13.64

Overtime Supplemental Rate Per Hour: \$14.73

### **Electrician (Second Term: 7-12 Months)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: \$17.00

Supplemental Benefit Rate per Hour: \$13.90

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Overtime Supplemental Rate Per Hour: \$15.02

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: \$17.50

Supplemental Benefit Rate per Hour: \$14.15

Overtime Supplemental Rate Per Hour: \$15.31

**Electrician (Third Term: 0-6 Months)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: \$18.00

Supplemental Benefit Rate per Hour: \$14.41

Overtime Supplemental Rate Per Hour: \$15.59

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: \$18.50

Supplemental Benefit Rate per Hour: \$14.66

Overtime Supplemental Rate Per Hour: \$15.88

**Electrician (Third Term: 7-12 Months)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: \$19.00

Supplemental Benefit Rate per Hour: \$14.92

Overtime Supplemental Rate Per Hour: \$16.17

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: \$19.50

Supplemental Benefit Rate per Hour: \$15.17

Overtime Supplemental Rate Per Hour: \$16.45

**Electrician (Fourth Term: 0-6 Months)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: \$20.00

Supplemental Benefit Rate per Hour: \$15.43

Overtime Supplemental Rate Per Hour: \$16.74

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: \$20.50

Supplemental Benefit Rate per Hour: \$15.68

Overtime Supplemental Rate Per Hour: \$17.03

**Electrician (Fourth Term: 7-12 Months)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: \$22.00

Supplemental Benefit Rate per Hour: \$16.44

Overtime Supplemental Rate Per Hour: \$17.89

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Effective Period: 5/10/2018 - 6/30/2018  
Wage Rate per Hour: \$22.50  
Supplemental Benefit Rate per Hour: \$16.70  
Overtime Supplemental Rate Per Hour: \$18.18

**Electrician (Fifth Term: 0-12 Months)**

Effective Period: 7/1/2017 - 5/9/2018  
Wage Rate per Hour: \$24.00  
Supplemental Benefit Rate per Hour: \$19.80  
Overtime Supplemental Rate Per Hour: \$21.30

Effective Period: 5/10/2018 - 6/30/2018  
Wage Rate per Hour: \$24.50  
Supplemental Benefit Rate per Hour: \$20.30  
Overtime Supplemental Rate Per Hour: \$21.84

**Electrician (Fifth Term: 13-18 Months)**

Effective Period: 7/1/2017 - 5/9/2018  
Wage Rate per Hour: \$28.50  
Supplemental Benefit Rate per Hour: \$22.10  
Overtime Supplemental Rate Per Hour: \$23.89

Effective Period: 5/10/2018 - 6/30/2018  
Wage Rate per Hour: \$29.00  
Supplemental Benefit Rate per Hour: \$22.65  
Overtime Supplemental Rate Per Hour: \$24.47

**Overtime Description**

Overtime Wage paid at time and one half the regular rate

(Local #3)

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**ELEVATOR CONSTRUCTOR**

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

**Elevator (Constructor) - First Year**

Effective Period: 7/1/2017 - 3/16/2018  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Rate Per Hour: \$29.88

Effective Period: 3/17/2018 - 6/30/2018

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Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Rate Per Hour: \$31.35

**Elevator (Constructor) - Second Year**

Effective Period: 7/1/2017 - 3/16/2018  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Rate Per Hour: \$30.31

Effective Period: 3/17/2018 - 6/30/2018  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Rate Per Hour: \$31.80

**Elevator (Constructor) - Third Year**

Effective Period: 7/1/2017 - 3/16/2018  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Rate Per Hour: \$31.19

Effective Period: 3/17/2018 - 6/30/2018  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Rate Per Hour: \$32.70

**Elevator (Constructor) - Fourth Year**

Effective Period: 7/1/2017 - 3/16/2018  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Rate Per Hour: \$32.07

Effective Period: 3/17/2018 - 6/30/2018  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Rate Per Hour: \$33.60

(Local #1)

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**ELEVATOR REPAIR & MAINTENANCE**

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

**Elevator Service/Modernization Mechanic (First Year)**

Effective Period: 7/1/2017 - 3/16/2018  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Benefit Per Hour: \$29.80

Effective Period: 3/17/2018 - 6/30/2018  
Wage Rate Per Hour: 50% of Journeyperson's rate

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Supplemental Benefit Per Hour: \$31.28

**Elevator Service/Modernization Mechanic (Second Year)**

Effective Period: 7/1/2017 - 3/16/2018

Wage Rate Per Hour: 55% of Journey person's rate

Supplemental Benefit Per Hour: \$30.23

Effective Period: 3/17/2018 - 6/30/2018

Wage Rate Per Hour: 55% of Journey person's rate

Supplemental Benefit Per Hour: \$31.72

**Elevator Service/Modernization Mechanic (Third Year)**

Effective Period: 7/1/2017 - 3/16/2018

Wage Rate Per Hour: 65% of Journey person's rate

Supplemental Benefit Per Hour: \$31.09

Effective Period: 3/17/2018 - 6/30/2018

Wage Rate Per Hour: 65% of Journey person's rate

Supplemental Benefit Per Hour: \$32.60

**Elevator Service/Modernization Mechanic (Fourth Year)**

Effective Period: 7/1/2017 - 3/16/2018

Wage Rate Per Hour: 75% of Journey person's rate

Supplemental Benefit Per Hour: \$31.95

Effective Period: 3/17/2018 - 6/30/2018

Wage Rate Per Hour: 75% of Journey person's rate

Supplemental Benefit Per Hour: \$33.49

(Local #1)

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**ENGINEER**

(Ratio of Apprentice to Journey person: 1 to 1, 1 to 5)

**Engineer - First Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$24.77

Supplemental Benefit Rate per Hour: \$24.62

**Engineer - Second Year**



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Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$30.97

Supplemental Benefit Rate per Hour: \$24.62

**Engineer - Third Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$34.06

Supplemental Benefit Rate per Hour: \$24.62

**Engineer - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$37.16

Supplemental Benefit Rate per Hour: \$24.62

(Local #15)

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**ENGINEER - OPERATING**

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

**Operating Engineer - First Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour 40% of Journeyperson's Rate

Supplemental Benefit Per Hour: \$20.85

**Operating Engineer - Second Year**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Benefit Per Hour: \$20.85

**Operating Engineer - Third Year**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Benefit Per Hour: \$20.85

(Local #14)

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## **FLOOR COVERER**

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

### **Floor Coverer (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 40% of Journeyman's rate

Supplemental Rate Per Hour: \$31.14

### **Floor Coverer (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Rate Per Hour: \$31.14

### **Floor Coverer (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Rate Per Hour: \$31.14

### **Floor Coverer (Fourth Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Rate Per Hour: \$31.14

(Carpenters District Council)

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## **GLAZIER**

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

### **Glazier (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 40% of Journeyman's rate

Supplemental Rate Per Hour: \$15.26

### **Glazier (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

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Supplemental Rate Per Hour: \$25.36

**Glazier (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Rate Per Hour: \$28.62

**Glazier (Fourth Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Rate Per Hour: \$34.67

(Local #1281)

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**HEAT & FROST INSULATOR**

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

**Heat & Frost Insulator (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

**Heat & Frost Insulator (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

**Heat & Frost Insulator (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

**Heat & Frost Insulator (Fourth Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

(Local #12)

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**HOUSE WRECKER  
(TOTAL DEMOLITION)**

**(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)**

**House Wrecker - First Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$21.17

Supplemental Benefit Rate per Hour: \$18.54

**House Wrecker - Second Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$22.32

Supplemental Benefit Rate per Hour: \$18.54

**House Wrecker - Third Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$23.97

Supplemental Benefit Rate per Hour: \$18.54

**House Wrecker - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$26.53

Supplemental Benefit Rate per Hour: \$18.54

(Mason Tenders District Council)

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**IRON WORKER - ORNAMENTAL**

**(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)**

**Iron Worker (Ornamental) - 1st Ten Months**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Rate Per Hour: \$39.40

**Iron Worker (Ornamental) - 11 -16 Months**

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Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 55% of Journeyman's rate  
Supplemental Rate Per Hour: \$40.62

**Iron Worker (Ornamental) - 17 - 22 Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 60% of Journeyman's rate  
Supplemental Rate Per Hour: \$41.83

**Iron Worker (Ornamental) - 23 - 28 Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 70% of Journeyman's rate  
Supplemental Rate Per Hour: \$44.27

**Iron Worker (Ornamental) - 29 - 36 Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 80% of Journeyman's rate  
Supplemental Rate Per Hour: \$46.70

(Local #580)

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**IRON WORKER - STRUCTURAL**  
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 6)

**Iron Worker (Structural) - 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$26.12  
Supplemental Benefit Rate per Hour: \$50.22

**Iron Worker (Structural) - 7- 18 Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$26.72  
Supplemental Benefit Rate per Hour: \$50.22

**Iron Worker (Structural) - 19 - 36 months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$27.32

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Supplemental Benefit Rate per Hour: \$50.22

(Local #40 and #361)

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**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: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Rate Per Hour: \$40.63

**Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) -  
Second 1000 hours**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 60% of Journeyperson's rate  
Supplemental Rate Per Hour: \$40.63

**Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) -  
Third 1000 hours**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Rate Per Hour: \$40.63

**Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) -  
Fourth 1000 hours**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 90% of Journeyperson's rate  
Supplemental Rate Per Hour: \$40.63

(Local #731)

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## **MARBLE MECHANICS**

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

### **Cutters & Setters - First 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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: 7/1/2017 - 6/30/2018

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

### **Cutters & Setters - Third 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

### **Cutters & Setters - Fourth 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

### **Cutters & Setters - Fifth 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

### **Cutters & Setters - Sixth 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

### **Polishers & Finishers - First 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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: 7/1/2017 - 6/30/2018

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

### **Polishers & Finishers - Third 750 Hours**

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Effective Period: 7/1/2017 - 6/30/2018

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

**Polishers & Finishers - Fourth 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

(Local #7)

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**MASON TENDER**

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

**Mason Tender - First Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$21.39

Supplemental Benefit Rate per Hour: \$19.65

**Mason Tender - Second Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$22.54

Supplemental Benefit Rate per Hour: \$19.65

**Mason Tender - Third Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$24.29

Supplemental Benefit Rate per Hour: \$19.70

**Mason Tender - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$26.95

Supplemental Benefit Rate per Hour: \$19.70

(Local #79)

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## **METALLIC LATHER**

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

### **Metallic Lather (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$28.38

Supplemental Benefit Rate per Hour: \$10.96

### **Metallic Lather (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$32.38

Supplemental Benefit Rate per Hour: \$12.96

### **Metallic Lather (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$35.38

Supplemental Benefit Rate per Hour: \$17.12

### **Metallic Lather (Fourth Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$37.38

Supplemental Benefit Rate per Hour: \$17.92

(Local #46)

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## **MILLWRIGHT**

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

### **Millwright (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$28.33

Supplemental Benefit Rate per Hour: \$34.28

### **Millwright (Second Year)**

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Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$33.48

Supplemental Benefit Rate per Hour: \$37.88

**Millwright (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$38.63

Supplemental Benefit Rate per Hour: \$42.13

**Millwright (Fourth Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$48.93

Supplemental Benefit Rate per Hour: \$48.69

(Local #740)

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**PAVER AND ROADBUILDER**

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

**Paver and Roadbuilder - First Year (Minimum 1000 hours)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$27.86

Supplemental Benefit Rate per Hour: \$19.25

**Paver and Roadbuilder - Second Year (Minimum 1000 hours)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$29.50

Supplemental Benefit Rate per Hour: \$19.25

(Local #1010)

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**PAINTER**

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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

**Painter - Brush & Roller - First Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$17.00

Supplemental Benefit Rate per Hour: \$13.42

**Painter - Brush & Roller - Second Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$21.25

Supplemental Benefit Rate per Hour: \$17.43

**Painter - Brush & Roller - Third Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$25.50

Supplemental Benefit Rate per Hour: \$20.50

**Painter - Brush & Roller - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$34.00

Supplemental Benefit Rate per Hour: \$26.20

(District Council of Painters)

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**PAINTER - METAL POLISHER**

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

**Metal Polisher (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$11.75

Supplemental Benefit Rate per Hour: \$5.13

**Metal Polisher (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$13.00

Supplemental Benefit Rate per Hour: \$5.13

**Metal Polisher (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$15.75

Supplemental Benefit Rate per Hour: \$5.13

(Local 8A-28)

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**PAINTER - STRUCTURAL STEEL**

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

**Painters - Structural Steel (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

**Painters - Structural Steel (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

**Painters - Structural Steel (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

(Local #806)

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**PLASTERER**

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

**Plasterer - First Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 40% of Journeyman's rate

Supplemental Rate Per Hour: \$13.59

**Plasterer - First Year: 2nd Six Months**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 45% of Journeyperson's rate  
Supplemental Rate Per Hour: \$14.07

**Plasterer - Second Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Rate Per Hour: \$16.04

**Plasterer - Second Year: 2nd Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 60% of Journeyperson's rate  
Supplemental Rate Per Hour: \$17.12

**Plasterer - Third Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Rate Per Hour: \$19.29

**Plasterer - Third Year: 2nd Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Rate Per Hour: \$20.37

(Local #530)

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**PLASTERER - TENDER**

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

**Plasterer Tender - First Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$21.39  
Supplemental Benefit Rate per Hour: \$19.65

**Plasterer Tender - Second Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$22.54

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: \$19.65

**Plasterer Tender - Third Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$24.29

Supplemental Benefit Rate per Hour: \$19.70

**Plasterer Tender - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$26.95

Supplemental Benefit Rate per Hour: \$19.70

(Local #79)

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**PLUMBER**

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

**Plumber - First Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$16.28

Supplemental Benefit Rate per Hour: \$5.43

**Plumber - First Year: 2nd Six Months**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$19.28

Supplemental Benefit Rate per Hour: \$6.43

**Plumber - Second Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$26.35

Supplemental Benefit Rate per Hour: \$17.10

**Plumber - Third Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$28.45

Supplemental Benefit Rate per Hour: \$17.10

**Plumber - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$31.30

Supplemental Benefit Rate per Hour: \$17.10

**Plumber - Fifth Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$32.70

Supplemental Benefit Rate per Hour: \$17.10

**Plumber - Fifth Year: 2nd Six Months**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$44.77

Supplemental Benefit Rate per Hour: \$17.10

(Plumbers Local #1)

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**POINTER, WATERPROOFER, CAULKER, SANDBLASTER,  
STEAMBLASTER**

(Exterior Building Renovation)

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

**Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - First Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$25.89

Supplemental Benefit Rate per Hour: \$13.64

**Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - Second Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$28.97

Supplemental Benefit Rate per Hour: \$18.15

**Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - Third Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$34.12

Supplemental Benefit Rate per Hour: \$20.90

**Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$41.33

Supplemental Benefit Rate per Hour: \$21.60

(Bricklayer District Council)

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**ROOFER**

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

**Roofer - First Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage and Supplemental Rate Per Hour: 35% of Journeyperson's Rate

**Roofer - Second Year**

Effective Period: 7/1/2017 - 6/30/2018

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

**Roofer - Third Year**

Effective Period: 7/1/2017 - 6/30/2018

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

**Roofer - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018

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

(Local #8)

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**SHEET METAL WORKER**

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

**Sheet Metal Worker (0-6 Months)**



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 25% of Journeyperson's rate  
Supplemental Rate Per Hour: \$6.35

**Sheet Metal Worker (7-18 Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 35% of Journeyperson's rate  
Supplemental Rate Per Hour: \$17.12

**Sheet Metal Worker (19-30 Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 45% of Journeyperson's rate  
Supplemental Rate Per Hour: \$23.54

**Sheet Metal Worker (31-36 Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Rate Per Hour: \$27.70

**Sheet Metal Worker (37-42 Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 60% of Journeyperson's rate  
Supplemental Rate Per Hour: \$29.11

**Sheet Metal Worker (43-48 Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Rate Per Hour: \$33.96

**Sheet Metal Worker (49-54 Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Rate Per Hour: \$36.07

**Sheet Metal Worker (55-60 Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Rate Per Hour: \$38.15

(Local #28)

## **SIGN ERECTOR**

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

### **Sign Erector - First Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 35% of Journeyperson's rate  
Supplemental Rate Per Hour: \$14.72

### **Sign Erector - First Year: 2nd Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 40% of Journeyperson's rate  
Supplemental Rate Per Hour: \$16.71

### **Sign Erector - Second Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 45% of Journeyperson's rate  
Supplemental Rate Per Hour: \$18.68

### **Sign Erector - Second Year: 2nd Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Rate Per Hour: \$20.68

### **Sign Erector - Third Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Rate Per Hour: \$27.72

### **Sign Erector - Third Year: 2nd Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 60% of Journeyperson's rate  
Supplemental Rate Per Hour: \$30.57

### **Sign Erector - Fourth Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Rate Per Hour: \$33.31

### **Sign Erector - Fourth Year: 2nd Six Months**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Rate Per Hour: \$35.83

**Sign Erector - Fifth Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Rate Per Hour: \$38.32

**Sign Erector - Sixth Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Rate Per Hour: \$40.81

(Local #137)

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**STEAMFITTER**

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

**Steamfitter - First Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate and Supplemental Per Hour: 40% of Journeyperson's rate

**Steamfitter - Second Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate and Supplemental Rate Per Hour: 50% of Journeyperson's rate.

**Steamfitter - Third Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate and Supplemental Rate per Hour: 65% of Journeyperson's rate.

**Steamfitter - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate and Supplemental Rate Per Hour: 80% of Journeyperson's rate.

**Steamfitter - Fifth Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate and Supplemental Rate Per Hour: 85% of Journeyperson's rate.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

(Local #638)

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## **STONE MASON - SETTER**

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

### **Stone Mason - Setters - First 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

### **Stone Mason - Setters - Second 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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: 7/1/2017 - 6/30/2018

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: 7/1/2017 - 6/30/2018

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

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

### **Stone Mason - Setters - Fifth 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 100% of Journeyperson's rate

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

(Bricklayers District Council)

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## **TAPER**

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

### **Drywall Taper - First Year**

Effective Period: 7/1/2017 - 6/30/2018

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

### **Drywall Taper - Second Year**

Effective Period: 7/1/2017 - 6/30/2018

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

### **Drywall Taper - Third Year**

Effective Period: 7/1/2017 - 6/30/2018

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

(Local #1974)

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## **TILE LAYER - SETTER**

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

### **Tile Layer - Setter - First 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

### **Tile Layer - Setter - Second 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

### **Tile Layer - Setter - Third 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

### **Tile Layer - Setter - Fourth 750 Hours**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2017 - 6/30/2018

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

**Tile Layer - Setter - Fifth 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

**Tile Layer - Setter - Sixth 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

(Local #7)

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**TIMBERPERSON**

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

**Timberperson - First Year**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Rate Per Hour: \$32.79

**Timberperson - Second Year**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Rate Per Hour: \$32.79

**Timberperson - Third Year**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Rate Per Hour: \$32.79

**Timberperson - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Rate Per Hour: \$32.79

(Local #1536)



Department of  
Design and  
Construction

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INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN

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VOLUME 1 OF 3

PROJECT ID: HWXS511

RECONSTRUCTION OF

WEST TREMONT STEP STREET

INCLUDING STREET LIGHTING, ROADWAY RECONSTRUCTION,  
SEWER, AND TRAFFIC WORK

Together With All Work Incidental Thereto

BOROUGH OF THE BRONX  
CITY OF NEW YORK

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*Contractor.*

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Dated \_\_\_\_\_, 20\_\_\_\_

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Department of  
Design and  
Construction

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INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN

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VOLUME 1 OF 3

PROJECT ID: HWXS511

RECONSTRUCTION OF

WEST TREMONT STEP STREET

INCLUDING STREET LIGHTING, ROADWAY RECONSTRUCTION,  
SEWER, AND TRAFFIC WORK

Together With All Work Incidental Thereto

BOROUGH OF THE BRONX  
CITY OF NEW YORK

*LAWS Construction Corp*

Contractor.

Dated *July 14<sup>th</sup>*, 20 *17*





**Department of  
Design and  
Construction**

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

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

**PROJECT ID: HWXS511**

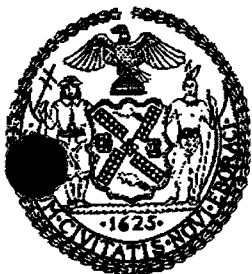
**RECONSTRUCTION OF**

**WEST TREMONT STEP STREET**

**INCLUDING STREET LIGHTING, ROADWAY RECONSTRUCTION,  
SEWER, AND TRAFFIC WORK**

**Together With All Work Incidental Thereto**

**BOROUGH OF THE BRONX  
CITY OF NEW YORK**



**FOR THE DEPARTMENT OF TRANSPORTATION  
PREPARED BY  
URS CORPORATION.**

**APRIL 14, 2017**

**W 7-103**



**Department of  
Design and  
Construction**

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

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

FOR THE DEPARTMENT OF TRANSPORTATION  
PREPARED BY

*IN HOUSE DESIGN*

**MARCH 15, 2017**



# NOTICE TO BIDDERS

The City of New York has issued a new Standard Construction Contract. The new Contract, which is incorporated in this bid, is different from the 2013 version previously used by the City. Some of the significant changes are listed below. In addition, this March 2017 version incorporates the Insurance Rider (Articles 22.1.1(c) and 22.3.3), the Paid Sick Leave Law Contract Rider (Article 35.5), and the Hiring and Employment Rider: HireNYC and Reporting Requirements (Article 35.6). 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 if there are any discrepancies between this notice and the Standard Construction Contract.

**Significant changes include the following:**

- **ARTICLE 11 - DAMAGES CAUSED BY DELAYS:** Article 11 no longer provides for agencies to make determinations on claims for damages for delay or make payments for those claims through a change order. Instead claims will be submitted to the Comptroller in accordance with the standards in the Contract. The revised Article 11 also sets forth additional detail of what delay costs are compensable and how they are to be calculated.
- **ARTICLE 12 - COORDINATION WITH OTHER CONTRACTORS:** The March 2017 version revises Article 12.3 concerning the Engineer's failure to issue directions to an Other Contractor.
- **ARTICLE 14 - COMPLETION AND FINAL ACCEPTANCE OF THE WORK:** The March 2017 version clarifies Article 14.2.2 concerning the dates to complete punch list work.
- **ARTICLE 30 - NOTICE AND DOCUMENTATION OF COSTS AND DAMAGES; PRODUCTION OF FINANCIAL RECORDS:** The March 2017 version clarifies the relationship between the requirements in Article 30.1 concerning when the contractor must submit notice and documentation of claims for delay damages, extra work, and other claims and the requirements that are set forth in Articles 11 and 27.
- **ARTICLE 56 - CLAIMS AND ACTIONS THEREON:** The March 2017 version revises Article 56.2.2 concerning the time to commence an action arising out of the Commissioner's exercise of his/her right to complete punch list or unsatisfactory work.
- **ARTICLE 78 - EXAMINATION AND VIEWING OF SITE, CONSIDERATION OF OTHER SOURCES OF INFORMATION AND CHANGED SITE CONDITIONS:** The March 2017 version adds a new Article 78 requiring pre-bid viewing of the site and allowing the contractor to obtain a change order for extra work due to changed subsurface conditions.

**CITY OF NEW YORK**

**DEPARTMENT OF  
DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURES**

**INFORMATION FOR BIDDERS**

**JUNE 2015**

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

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## 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 not
- (2) The Contract Drawings and Specifications
- (3) The General Conditions, the General Requirements and the Special Conditions, if any
- (4) The Contract
- (5) The Information for Bidders; Request for Proposals; Notice of Solicitation and Proposal For Bids; Bid or Proposal, and, 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 prudent bidder. Such interpretation or correction, as well as any additional contract provisions the Commissioner may decide to include, will be issued in writing by the Commissioner as an addendum to the Contract, which will be transmitted to each person recorded as having received a copy of the Contract Documents from the Department. Transmission of such addendum will be by mail, e-mail, facsimile or hand delivery. Such addendum will also be posted at the place where the Contract Documents are available for the inspection of prospective bidders. Upon transmission as provided for herein, such addendum shall become a part of the Contract Documents, and binding on all bidders, whether or not actual notice of such addendum is shown.

(B) Only Commissioner's Interpretation or Correction Binding: Only the written interpretation or correction so given by the Commissioner shall be binding, and prospective bidders are warned that no other officer, agent or employee of the City is authorized to give information concerning, or to explain or interpret, the Contract.

(C) Documents given to a subcontractor for the purpose of soliciting the subcontractor's bid shall include either a copy of the bid cover sheet or a separate information sheet setting forth the project name, the Contract number (if available), the contracting agency and the Project's location.

10. Form of Bid

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

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

11. Irrevocability of Bid



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

12. Acknowledgment of Amendments

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

13. Bid Samples and Descriptive Literature

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

14. Proprietary Information/Trade Secrets

(A) The bidder shall identify those portions of the bid which it deems to be confidential, proprietary information or trade secrets, and provide justification why such materials shall not be disclosed by the City. All such materials shall be clearly indicated by stamping the pages on which such information appears, at the top and bottom thereof with the word "Confidential". Such materials stamped "Confidential" must be easily separable from the non-confidential sections of the bid.

(B) All such materials so indicated shall be reviewed by the Agency and any decision not to honor a request for confidentiality shall be communicated in writing to the bidder. For those bids which are unsuccessful, all such confidential materials shall be returned to the bidder. Prices, makes and model or catalog numbers of the items offered, deliveries, and terms of payment shall be publicly available after bid opening, regardless of any designation of confidentiality made by the bidder.

15. Pre-Opening Modification or Withdrawal of Bids

Bids may be modified or withdrawn by written notice received in the office designated in 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 or within 3 days after the opening of the bid, whichever period is shorter; and
- (b) The price bid was based upon an error of such magnitude that enforcement would be unconscionable; and
- (c) The bid was submitted in good faith and the bidder submits credible evidence that the mistake was a clerical error as opposed to a judgment error; and
- (d) The error in the bid is actually due to an unintentional and substantial arithmetic error or an unintentional omission of a substantial quantity of work, labor, material or services made directly in the compilation of the bid, which unintentional arithmetic error or unintentional omission can be clearly shown by objective evidence drawn from inspection of the original work paper, documents, or materials used in the preparation of the bid sought to be withdrawn; and
- (e) It is possible to place the agency in the same position as existed prior to the bid.

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

therein is strictly prohibited.

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

## 20. Low Tie Bids

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

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

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

## 21. Rejection of Bids

(A) Rejection of Individual Bids: The Agency may reject a bid if:

- (1) The bidder fails to furnish any of the information required pursuant to Section 24 or 28 hereof; or if
- (2) The bidder is determined to be not responsible pursuant to the Procurement Policy Board Rules; or if
- (3) The bid is determined to be non-responsive pursuant to the Procurement Policy Board Rules; or if
- (4) The bid, in the opinion of the Agency Chief Contracting Officer, contains unbalanced bid prices and is thus non-responsive, unless the bidder can show that the prices are not unbalanced for the probable required quantity of items, or if the imbalance is corrected pursuant to Section 15.

(B) Rejection of All Bids: The Agency, upon written approval by the Agency Chief Contracting Officer, may reject all bids and may elect to resolicit bids if in its sole opinion it shall deem it in the best interest of the City so to do.

(C) Rejection of All Bids and Negotiation With All Responsible Bidders: The Agency Head may determine that it is appropriate to cancel the Invitation For Bids after bid opening and before award and to complete the acquisition by negotiation. This determination shall be based on one of the following reasons:

- (1) All otherwise acceptable bids received are at unreasonable prices, or only one bid is received and the Agency Chief Contracting Officer cannot determine the reasonableness of the bid price, or no responsive bid has been received from a responsible bidder; or
- (2) In the judgment of the Agency Chief Contracting Officer, the bids were not independently arrived at in open competition, were collusive, or were submitted in bad faith.

(D) When the Agency has determined that the Invitation for Bids is to be canceled and that use of negotiation is appropriate to complete the acquisition, the contracting officer may negotiate and award the Contract without issuing a new solicitation, subject to the following conditions:

- (1) prior notice of the intention to negotiate and a reasonable opportunity to negotiate have been given by the contracting officer to each responsible bidder that submitted a bid in response to the Invitation for Bids;
- (2) the negotiated price is the lowest negotiated price offered by a responsible bidder; and
- (3) the negotiated price is lower than the lowest rejected bid price of a responsible bidder that submitted a bid in response to the Invitation for Bids.

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

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

23. Affirmative Action and Equal Employment Opportunity

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

24. 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 contracts, concessions and franchises the bidder has received from the City and any subcontracts received from City contractors over the past twelve months, equals or exceeds \$100,000, Vendex Questionnaires must be completed. If required, Vendex Questionnaires must be completed and submitted before any award of contract may be made or before approval is given for a proposed subcontractor. Non-compliance with these submission requirements may result in the disqualification of the bid, disapproval of a subcontractor, subsequent withdrawal of approval for the use of an approved subcontractor, 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](http://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 inform the Comptroller, Office of Contract Administration, One Centre Street, Room 835, New York, New York; telephone number (212)669-2797.

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 of the adherence of the bidder to its proposal, the execution of the Contract, and the furnishing of Performance and Payment Bonds by the bidder, if required in Attachment 1. Bid security shall be returned to the bidder as follows:

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

(B) Performance and Payment Security: Performance and Payment Security must be provided in an amount and type specified in Attachment 1 (page A-1 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 Contract. If a contractor fails to deliver the required performance and payment security, its bid security shall be enforced, and an award of Contract may be made to the next lowest responsible and responsive bidder, or the contract may be rebid.

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

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

Whenever the successful bidder deposits obligations of the City of New York as performance and payment security, the Comptroller may sell and use the proceeds thereof for any purpose for which the principal or surety on such bond would be liable under the terms of the Contract. If the money is deposited with the Comptroller, the successful bidder shall not be entitled to receive interest on such money from the City.

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

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

The Department of the Treasury of the United States advises that information concerning approved surety companies may be obtained as follows: (1) from the Government Printing Office at 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 bid.

29. Employment Report

In accordance with Executive Order No. 50 (1980) as modified by Executive Order 108 (1986), the filing of a completed Employment Report (ER) is a requirement of doing business with the City of New York for construction contractors with contracts of \$1,000,000 or more and subcontractors with construction subcontracts of \$750,000 or more. The required forms and information are included in the Bid Booklet.

30. Labor Law Requirements

(A) General: The successful bidder will be required to comply strictly with all Federal, State and local labor laws and regulations.

(B) New York State Labor Law: This Contract is subject to New York State Labor Law Section 220, which requires that construction workers on the site be paid prevailing wages and supplements. The Contractor is reminded that all wage provisions of this Contract will be enforced strictly and failure to comply will be considered when evaluating performance. Noncompliance may result in the contractor being debarred by the City from future contracts. Complaints filed with the Comptroller may result in decisions which may debar a contractor from bidding contracts with any state governmental entity and other political subdivisions.

(C) Records: The Contractor is expected to submit accurate payroll reports and other required documents and verify attendance and job classifications being utilized in compliance with the law, Contract provisions and agency procedures.

31. Insurance

(A) Bidders are advised that the insurance requirements contained herein are regarded as material terms of the Contract. As required by Article 22 of the Contract, the contractor must effect and maintain with companies licensed and authorized to do business in the State of New York, the types of insurance set forth therein, when required by and in the amounts set forth in Schedule A of the General Conditions. Such required insurance must be provided from the date the contractor is ordered to commence work and up to the date of final acceptance of all required work.

(B) The contractor must, within ten days of receipt of the notice of award, submit the following insurance documentation: (a) original certificate of insurance for general liability in the amount required by Schedule A of the General Conditions, and (b) original certificates of insurance or other proof of coverage for workers' compensation and disability benefits, as required by Section 57 of the New York State Workers' Compensation Law and Section 220 of the Disability Benefits Law.

32. Lump Sum Contracts

(A) Comparison of Bids: Bids on Lump Sum Contracts will be compared on the basis of the lump sum price bid, adjusted for alternate prices bid, if any.

(B) Lump Sum Bids for "General Construction Work" which include excavation shall include all necessary excavation work defined in the Specifications as being included in the lump sum bid. The bidder shall also bid a unit price for the additional cost of excavating material which is defined in the Specifications as excavation for which additional payment will be made. The total estimated additional cost of removing such material will be taken as the quantity set forth in the Engineer's Estimate multiplied by the unit price bid. This total estimated cost of additional excavation shall be added to the lump sum bid for the General Construction Work for the purpose of comparing bids to determine the low bidder.

(C) Variations from Engineer's Estimate: The Engineer's Estimate of the quantity of excavation for which additional payment will be made is approximate only and is given solely to be used as a uniform basis for the comparison of bids and such estimate is not to be considered as part of this contract. The quantities actually required to complete the contract work may be more or less than the quantities in the Engineer's Estimate and, if so, no action for damages or for loss of profits shall accrue to the contractor by reason thereof.

33. Unit Price Contracts

(A) Comparison of Bids: Bids on Unit Price Contracts will be compared on the basis of a total estimated price, arrived at by taking the sum of the estimated quantities of such items, in accordance with the Engineer's Estimate of Quantities set forth in the Bid Schedule, multiplied by the corresponding unit prices, and including any lump sum bids on individual items.

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

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

34. Excise Tax

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

35. Licenses and Permits

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

36. Multiple Prime Contractors



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

37. Locally Based Enterprise Requirements (LBE)

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

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

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

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

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

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

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

- (a) the name and address of each LBE that will be given a subcontract,
- (b) the percentage, dollar amount and type of work to be subcontracted to the LBE, and
- (c) the dates when the LBE subcontract work will commence and end.

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

- (a) verification letters from each subcontractor listed in the "LBE Participation Schedule" stating that the LBE will enter into a formal agreement for work,
- (b) certification documents of any proposed LBE subcontractor which is not on the LBE certified list, and
- (c) copies of the certification letter of any proposed subcontractor which is an LBE.

(3) Documentation of good faith efforts to achieve the required LBE percentage shall include as appropriate but not limited to the following:

- (a) attendance at prebid meetings, when scheduled by the agency, to advise bidders of contract requirements;

- (b) advertisement where appropriate in general circulation media, trade association publications and small business media of the specific subcontracts that would be at least equal to the percentage goal for LBE utilization specified by the contractor;
- (c) written notification to association of small, minority and women contractors soliciting specific subcontractors;
- (d) written notification by certified mail to LBE firms that their interest in the contract is solicited for specific work items and their estimated values;
- (e) demonstration of efforts made to select portions of the work for performance by LBE firms in order to increase the likelihood of achieving the stated goal;
- (f) documented efforts to negotiate with LBE firms for specific subcontracts, including at a minimum:
  - (i) The names, address and telephone numbers of LBE firms that are contacted;
  - (ii) A description of the information provided to LBE firms regarding the plans and specifications for portions of the work to be performed;
  - (iii) Documentation showing that no reasonable price can be obtained from LBE firms;
  - (iv) A statement of why agreements with LBE firms were not reached;
- (g) a statement of the reason for rejecting any LBE firm which the contractor deemed to be unqualified; and
- (h) documentation of efforts made to assist the LBE firms contacted that needed assistance in obtaining required insurance.

(E) Unless otherwise waived by the Commissioner with the approval of the Office of Economic and Financial Opportunity, failure of a proposed contractor to provide the information required by paragraphs (C) and (D) above may render the bid non-responsive and the Contract may not be awarded to the bidder. If the contractor states that it will subcontract a specific portion of the work, but can demonstrate despite good faith efforts it cannot achieve its required LBE percentage for subcontracted work until after award of Contract, the Contract may be awarded, subject to a letter of compliance from the contractor stating that it will comply with Administrative Code Section 6-108.1 and subject to approval by the Commissioner. If the contractor has not met its required LBE percentage prior to award, the contractor shall demonstrate that a good faith effort has been made subsequent to award to obtain LBEs on each subcontract until it meets the required percentage.

(F) When a bidder indicates prior to award that no work will be subcontracted, no work may be subcontracted without the prior written approval of the Commissioner, which shall be granted only if the contractor in good faith seeks LBE subcontractors at least six weeks prior to the start of work.

(G) The contractor may not substitute or change any LBE which was identified prior to award of the contract without the written permission of the Commissioner. The contractor shall make a written application to the Commissioner for permission to make such substitution or change, explaining why the contractor needs to change its LBE subcontractor and how the contractor will meet its LBE subcontracting requirement. Copies of such application must be served on the originally identified LBE by certified mail return receipt requested, as well as the proposed substitute LBE. The Commissioner shall determine whether or not to grant the contractor's request for substitution.

### 38. Bid Submission Requirements

The 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 Subcontractor 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 DISQUALIFICATION OF THE BID.**

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

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*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
- ☐ NYC Department of Transportation Title 34 Chapter 2 – Highway Rules
- ☐ New York State Department of Labor Industrial Code Rule 16 NYCRR Part 753
- ☐ 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.

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**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.**

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**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  
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



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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.

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

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

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

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**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 complete the work. The Safety Program and the Site Safety Plan are subject to review and acceptance by the Construction Safety Unit prior to the commencement of work at the site. Failure by the Contractor to submit an acceptable Site Safety Plan and Safety Program shall be grounds for default.

**Safety Program:** Corporate Safety Program established by the Contractor that includes the Contractor's overall safety policy, regulatory compliance plan and basic safety procedures covering all aspects of 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 non-compliances, implementation and verification of corrective actions, forms to document safety inspections results, etc.
- Accident/Exposure Investigation
- Recordkeeping and Reporting Injuries – Responsible staff; reporting and recording criteria; OSHA 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 requirements, installation, use, inspection, dismantling, training and 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

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- 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 element described in a separate section (It may be necessary to modify the basic format for certain unique or high-risk projects, such as tunnels or high-rise construction):

- Project Work Scope – Detailed information regarding work tasks that will be performed by contractor and subcontractors under the project.
- Responsibility and Organization – Contractor's organization chart with responsible staff for the project, including titles, names, contact information, roles and responsibilities.
- Safety Training and Education – OSHA 10 Hours training, requirements for daily safety briefings and weekly safety meetings, any work task specific training, responsible staff for implementation of training program for the project.
- Job Hazard Analysis (JHA) – Project specific Job Hazard Analysis including work tasks, identified hazards, hazard control methods (administrative, engineering, PPE), contractor's name, project id, location, name and signature of a certifying person, hazard assessment date.
- Protection of Public
- Hazard Corrective Actions – Responsible staff, forms, frequency of safety inspections and implementation of corrective actions.
- Accident/Exposure Investigation – Accident/incident notification procedure of DDC project staff. Project specific procedures for accident investigation and implementation of corrective actions.
- First Aid and Medical Attention – Responsible staff, location and inspection of First Aid kit, directions to local hospitals; emergency telephone numbers.
- Project Specific Fire Protection and Prevention Program.
- Project Specific Illumination Procedure.
- Project Specific Sanitation Procedure.
- Personal Protective Equipment (PPE)
- Hazard Communication Program – Responsible staff; training; SDS records, project specific list of chemical; location of the program and SDS records.
- Means of Egress – Information regarding free and unobstructed egress from all parts of the building or structure; exit marking; maintenance of means of egress, etc.
- Employee Emergency Action Plan – Project specific: responsible staff, emergency alarm system, evacuation procedure, procedure to account for employees after evacuation, etc.
- Evacuation Plan – Project specific evacuation plan (drawing/scheme) with exists and evacuation routes.
- Protection of Underground Facilities and Utilities, including responsible staff.
- Ionizing/Nonionizing Radiation – Competent person, license and qualification requirements, type of radiation, employees exposure and protection, etc.
- Material Handling, Storage, Use and Disposal – Project specific information regarding material storage and disposal.
- Signs, Signals, and Barricades – Use of danger/warning signs, sidewalk closure, safety instruction signs, pedestrian fencing and barricades, etc.
- Scaffold – Project specific scaffold types, training, scaffold drawings, competent person, criteria for project specific scaffold, falling object protection.

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- 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.

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**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.

**NEW YORK CITY STANDARD CONSTRUCTION CONTRACT (DEC. 2013)**  
**INSURANCE RIDER**

The following provisions supersede the corresponding provisions in the December 2013 version of the New York City Standard Construction Contract:

1. Section 22.1.1(c) provides as follows:

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

2. Section 22.3.3 provides as follows:

22.3.3 For policies provided pursuant to all of Article 22.1 other than Article 22.1.2, the **Contractor** shall submit one or more Certificates of Insurance on forms acceptable to the **Commissioner**. All such Certificates of Insurance shall certify (a) the issuance and effectiveness of such policies of insurance, each with the specified minimum limits (b) for insurance secured pursuant to Article 22.1.1 that the City and any other entity specified in Schedule A is an Additional Insured thereunder; (c) in the event insurance is required pursuant to Article 22.1.6 and/or Article 22.1.7, that the City is an Additional Insured thereunder; and (d) the company code issued to the insurance company by the National Association of Insurance Commissioners (the NAIC number). All such Certificates of Insurance shall be accompanied by the required additional insured endorsements and either a duly executed "Certification by Insurance Broker or Agent" in the form contained in Part III of Schedule A or copies of all policies referenced in such Certificate of Insurance as certified by an authorized representative of the issuing insurance carrier. If any policy is not available at the time of submission, certified binders may be submitted until such time as the policy is available, at which time a certified copy of the policy shall be submitted.

**CITY OF NEW YORK**  
**STANDARD CONSTRUCTION CONTRACT**

**March 2017**

**CITY OF NEW YORK  
STANDARD CONSTRUCTION CONTRACT**

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**WITNESSETH:**

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

**CHAPTER I: THE CONTRACT AND DEFINITIONS**

**ARTICLE 1. THE CONTRACT**

1.1 Except for titles, subtitles, headings, running headlines, tables of contents and indices (all of which are printed herein merely for convenience), the following, except for such portions thereof as 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) Government provides financial funding as so designated in the Information for Bidders.

2.1.18 **"Final Acceptance"** shall mean final written acceptance of all the Work by the Commissioner, a copy of which shall be sent to the Contractor.

2.1.19 **"Final Approved Punch List"** shall mean a list, approved pursuant to Article 14.2.2, specifying those items of Work to be completed by the Contractor after Substantial Completion and dates for the completion of each item of Work.

2.1.20 **"Law"** or **"Laws"** shall mean the Constitution of the State of New York, the New York City Charter, the New York City Administrative Code, a statute of the United States or of the State of New York, a local law of the City of New York, any ordinance, rule or regulation having the force of law, or common law.

2.1.21 **"Materialman"** shall mean any corporation, firm, partnership, joint venture, or individual, other than employees of the Contractor, who or which contracts with the Contractor or any Subcontractor, to fabricate or deliver, or who actually fabricates or delivers, plant, materials or equipment to be incorporated in the Work.

2.1.22 **"Means and Methods of Construction"** shall mean the labor, materials, temporary structures, tools, plant, and construction equipment, and the manner and time of their use, necessary to accomplish the result intended by this Contract.

2.1.23 **"Notice to Proceed"** or **"Order to Work"** shall mean the written notice issued by the Commissioner specifying the time for commencement of the Work and the Engineer, Architect or Project Manager.

2.1.24 **"Other Contractor(s)"** shall mean any contractor (other than the entity which executed this Contract or its Subcontractors) who or which has a contract with the City for work on or adjacent to the building or Site of the Work.

2.1.25 **"Payroll Taxes"** shall mean State Unemployment Insurance (SUI), Federal Unemployment Insurance (FUI), and payments pursuant to the Federal Insurance Contributions Act (FICA).

2.1.26 **"Project"** shall mean the public improvement to which this Contract relates.

2.1.27 **"Procurement Policy Board" (PPB)** shall mean the Agency of the City of New York whose function is to establish comprehensive and consistent procurement policies and rules which shall have broad application throughout the City.

2.1.28 **"Required Quantity"** in a unit price Contract shall mean the actual quantity of any item of Work or materials which is required to be performed or furnished in order to comply with the Contract.

2.1.29 **"Resident Engineer"** shall mean the representative of the Commissioner duly designated by the Commissioner to be his/her representative at the site of the Work.

2.1.30 **"Site"** shall mean the area upon or in which the Contractor's operations are carried on, and such other areas adjacent thereto as may be designated as such by the Engineer.

2.1.31 **"Small Tools"** shall mean items that are ordinarily required for a worker's job function, including but not limited to, equipment that ordinarily has no licensing, insurance or substantive storage costs associated with it; such as circular and chain saws, impact drills, threaders, benders, wrenches, socket tools, etc.

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

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

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

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

## **CHAPTER II: THE WORK AND ITS PERFORMANCE**

### **ARTICLE 3. CHARACTER OF THE WORK**

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

### **ARTICLE 4. MEANS AND METHODS OF CONSTRUCTION**

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

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

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

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

4.2. The **Engineer's** approval of the **Contractor's Means and Methods of Construction**, or his/her failure to exercise his/her right to reject such means or methods, shall not relieve the **Contractor**

of its obligation to complete the **Work** as provided in this **Contract**; nor shall the exercise of such right to reject create a cause of action for damages.

## **ARTICLE 5. COMPLIANCE WITH LAWS**

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

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

5.3 Noise Control Code provisions.

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

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

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

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

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

5.4.1(b) "Motor Vehicle" means any self-propelled vehicle designed for transporting persons or property on a street or highway.

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

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

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

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

#### 5.4.2 Ultra Low Sulfur Diesel Fuel

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

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

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



requirements of this **Contract**, to the extent practicable, shall use whatever quantity of Ultra Low Sulfur Diesel Fuel or diesel fuel that has a sulfur content of no more than thirty parts per million (30 ppm) is available. Any finding made pursuant to this Article 5.4.2(c) shall expire after sixty (60) **Days**, at which time the requirements of this Article 5.4.2 shall be in full force and effect unless the **City Agency** renews the finding in writing and such renewal is approved by the DEP Commissioner.

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

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

#### 5.4.3 Best Available Technology

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

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

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

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

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

5.4.3(d)(ii) Where the DEP Commissioner has issued a written waiver based upon the **Contractor** having demonstrated to the DEP Commissioner that the use of the best available technology for reducing the emission of pollutants might endanger the operator of such vehicle or those working near such vehicle, due to engine malfunction, the **Contractor** shall use whatever technology for

reducing the emission of pollutants, if any, is available and appropriate for such vehicle, which would not endanger the operator of such vehicle or those working near such vehicle.

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

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

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

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

#### 5.4.5 Compliance

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

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

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

#### 5.4.6 Reporting

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## **ARTICLE 6. INSPECTION**

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

6.2 The **Contractor's** obligation hereunder shall include the uncovering or taking down of finished **Work** and its restoration thereafter; provided, however, that the order to uncover, take down and restore shall be in writing, and further provided that if **Work** thus exposed proves satisfactory, and if the **Contractor** has complied with Article 6.1, such uncovering or taking down and restoration shall be

considered an item of **Extra Work** to be paid for in accordance with the provisions of Article 26. If the **Work** thus exposed proves unsatisfactory, the **City** has no obligation to compensate the **Contractor** for the uncovering, taking down or restoration.

6.3 Inspection and approval by the **Commissioner**, the **Engineer**, **Project Manager**, or **Resident Engineer**, of finished **Work** or of **Work** being performed, or of materials and equipment at the place of manufacture or preparation, shall not relieve the **Contractor** of its obligation to perform the **Work** in strict accordance with the **Contract**. Finished or unfinished **Work** not found to be in strict accordance with the **Contract** shall be replaced as directed by the **Engineer**, even though such **Work** may have been previously approved and paid for. Such corrective **Work** is **Contract Work** and shall not be deemed **Extra Work**.

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

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

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

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

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

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

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

being given on behalf of the City of New York as Additional Insured, such other Additional Insureds, as well as the Named Insured.”

7.3.2(a) Whenever such notice is sent under a policy on which the **City** is an Additional Insured, the **Contractor** shall provide copies of the notice to the **Comptroller**, the **Commissioner** and the **City Corporation Counsel**. The copy to the **Comptroller** shall be sent to the Insurance Unit, NYC Comptroller’s Office, 1 Centre Street – Room 1222, New York, New York, 10007. The copy to the **Commissioner** shall be sent to the address set forth in Schedule A of the General Conditions. The copy to the **City Corporation Counsel** shall be sent to Insurance Claims Specialist, Affirmative Litigation Division, New York City Law Department, 100 Church Street, New York, New York 10007.

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

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

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

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

### **CHAPTER III: TIME PROVISIONS**

#### **ARTICLE 8. COMMENCEMENT AND PROSECUTION OF THE WORK**

8.1 The **Contractor** shall commence the **Work** on the date specified in the **Notice to Proceed** or the **Order to Work**. The time for performance of the **Work** under the **Contract** shall be computed from

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

#### **ARTICLE 9. PROGRESS SCHEDULES**

9.1 To enable the **Work** to be performed in an orderly and expeditious manner, the **Contractor**, within fifteen (15) **Days** after the **Notice to Proceed** or **Order to Work**, unless otherwise directed by the **Engineer**, shall submit to the **Engineer** a proposed progress schedule based on the Critical Path Method in the form of a bar graph or in such other form as specified by the **Engineer**, and monthly cash flow requirements, showing:

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

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

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

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

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

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

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

#### **ARTICLE 10. REQUESTS FOR INFORMATION OR APPROVAL**

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

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

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

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

11.1.1 Within fifteen (15) **Days** after the **Contractor** becomes aware or reasonably should be aware of each such condition, the **Contractor** must notify the **Resident Engineer or Engineer**, as directed by the **Commissioner**, in writing of the existence, nature and effect of such condition upon the approved progress schedule and the **Work**, and must state why and in what respects, if any, the condition is causing or may cause a delay. Such notice shall include a description of the construction activities that are or could be affected by the condition and may include any recommendations the **Contractor** may have to address the delay condition and any activities the **Contractor** may take to avoid or minimize the delay.

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

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

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

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

11.4 Compensable Delays

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



compensated, if at all, solely by an extension of time to complete the performance of the **Work**.

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

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

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

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

11.4.1.5 Differing site conditions or environmental hazards that were neither known nor reasonably ascertainable on a pre-bid inspection of the **Site** or review of the bid documents or other publicly available sources, and that are not ordinarily encountered in the **Project's** geographical area or neighborhood or in the type of **Work** to be performed.

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

11.4.1.7 Delays not contemplated by the parties;

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

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

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

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

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

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

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

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

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

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

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

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

#### 11.6 Required Content of Submission of Statement of Delay Damages

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

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

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

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

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

#### 11.7 Recoverable Costs

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

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

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

- 11.7.1.3 Reasonable rental value of necessary plant and equipment other than small tools, plus fuel/energy costs according to the applicable formula set forth in Articles 26.2.4 and/or 26.2.8, based on time and material records;
- 11.7.1.4 Additional insurance and bond costs;
- 11.7.1.5 Extended **Site** overhead, field office rental, salaries of field office staff, on-site project managers and superintendents, field office staff vehicles, **Project**-specific storage, field office utilities and telephone, and field office consumables;
- 11.7.1.6 Labor escalation costs based on actual costs;
- 11.7.1.7 Materials and equipment escalation costs based on applicable industry indices unless documentation of actual increased cost is provided;
- 11.7.1.8 Additional material and equipment storage costs based on actual documented costs and additional costs necessitated by extended manufacturer warranty periods; and
- 11.7.1.9 Extended home office overhead calculated based on the following formula:
  - (1) Subtract from the original **Contract** amount the amount earned by original contractual **Substantial Completion** date (not including change orders);
  - (2) Remove 15% overhead and profit from the calculation in item (1) by dividing the results of item (1) by 1.15;
  - (3) Multiply the result of item (2) by 7.25% for the total home office overhead;
  - (4) Multiply the result of item (3) by 7.25% for the total profit; and
  - (5) The total extended home office overhead will be the total of items (3) and (4).

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

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

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

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

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

## **ARTICLE 12. COORDINATION WITH OTHER CONTRACTORS**

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

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

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

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

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

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

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

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

### **ARTICLE 13. EXTENSION OF TIME FOR PERFORMANCE**

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

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

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

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

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

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

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

13.4 The **Contractor** shall not be entitled to receive a separate extension of time for each of several causes of delay operating concurrently, but, if at all, only for the actual period of delay in completion of the **Work** as determined by the **ACCO** or the Board, irrespective of the number of causes contributing to produce such delay. If one of several causes of delay operating concurrently results from any act, fault or omission of the **Contractor** or of its **Subcontractors** or **Materialmen**, and would of itself (irrespective

of the concurrent causes) have delayed the **Work**, no extension of time will be allowed for the period of delay resulting from such act, fault or omission.

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

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

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

13.8 Application for Extension of Time:

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

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

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

13.8.1(c) Original total bid price;

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

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

13.8.1(f) The extension of time requested.

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

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

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

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

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

13.9 Analysis and Approval of Time Extensions:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



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

#### **ARTICLE 15. LIQUIDATED DAMAGES**

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

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

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

#### **ARTICLE 16. OCCUPATION OR USE PRIOR TO COMPLETION**

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

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

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

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

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

## CHAPTER IV: SUBCONTRACTS AND ASSIGNMENTS

### ARTICLE 17. SUBCONTRACTS

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

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

17.3 In addition to the requirements in Article 17.2, **Contractor** is required to list the **Subcontractor** in the web based Subcontractor Reporting System through the City's Payee Information Portal (PIP), available at [www.nyc.gov/pip](http://www.nyc.gov/pip).<sup>1</sup> 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.

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

<sup>1</sup> 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](http://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](mailto:pip@fisa.nyc.gov).

**Subcontractor** shall expressly stipulate that all labor performed and materials furnished by the **Subcontractor** shall strictly comply with the requirements of this **Contract**.

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

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

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

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

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

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

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

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

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

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

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

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

## **ARTICLE 18. ASSIGNMENTS**

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

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

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

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

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

## **CHAPTER V: CONTRACTOR'S SECURITY AND GUARANTEE**

### **ARTICLE 19. SECURITY DEPOSIT**

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

**Contract** and furnishes the required payment and performance security, the **City** shall return the bid security within a reasonable time after the furnishing of such bonds and execution of the **Contract** by the **City**.

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

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

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

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

#### **ARTICLE 20. PAYMENT GUARANTEE**

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

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

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

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

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

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

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

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

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

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

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

20.3.7 All demands made against the **City** by a beneficiary of this payment guarantee shall be presented to the **Engineer** along with all written documentation concerning the demand which the **Engineer** deems reasonably appropriate or necessary, which may include, but shall not be limited to: the subcontract; any invoices presented to the **Contractor** for payment; the notarized statement of the beneficiary that the demand is due and payable, that a request for payment has been made of the **Contractor** and that the demand has not been paid by the **Contractor** within the time allowed for such payment by the subcontract; and copies of any correspondence between the beneficiary and the **Contractor** concerning such demand. The **City** shall notify the **Contractor** that a demand has been made. The **Contractor** shall inform the **City** of any defenses to the demand and shall forward to the **City** any documents the **City** requests concerning the demand.

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

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

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

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

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

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

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

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

20.7 Nothing in this Article 20 shall relieve the **Contractor** of the obligation to pay the claims of all persons with valid and lawful claims against the **Contractor** relating to the **Work**.

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

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

## **ARTICLE 21. RETAINED PERCENTAGE**

21.1 If this **Contract** requires one hundred (100%) percent performance and payment security, then as further security for the faithful performance of this **Contract**, the **Commissioner** shall deduct, and

retain until the substantial completion of the **Work**, five (5%) percent of the value of **Work** certified for payment in each partial payment voucher.

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

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

## **ARTICLE 22. INSURANCE**

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

22.1.1 Commercial General Liability Insurance: The **Contractor** shall provide Commercial General Liability Insurance covering claims for property damage and/or bodily injury, including death, which may arise from any of the operations under this **Contract**. Coverage under this insurance shall be at least as broad as that provided by the latest edition of Insurance Services Office ("ISO") Form CG 0001. Such insurance shall be "occurrence" based rather than "claims-made" and include, without limitation, the following types of coverage: premises operations; products and completed operations; contractual liability (including the tort liability of another assumed in a contract); broad form property damage; independent contractors; explosion, collapse and underground (XCU); construction means and methods; and incidental malpractice. Such insurance shall contain a "per project" aggregate limit, as specified in Schedule A, that applies separately to operations under this **Contract**.

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

22.1.1(b) Such Commercial General Liability Insurance shall name all other entities designated as additional insureds in Schedule A but only for claims arising from the



**Contractor's** operations under this **Contract**, with coverage at least as broad as the latest edition of ISO Form CG 20 26.

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

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

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

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

22.1.4 Builders Risk Insurance: If specified in Schedule A of the General Conditions, the **Contractor** shall provide Builders Risk Insurance on a completed value form for the total value of the **Work** through **Substantial Completion** of the **Work** in its entirety. Such insurance shall be provided on an All Risk basis and include coverage, without limitation, for windstorm (including named windstorm), storm surge, flood and earth movement. Unless waived by the **Commissioner**, it shall include coverage for ordinance and law, demolition and increased costs of construction, debris removal, pollutant clean up and removal, and expediting costs. Such insurance shall cover, without limitation, (a) all buildings and/or structures involved in the **Work**, as well as temporary structures at the **Site**, and (b) any property that is intended to become a permanent part of such building or structure, whether such property is on the **Site**, in transit or in temporary storage. Policies shall name the **Contractor** as Named Insured and list the **City** as both an Additional Insured and a Loss Payee as its interest may appear.

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

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

22.1.5 Commercial Automobile Liability Insurance: The **Contractor** shall provide Commercial Automobile Liability Insurance for liability arising out of ownership,

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

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

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

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

22.1.7 Marine Insurance:

22.1.7(a) Marine Protection and Indemnity Insurance: If specified in Schedule A of the General Conditions or if the **Contractor** engages in marine operations in the execution of any part of the **Work**, the **Contractor** shall maintain, or cause the **Subcontractor** doing such **Work** to maintain, Marine Protection and Indemnity Insurance with coverage at least as broad as Form SP-23. The insurance shall provide coverage for the **Contractor** or **Subcontractor** (whichever is doing this **Work**) and for the **City** (together with its officials and employees) and any other entity specified in Schedule A as an Additional Insured for bodily injury and property damage arising from marine operations under this **Contract**. Coverage shall include, without limitation, injury or death of crew members (if not fully provided through other insurance), removal of wreck, damage to piers, wharves and other fixed or floating objects and loss of or damage to any other vessel or craft, or to property on such other vessel or craft.

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

**Contract** and Collision Liability at least as broad as the latest edition of American Institute Hull Clauses.

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

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

22.2 General Requirements for Insurance Coverage and Policies:

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

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

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

22.2.4 The **City's** limits of coverage for all types of insurance required pursuant to Schedule A of the General Conditions shall be the greater of (i) the minimum limits set forth in Schedule A or (ii) the limits provided to the **Contractor** as Named Insured under all primary, excess, and umbrella policies of that type of coverage.

22.2.5 The **Contractor** may satisfy its insurance obligations under this Article 22 through primary policies or a combination of primary and excess/umbrella policies, so long as all policies provide the scope of coverage required herein.

22.2.6 Policies of insurance provided pursuant to this Article 22 shall be primary and non-contributing to any insurance or self-insurance maintained by the **City**.

22.3 Proof of Insurance:

22.3.1 For all types of insurance required by Article 22.1 and Schedule A, except for insurance required by Articles 22.1.4 and 22.1.7, the **Contractor** shall file proof of insurance in accordance with this Article 22.3 within ten (10) **Days** of award. For insurance

provided pursuant to Articles 22.1.4 and 22.1.7, proof shall be filed by a date specified by the **Commissioner** or ten (10) **Days** prior to the commencement of the portion of the **Work** covered by such policy, whichever is earlier.

22.3.2 For Workers' Compensation Insurance provided pursuant to Article 22.1.2, the **Contractor** shall submit one of the following forms: C-105.2 Certificate of Workers' Compensation Insurance; U-26.3 - State Insurance Fund Certificate of Workers' Compensation Insurance; Request for WC/DB Exemption (Form CE-200); equivalent or successor forms used by the New York State Workers' Compensation Board; or other proof of insurance in a form acceptable to the **Commissioner**. For Disability Benefits Insurance provided pursuant to Article 22.1.2, the Contractor shall submit DB-120.1 - Certificate Of Insurance Coverage Under The NYS Disability Benefits Law, Request for WC/DB Exemption (Form CE-200); equivalent or successor forms used by the New York State Workers' Compensation Board; or other proof of insurance in a form acceptable to the **Commissioner**. ACORD forms are not acceptable.

22.3.3 For policies provided pursuant to all of Article 22.1 other than Article 22.1.2, the **Contractor** shall submit one or more Certificates of Insurance on forms acceptable to the **Commissioner**. All such Certificates of Insurance shall certify (a) the issuance and effectiveness of such policies of insurance, each with the specified minimum limits (b) for insurance secured pursuant to Article 22.1.1 that the **City** and any other entity specified in Schedule A is an Additional Insured thereunder; (c) in the event insurance is required pursuant to Article 22.1.6 and/or Article 22.1.7, that the **City** is an Additional Insured thereunder; (d) the company code issued to the insurance company by the National Association of Insurance Commissioners (the NAIC number); and (e) the number assigned to the **Contract** by the **City**. All such Certificates of Insurance shall be accompanied by either a duly executed "Certification by Insurance Broker or Agent" in the form contained in Part III of Schedule A or copies of all policies referenced in such Certificate of Insurance as certified by an authorized representative of the issuing insurance carrier. If any policy is not available at the time of submission, certified binders may be submitted until such time as the policy is available, at which time a certified copy of the policy shall be submitted.

22.3.4 Documentation confirming renewals of insurance shall be submitted to the **Commissioner** prior to the expiration date of coverage of policies required under this **Contract**. Such proofs of insurance shall comply with the requirements of Articles 22.3.2 and 22.3.3.

22.3.5 The **Contractor** shall be obligated to provide the **City** with a copy of any policy of insurance provided pursuant to this Article 22 upon the demand for such policy by the **Commissioner** or the **City** Corporation Counsel.

#### 22.4 Operations of the **Contractor**:

22.4.1 The **Contractor** shall not commence the **Work** unless and until all required certificates have been submitted to and accepted by the **Commissioner**. Acceptance by the **Commissioner** of a certificate does not excuse the **Contractor** from securing insurance consistent with all provisions of this Article 22 or of any liability arising from its failure to do so.

22.4.2 The **Contractor** shall be responsible for providing continuous insurance coverage in the manner, form, and limits required by this **Contract** and shall be authorized to perform **Work** only during the effective period of all required coverage.

22.4.3 In the event that any of the required insurance policies lapse, are revoked, suspended or otherwise terminated, for whatever cause, the **Contractor** shall immediately stop all **Work**, and shall not recommence **Work** until authorized in writing to do so by the **Commissioner**. Upon quitting the **Site**, except as otherwise directed by the **Commissioner**, the **Contractor** shall leave all plant, materials, equipment, tools, and supplies on the **Site**. **Contract** time shall continue to run during such periods and no extensions of time will be granted. The **Commissioner** may also declare the **Contractor** in default for failure to maintain required insurance.

22.4.4 In the event the **Contractor** receives notice, from an insurance company or other person, that any insurance policy required under this Article 22 shall be cancelled or terminated (or has been cancelled or terminated) for any reason, the **Contractor** shall immediately forward a copy of such notice to both the **Commissioner** and the New York City Comptroller, attn: Office of Contract Administration, Municipal Building, One Centre Street, room 1005, New York, New York 10007. Notwithstanding the foregoing, the **Contractor** shall ensure that there is no interruption in any of the insurance coverage required under this Article 22.

22.4.5 Where notice of loss, damage, occurrence, accident, claim or suit is required under an insurance policy maintained in accordance with this Article 22, the **Contractor** shall notify in writing all insurance carriers that issued potentially responsive policies of any such event relating to any operations under this **Contract** (including notice to Commercial General Liability insurance carriers for events relating to the **Contractor's** own employees) no later than 20 days after such event. For any policy where the **City** is an Additional Insured, such notice shall expressly specify that "this notice is being given on behalf of the City of New York as Insured as well as the Named Insured." Such notice shall also contain the following information: the number of the insurance policy, the name of the named insured, the date and location of the damage, occurrence, or accident, and the identity of the persons or things injured, damaged or lost. The **Contractor** shall simultaneously send a copy of such notice to the City of New York c/o Insurance Claims Specialist, Affirmative Litigation Division, New York City Law Department, 100 Church Street, New York, New York 10007.

22.4.6 In the event of any loss, accident, claim, action, or other event that does or can give rise to a claim under any insurance policy required under this Article 22, the **Contractor** shall at all times fully cooperate with the **City** with regard to such potential or actual claim.

22.5 **Subcontractor Insurance:** In the event the **Contractor** requires any **Subcontractor** to procure insurance with regard to any operations under this **Contract** and requires such **Subcontractor** to name the **Contractor** as an **Additional Insured** thereunder, the **Contractor** shall ensure that the **Subcontractor** name the **City**, including its officials and employees, as an Additional Insured with coverage at least as broad as the most recent edition of ISO Form CG 20 26.

22.6 Wherever reference is made in Article 7 or this Article 22 to documents to be sent to the **Commissioner** (e.g., notices, filings, or submissions), such documents shall be sent to the address set forth in Schedule A of the General Conditions. In the event no address is set forth in Schedule A, such documents are to be sent to the **Commissioner's** address as provided elsewhere in this **Contract**.

22.7 Apart from damages or losses covered by insurance provided pursuant to Articles 22.1.2, 22.1.3, or 22.1.5, the **Contractor** waives all rights against the **City**, including its officials and employees, for any damages or losses that are covered under any insurance required under this Article 22 (whether or

not such insurance is actually procured or claims are paid thereunder) or any other insurance applicable to the operations of the **Contractor** and/or its employees, agents, or **Subcontractors**.

22.8 In the event the **Contractor** utilizes a self-insurance program to satisfy any of the requirements of this Article 22, the **Contractor** shall ensure that any such self-insurance program provides the **City** with all rights that would be provided by traditional insurance under this Article 22, including but not limited to the defense and indemnification obligations that insurers are required to undertake in liability policies.

22.9 Materiality/Non-Waiver: The **Contractor's** failure to secure policies in complete conformity with this Article 22, or to give an insurance company timely notice of any sort required in this **Contract** or to do anything else required by this Article 22 shall constitute a material breach of this **Contract**. Such breach shall not be waived or otherwise excused by any action or inaction by the **City** at any time.

22.10 Pursuant to General Municipal Law Section 108, this **Contract** shall be void and of no effect unless **Contractor** maintains Workers' Compensation Insurance for the term of this **Contract** to the extent required and in compliance with the New York State Workers' Compensation Law.

22.11 Other Remedies: Insurance coverage provided pursuant to this Article 22 or otherwise shall not relieve the **Contractor** of any liability under this **Contract**, nor shall it preclude the **City** from exercising any rights or taking such other actions available to it under any other provisions of this **Contract** or Law.

### **ARTICLE 23. MONEY RETAINED AGAINST CLAIMS**

23.1 If any claim shall be made by any person or entity (including **Other Contractors** with the **City** on this **Project**) against the **City** or against the **Contractor** and the **City** for any of the following:

(a) An alleged loss, damage, injury, theft or vandalism of any of the kinds referred to in Articles 7 and 12, plus the reasonable costs of defending the **City**, which in the opinion of the **Comptroller** may not be paid by an insurance company (for any reason whatsoever); or

(b) An infringement of copyrights, patents or use of patented articles, tools, etc., as referred to in Article 57; or

(c) Damage claimed to have been caused directly or indirectly by the failure of the **Contractor** to perform the **Work** in strict accordance with this **Contract**,

the amount of such claim, or so much thereof as the **Comptroller** may deem necessary, may be withheld by the **Comptroller**, as security against such claim, from any money due hereunder. The **Comptroller**, in his/her discretion, may permit the **Contractor** to substitute other satisfactory security in lieu of the monies so withheld.

23.2 If an action on such claim is timely commenced and the liability of the **City**, or the **Contractor**, or both, shall have been established therein by a final judgment of a court of competent jurisdiction, or if such claim shall have been admitted by the **Contractor** to be valid, the **Comptroller** shall pay such judgment or admitted claim out of the monies retained by the **Comptroller** under the provisions of this Article 23, and return the balance, if any, without interest, to the **Contractor**.

## **ARTICLE 24. MAINTENANCE AND GUARANTY**

24.1 The **Contractor** shall promptly repair, replace, restore or rebuild, as the **Commissioner** may determine, any finished **Work** in which defects of materials or workmanship may appear or to which damage may occur because of such defects, during the one (1) year period subsequent to the date of **Substantial Completion** (or use and occupancy in accordance with Article 16), except where other periods of maintenance and guaranty are provided for in Schedule A.

24.2 As security for the faithful performance of its obligations hereunder, the **Contractor**, upon filing its requisition for payment on **Substantial Completion**, shall deposit with the **Commissioner** a sum equal to one (1%) percent of the price (or the amount fixed in Schedule A of the General Conditions) in cash or certified check upon a state or national bank and trust company or a check of such bank and trust company signed by a duly authorized officer thereof and drawn to the order of the **Comptroller**, or obligations of the **City**, which the **Comptroller** may approve as of equal value with the sum so required.

24.3 In lieu of the above, the **Contractor** may make such security payment to the **City** by authorizing the **Commissioner** in writing to deduct the amount from the **Substantial Completion** payment which shall be deemed the deposit required above.

24.4 If the **Contractor** has faithfully performed all of its obligations hereunder the **Commissioner** shall so certify to the **Comptroller** within five (5) **Days** after the expiration of one (1) year from the date of **Substantial Completion** and acceptance of the **Work** or within thirty (30) **Days** after the expiration of the guarantee period fixed in the **Specifications**. The security payment shall be repaid to the **Contractor** without interest within thirty (30) **Days** after certification by the **Commissioner** to the **Comptroller** that the **Contractor** has faithfully performed all of its obligations hereunder.

24.5 Notice by the **Commissioner** to the **Contractor** to repair, replace, rebuild or restore such defective or damaged **Work** shall be timely, pursuant to this article, if given not later than ten (10) **Days** subsequent to the expiration of the one (1) year period or other periods provided for herein.

24.6 If the **Contractor** shall fail to repair, replace, rebuild or restore such defective or damaged **Work** promptly after receiving such notice, the **Commissioner** shall have the right to have the **Work** done by others in the same manner as provided for in the completion of a defaulted **Contract**, under Article 51.

24.7 If the security payment so deposited is insufficient to cover the cost of such **Work**, the **Contractor** shall be liable to pay such deficiency on demand by the **Commissioner**.

24.8 The **Engineer's** certificate setting forth the fair and reasonable cost of repairing, replacing, rebuilding or restoring any damaged or defective **Work** when performed by one other than the **Contractor**, shall be binding and conclusive upon the **Contractor** as to the amount thereof.

24.9 The **Contractor** shall obtain all manufacturers' warranties and guaranties of all equipment and materials required by this **Contract** in the name of the **City** and shall deliver same to the **Commissioner**. All of the **City's** rights and title and interest in and to said manufacturers' warranties and guaranties may be assigned by the **City** to any subsequent purchasers of such equipment and materials or lessees of the premises into which the equipment and materials have been installed.

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

### ARTICLE 25. CHANGES

25.1 Changes may be made to this **Contract** only as duly authorized in writing by the **Commissioner** in accordance with the **Law** and this **Contract**. All such changes, modifications, and amendments will become a part of the **Contract**. **Work** so ordered shall be performed by the **Contractor**.

25.2 **Contract** changes will be made only for **Work** necessary to complete the **Work** included in the original scope of the **Contract** and/or for non-material changes to the scope of the **Contract**. Changes are not permitted for any material alteration in the scope of **Work** in the **Contract**.

25.3 The **Contractor** shall be entitled to a price adjustment for **Extra Work** performed pursuant to a written change order. Adjustments to price shall be computed in one or more of the following ways:

25.3.1 By applicable unit prices specified in the **Contract**; and/or

25.3.2 By agreement of a fixed price; and/or

25.3.3 By time and material records; and/or

25.3.4 In any other manner approved by the **CCPO**.

25.4 All payments for change orders are subject to pre-audit by the **Engineering Audit Officer** and may be post-audited by the **Comptroller** and/or the **Agency**.

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

26.1 **Overrun of Unit Price Item:** An overrun is any quantity of a unit price item which the **Contractor** is directed to provide which is in excess of one hundred twenty-five (125%) percent of the estimated quantity for that item set forth in the bid schedule.

26.1.1 For any unit price item, the **Contractor** will be paid at the unit price bid for any quantity up to one hundred twenty-five (125%) percent of the estimated quantity for that item set forth in the bid schedule. If during the progress of the **Work**, the actual quantity of any unit price item required to complete the **Work** approaches the estimated quantity for that item, and for any reason it appears that the actual quantity of any unit price item necessary to complete the **Work** will exceed the estimated quantity for that item by twenty-five (25%) percent, the **Contractor** shall immediately notify the **Engineer** of such anticipated overrun. The **Contractor** shall not be compensated for any quantity of a unit price item provided which is in excess of one hundred twenty-five (125%) percent of the estimated quantity for that item set forth in the bid schedule without written authorization from the **Engineer**.

26.1.2 If the actual quantity of any unit price item necessary to complete the **Work** will exceed one hundred twenty five (125%) percent of the estimated quantity for that item set forth in the bid schedule, the **City** reserves the right and the **Contractor** agrees to negotiate a new unit price for such item. In no event shall such negotiated new unit price exceed the unit bid price. If the **City** and **Contractor** cannot agree on a new unit price, then the **City** shall order the **Contractor** and the **Contractor** agrees to provide additional quantities of



the item on the basis of time and material records for the actual and reasonable cost as determined under Article 26.2, but in no event at a unit price exceeding the unit price bid.

**26.2 Extra Work:** For **Extra Work** where payment is by agreement on a fixed price in accordance with Article 25.3.2, the price to be paid for such **Extra Work** shall be based on the fair and reasonable estimated cost of the items set forth below. For **Extra Work** where payment is based on time and material records in accordance with Article 25.3.3, the price to be paid for such **Extra Work** shall be the actual and reasonable cost of the items set forth below, calculated in accordance with the formula specified therein, if any.

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

26.2.2 Necessary direct labor, including payroll taxes (subject to statutory wage caps) and supplemental benefits; plus

26.2.3 Sales and personal property taxes, if any, required to be paid on materials not incorporated into such **Extra Work**; plus

26.2.4 Reasonable rental value of **Contractor**-owned (or **Subcontractor**-owned, as applicable), necessary plant and equipment other than **Small Tools**, plus fuel/energy costs. Except for fuel costs for pick-up trucks which shall be reimbursed based on a consumption of five (5) gallons per shift, fuel costs shall be reimbursed based on actual costs or, in the absence of auditable documentation, the following fuel consumption formula per operating hour:  $(.035) \times (\text{HP rating}) \times (\text{Fuel cost/gallon})$ . Reasonable rental value is defined as the lower of either seventy-five percent of the monthly prorated rental rates established in "The AED Green Book, Rental Rates and Specifications for Construction Equipment" published by Equipment Watch (the "Green Book"), or seventy-five percent of the monthly prorated rental rates established in the "Rental Rate Blue Book for Construction Equipment" published by Equipment Watch (the "Blue Book") (the applicable Blue Book rate being for rental only without the addition of any operational costs listed in the Blue Book). The reasonable rental value is deemed to be inclusive of all operating costs except for fuel/energy consumption and equipment operator's wages/costs. For multiple shift utilization, reimbursement shall be calculated as follows: first shift shall be seventy-five (75%) percent of such rental rates; second shift shall be sixty (60%) percent of the first shift rate; and third shift shall be forty (40%) percent of the first shift rate. Equipment on standby shall be reimbursed at one-third (1/3) the prorated monthly rental rate. **Contractor**-owned (or **Subcontractor**-owned, as applicable) equipment includes equipment from rental companies affiliated with or controlled by the **Contractor** (or **Subcontractor**, as applicable), as determined by the **Commissioner**. In establishing cost reimbursement for non-operating **Contractor**-owned (or **Subcontractor**-owned, as applicable) equipment (scaffolding, sheeting systems, road plates, etc.), the **City** may restrict reimbursement to a purchase-salvage/life cycle basis if less than the computed rental costs; plus

26.2.5 Necessary installation and dismantling of such plant and equipment, including transportation to and from the **Site**, if any, provided that, in the case of non-**Contractor**-owned (or non-**Subcontractor**-owned, as applicable) equipment rented from a third party, the cost of installation and dismantling are not allowable if such costs are included in the rental rate; plus

26.2.6 Necessary fees charged by governmental entities; plus

26.2.7 Necessary construction-related service fees charged by non-governmental entities, such as landfill tipping fees; plus

26.2.8 Reasonable rental costs of non-**Contractor**-owned (or non-**Subcontractor**-owned, as applicable) necessary plant and equipment other than **Small Tools**, plus fuel/energy costs. Except for fuel costs for pick-up trucks which shall be reimbursed based on a consumption of five (5) gallons per shift, fuel costs shall be reimbursed based on actual costs or, in the absence of auditable documentation, the following fuel consumption formula per hour of operation:  $(.035) \times (\text{HP rating}) \times (\text{Fuel cost/gallon})$ . In lieu of renting, the **City** reserves the right to direct the purchase of non-operating equipment (scaffolding, sheeting systems, road plates, etc.), with payment on a purchase-salvage/life cycle basis, if less than the projected rental costs; plus

26.2.9 Workers' Compensation Insurance, and any insurance coverage expressly required by the **City** for the performance of the **Extra Work** which is different than the types of insurance required by Article 22 and Schedule A of the General Conditions. The cost of Workers' Compensation Insurance is subject to applicable payroll limitation caps and shall be based upon the carrier's Manual Rate for such insurance derived from the applicable class Loss Cost ("LC") and carrier's Lost Cost Multiplier ("LCM") approved by the New York State Department of Financial Services, and with the exception of experience rating, rate modifiers as promulgated by the New York Compensation Insurance Rating Board ("NYCIRB"); plus

26.2.10 Additional costs incurred as a result of the **Extra Work** for performance and payment bonds; plus

26.2.11 Twelve percent (12%) percent of the total of items in Articles 26.2.1 through 26.2.5 as compensation for overhead, except that no percentage for overhead will be allowed on **Payroll Taxes** or on the premium portion of overtime pay or on sales and personal property taxes. Overhead shall include without limitation, all costs and expenses in connection with administration, management superintendence, small tools, and insurance required by Schedule A of the General Conditions other than Workers' Compensation Insurance; plus

26.2.12 Ten (10%) percent of the total of items in Articles 26.2.1 through 26.2.5, plus the items in Article 26.2.11, as compensation for profit, except that no percentage for profit will be allowed on **Payroll Taxes** or on the premium portion of overtime pay or on sales and personal property taxes; plus

26.2.13 Five (5%) percent of the total of items in Articles 26.2.6 through 26.2.10 as compensation for overhead and profit.

26.3 Where the **Extra Work** is performed in whole or in part by other than the **Contractor's** own forces pursuant to Article 26.2, the **Contractor** shall be paid, subject to pre-audit by the **Engineering Audit Officer**, the cost of such **Work** computed in accordance with Article 26.2 above, plus an additional allowance of five (5%) percent to cover the **Contractor's** overhead and profit.

26.4 Where a change is ordered, involving both **Extra Work** and omitted or reduced **Contract Work**, the **Contract** price shall be adjusted, subject to pre-audit by the **EAO**, in an amount based on the difference between the cost of such **Extra Work** and of the omitted or reduced **Work**.

26.5 Where the **Contractor** and the **Commissioner** can agree upon a fixed price for **Extra Work** in accordance with Article 25.3.2 or another method of payment for **Extra Work** in accordance with

Article 25.3.4, or for **Extra Work** ordered in connection with omitted **Work**, such method, subject to pre-audit by the **EAO**, may, at the option of the **Commissioner**, be substituted for the cost plus a percentage method provided in Article 26.2; provided, however, that if the **Extra Work** is performed by a **Subcontractor**, the **Contractor** shall not be entitled to receive more than an additional allowance of five (5%) percent for overhead and profit over the cost of such **Subcontractor's Work** as computed in accordance with Article 26.2.

## **ARTICLE 27. RESOLUTION OF DISPUTES**

27.1 All disputes between the **City** and the **Contractor** of the kind delineated in this Article 27.1 that arise under, or by virtue of, this **Contract** shall be finally resolved in accordance with the provisions of this Article 27 and the **PPB Rules**. This procedure for resolving all disputes of the kind delineated herein shall be the exclusive means of resolving any such disputes.

27.1.1 This Article 27 shall not apply to disputes concerning matters dealt with in other sections of the **PPB Rules**, or to disputes involving patents, copyrights, trademarks, or trade secrets (as interpreted by the courts of New York State) relating to proprietary rights in computer software.

27.1.2 This Article 27 shall apply only to disputes about the scope of **Work** delineated by the **Contract**, the interpretation of **Contract** documents, the amount to be paid for **Extra Work** or disputed work performed in connection with the **Contract**, the conformity of the **Contractor's Work** to the **Contract**, and the acceptability and quality of the **Contractor's Work**; such disputes arise when the **Engineer, Resident Engineer, Engineering Audit Officer**, or other designee of the **Commissioner** makes a determination with which the **Contractor** disagrees.

27.2 All determinations required by this Article 27 shall be made in writing clearly stated, with a reasoned explanation for the determination based on the information and evidence presented to the party making the determination. Failure to make such determination within the time required by this Article 27 shall be deemed a non-determination without prejudice that will allow application to the next level.

27.3 During such time as any dispute is being presented, heard, and considered pursuant to this Article 27, the **Contract** terms shall remain in force and the **Contractor** shall continue to perform **Work** as directed by the **ACCO** or the **Engineer**. Failure of the **Contractor** to continue **Work** as directed shall constitute a waiver by the **Contractor** of its claim.

### **27.4 Presentation of Disputes to Commissioner.**

Notice of Dispute and Agency Response. The **Contractor** shall present its dispute in writing ("Notice of Dispute") to the **Commissioner** within thirty (30) Days of receiving written notice of the determination or action that is the subject of the dispute. This notice requirement shall not be read to replace any other notice requirements contained in the **Contract**. The Notice of Dispute shall include all the facts, evidence, documents, or other basis upon which the **Contractor** relies in support of its position, as well as a detailed computation demonstrating how any amount of money claimed by the **Contractor** in the dispute was arrived at. Within thirty (30) Days after receipt of the detailed written submission comprising the complete Notice of Dispute, the **Engineer, Resident Engineer, Engineering Audit Officer**, or other designee of the **Commissioner** shall submit to the **Commissioner** all materials he or she deems pertinent to the dispute. Following initial submissions to the **Commissioner**, either party may demand of the other the production of any document or other material the demanding party believes may be relevant to the dispute. The requested party shall produce all relevant materials that are not otherwise

protected by a legal privilege recognized by the courts of New York State. Any question of relevancy shall be determined by the **Commissioner** whose decision shall be final. Willful failure of the **Contractor** to produce any requested material whose relevancy the **Contractor** has not disputed, or whose relevancy has been affirmatively determined, shall constitute a waiver by the **Contractor** of its claim.

27.4.1 **Commissioner Inquiry.** The **Commissioner** shall examine the material and may, in his or her discretion, convene an informal conference with the **Contractor**, the **ACCO**, and the **Engineer, Resident Engineer, Engineering Audit Officer**, or other designee of the **Commissioner** to resolve the issue by mutual consent prior to reaching a determination. The **Commissioner** may seek such technical or other expertise as he or she shall deem appropriate, including the use of neutral mediators, and require any such additional material from either or both parties as he or she deems fit. The **Commissioner's** ability to render, and the effect of, a decision hereunder shall not be impaired by any negotiations in connection with the dispute presented, whether or not the **Commissioner** participated therein. The **Commissioner** may or, at the request of any party to the dispute, shall compel the participation of any **Other Contractor** with a contract related to the **Work** of this **Contract**, and that **Contractor** shall be bound by the decision of the **Commissioner**. Any **Other Contractor** thus brought into the dispute resolution proceeding shall have the same rights and obligations under this Article 27 as the **Contractor** initiating the dispute.

27.4.2 **Commissioner Determination.** Within thirty (30) **Days** after the receipt of all materials and information, or such longer time as may be agreed to by the parties, the **Commissioner** shall make his or her determination and shall deliver or send a copy of such determination to the **Contractor**, the **ACCO**, and **Engineer, Resident Engineer, Engineering Audit Officer**, or other designee of the **Commissioner**, as applicable, together with a statement concerning how the decision may be appealed.

27.4.3 **Finality of Commissioner's Decision.** The **Commissioner's** decision shall be final and binding on all parties, unless presented to the Contract Dispute Resolution Board pursuant to this Article 27. The **City** may not take a petition to the Contract Dispute Resolution Board. However, should the **Contractor** take such a petition, the **City** may seek, and the Contract Dispute Resolution Board may render, a determination less favorable to the **Contractor** and more favorable to the **City** than the decision of the **Commissioner**.

27.5 **Presentation of Dispute to the Comptroller.** Before any dispute may be brought by the **Contractor** to the Contract Dispute Resolution Board, the **Contractor** must first present its claim to the **Comptroller** for his or her review, investigation, and possible adjustment.

27.5.1 **Time, Form, and Content of Notice.** Within thirty (30) **Days** of its receipt of a decision by the **Commissioner**, the **Contractor** shall submit to the **Comptroller** and to the **Commissioner** a Notice of Claim regarding its dispute with the **Agency**. The Notice of Claim shall consist of (i) a brief written statement of the substance of the dispute, the amount of money, if any, claimed and the reason(s) the **Contractor** contends the dispute was wrongly decided by the **Commissioner**; (ii) a copy of the written decision of the **Commissioner**; and (iii) a copy of all materials submitted by the **Contractor** to the **Agency**, including the Notice of Dispute. The **Contractor** may not present to the **Comptroller** any material not presented to the **Commissioner**, except at the request of the **Comptroller**.

27.5.2 Response. Within thirty (30) **Days** of receipt of the Notice of Claim, the **Agency** shall make available to the **Comptroller** a copy of all material submitted by the **Agency** to the **Commissioner** in connection with the dispute. The **Agency** may not present to the **Comptroller** any material not presented to the **Commissioner** except at the request of the **Comptroller**.

27.5.3 **Comptroller Investigation.** The **Comptroller** may investigate the claim in dispute and, in the course of such investigation, may exercise all powers provided in Sections 7-201 and 7-203 of the Administrative Code. In addition, the **Comptroller** may demand of either party, and such party shall provide, whatever additional material the **Comptroller** deems pertinent to the claim, including original business records of the **Contractor**. Willful failure of the **Contractor** to produce within fifteen (15) **Days** any material requested by the **Comptroller** shall constitute a waiver by the **Contractor** of its claim. The **Comptroller** may also schedule an informal conference to be attended by the **Contractor**, **Agency** representatives, and any other personnel desired by the **Comptroller**.

27.5.4 Opportunity of **Comptroller** to Compromise or Adjust Claim. The **Comptroller** shall have forty-five (45) **Days** from his or her receipt of all materials referred to in Article 27.5.3 to investigate the disputed claim. The period for investigation and compromise may be further extended by agreement between the **Contractor** and the **Comptroller**, to a maximum of ninety (90) **Days** from the **Comptroller's** receipt of all materials. The **Contractor** may not present its petition to the Contract Dispute Resolution Board until the period for investigation and compromise delineated in this Article 27.5.4 has expired. In compromising or adjusting any claim hereunder, the **Comptroller** may not revise or disregard the terms of the **Contract** between the parties.

27.6 Contract Dispute Resolution Board. There shall be a Contract Dispute Resolution Board composed of:

27.6.1 The chief administrative law judge of the Office of Administrative Trials and Hearings (OATH) or his/her designated OATH administrative law judge, who shall act as chairperson, and may adopt operational procedures and issue such orders consistent with this Article 27 as may be necessary in the execution of the Contract Dispute Resolution Board's functions, including, but not limited to, granting extensions of time to present or respond to submissions;

27.6.2 The **CCPO** or his/her designee; any designee shall have the requisite background to consider and resolve the merits of the dispute and shall not have participated personally and substantially in the particular matter that is the subject of the dispute or report to anyone who so participated; and

27.6.3 A person with appropriate expertise who is not an employee of the **City**. This person shall be selected by the presiding administrative law judge from a prequalified panel of individuals, established and administered by OATH with appropriate background to act as decision-makers in a dispute. Such individual may not have a contract or dispute with the **City** or be an officer or employee of any company or organization that does, or regularly represents persons, companies, or organizations having disputes with the **City**.

27.7 Petition to the Contract Dispute Resolution Board. In the event the claim has not been settled or adjusted by the **Comptroller** within the period provided in this Article 27, the **Contractor**,

within thirty (30) **Days** thereafter, may petition the Contract Dispute Resolution Board to review the **Commissioner's** determination.

27.7.1 **Form and Content of Petition by Contractor.** The **Contractor** shall present its dispute to the Contract Dispute Resolution Board in the form of a petition, which shall include (i) a brief written statement of the substance of the dispute, the amount of money, if any, claimed, and the reason(s) the **Contractor** contends the dispute was wrongly decided by the **Commissioner**; (ii) a copy of the written Decision of the **Commissioner**, (iii) copies of all materials submitted by the **Contractor** to the Agency; (iv) a copy of the written decision of the **Comptroller**, if any, and (v) copies of all correspondence with, or written material submitted by the **Contractor**, to the **Comptroller**. The **Contractor** shall concurrently submit four (4) complete sets of the Petition: one set to the City Corporation Counsel (Attn: Commercial and Real Estate Litigation Division) and three (3) sets to the Contract Dispute Resolution Board at OATH's offices with proof of service on the City Corporation Counsel. In addition, the **Contractor** shall submit a copy of the written statement of the substance of the dispute, cited in (i) above, to both the **Commissioner** and the **Comptroller**.

27.7.2 **Agency Response.** Within thirty (30) **Days** of its receipt of the Petition by the City Corporation Counsel, the **Agency** shall respond to the brief written statement of the **Contractor** and make available to the Contract Dispute Resolution Board all material it submitted to the **Commissioner** and **Comptroller**. Three (3) complete copies of the **Agency** response shall be provided to the Contract Dispute Resolution Board and one to the **Contractor**. Extensions of time for submittal of the **Agency** response shall be given as necessary upon a showing of good cause or, upon consent of the parties, for an initial period of up to thirty (30) **Days**.

27.7.3 **Further Proceedings.** The Contract Dispute Resolution Board shall permit the **Contractor** to present its case by submission of memoranda, briefs, and oral argument. The Contract Dispute Resolution Board shall also permit the **Agency** to present its case in response to the **Contractor** by submission of memoranda, briefs, and oral argument. If requested by the City Corporation Counsel, the **Comptroller** shall provide reasonable assistance in the preparation of the **Agency's** case. Neither the **Contractor** nor the **Agency** may support its case with any documentation or other material that was not considered by the **Comptroller**, unless requested by the Contract Dispute Resolution Board. The Contract Dispute Resolution Board, in its discretion, may seek such technical or other expert advice as it shall deem appropriate and may seek, on its own or upon application of a party, any such additional material from any party as it deems fit. The Contract Dispute Resolution Board, in its discretion, may combine more than one dispute between the parties for concurrent resolution.

27.7.4 **Contract Dispute Resolution Board Determination.** Within forty-five (45) **Days** of the conclusion of all written submissions and oral arguments, the Contract Dispute Resolution Board shall render a written decision resolving the dispute. In an unusually complex case, the Contract Dispute Resolution Board may render its decision in a longer period, not to exceed ninety (90) **Days**, and shall so advise the parties at the commencement of this period. The Contract Dispute Resolution Board's decision must be consistent with the terms of the **Contract**. Decisions of the Contract Dispute Resolution Board shall only resolve matters before the Contract Dispute Resolution Board and shall not have precedential effect with respect to matters not before the Contract Dispute Resolution Board.

27.7.5 Notification of Contract Dispute Resolution Board Decision. The Contract Dispute Resolution Board shall send a copy of its decision to the **Contractor**, the **ACCO**, the Engineer, the **Comptroller**, the **City Corporation Counsel**, the **CCPO**, and the **PPB**. A decision in favor of the **Contractor** shall be subject to the prompt payment provisions of the **PPB Rules**. The Required Payment Date shall be thirty (30) Days after the date the parties are formally notified of the Contract Dispute Resolution Board's decision.

27.7.6 Finality of Contract Dispute Resolution Board Decision. The Contract Dispute Resolution Board's decision shall be final and binding on all parties. Any party may seek review of the Contract Dispute Resolution Board's decision solely in the form of a challenge, filed within four (4) months of the date of the Contract Dispute Resolution Board's decision, in a court of competent jurisdiction of the State of New York, County of New York pursuant to Article 78 of the Civil Practice Law and Rules. Such review by the court shall be limited to the question of whether or not the Contract Dispute Resolution Board's decision was made in violation of lawful procedure, was affected by an error of **Law**, or was arbitrary and capricious or an abuse of discretion. No evidence or information shall be introduced or relied upon in such proceeding that was not presented to the Contract Dispute Resolution Board in accordance with this Article 27.

27.8 Any termination, cancellation, or alleged breach of the **Contract** prior to or during the pendency of any proceedings pursuant to this Article 27 shall not affect or impair the ability of the **Commissioner** or Contract Dispute Resolution Board to make a binding and final decision pursuant to this Article 27.

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

28.1 While the **Contractor** or any of its **Subcontractors** is performing **Work** on a time and material basis or **Extra Work** on a time and material basis ordered by the **Commissioner** under Article 25, or where the **Contractor** believes that it or any of its **Subcontractors** is performing **Extra Work** but a final determination by **Agency** has not been made, or the **Contractor** or any of its **Subcontractors** is performing disputed **Work** (whether on or off the **Site**), or complying with a determination or order under protest in accordance with Articles 11, 27, and 30, in each such case the **Contractor** shall furnish the **Resident Engineer** daily with three (3) copies of written statements signed by the **Contractor's** representative at the **Site** showing:

28.1.1 The name, trade, and number of each worker employed on such **Work** or engaged in complying with such determination or order, the number of hours employed, and the character of the **Work** each is doing; and

28.1.2 The nature and quantity of any materials, plant and equipment furnished or used in connection with the performance of such **Work** or compliance with such determination or order, and from whom purchased or rented.

28.2 A copy of such statement will be countersigned by the **Resident Engineer**, noting thereon any items not agreed to or questioned, and will be returned to the **Contractor** within two (2) Days after submission.

28.3 The **Contractor** and its **Subcontractors**, when required by the **Commissioner**, or the **Comptroller**, shall also produce for inspection, at the office of the **Contractor** or **Subcontractor**, any and all of its books, bid documents, financial statements, vouchers, records, daily job diaries and reports,

and cancelled checks, and any other documents relating to showing the nature and quantity of the labor, materials, plant and equipment actually used in the performance of such **Work**, or in complying with such determination or order, and the amounts expended therefor, and shall permit the **Commissioner** and the **Comptroller** to make such extracts therefrom, or copies thereof, as they or either of them may desire.

28.4 In connection with the examination provided for herein, the **Commissioner**, upon demand therefor, will produce for inspection by the **Contractor** such records as the **Agency** may have with respect to such **Extra Work** or disputed **Work** performed under protest pursuant to order of the **Commissioner**, except those records and reports which may have been prepared for the purpose of determining the accuracy and validity of the **Contractor's** claim.

28.5 Failure to comply strictly with these requirements shall constitute a waiver of any claim for extra compensation or damages on account of the performance of such **Work** or compliance with such determination or order.

#### **ARTICLE 29. OMITTED WORK**

29.1 If any **Contract Work** in a lump sum **Contract**, or if any part of a lump sum item in a unit price, lump sum, or percentage-bid **Contract** is omitted by the **Commissioner** pursuant to Article 33, the **Contract** price, subject to audit by the EAO, shall be reduced by a pro rata portion of the lump sum bid amount based upon the percent of **Work** omitted subject to Article 29.4. For the purpose of determining the pro rata portion of the lump sum bid amount, the bid breakdown submitted in accordance with Article 41 shall be considered, but shall not be the determining factor.

29.2 If the whole of a lump sum item or units of any other item is so omitted by the **Commissioner** in a unit price, lump sum, or percentage-bid **Contract**, then no payment will be made therefor except as provided in Article 29.4.

29.3 For units that have been ordered but are only partially completed, the unit price shall be reduced by a pro rata portion of the unit price bid based upon the percentage of **Work** omitted subject to Article 29.4.

29.4 In the event the **Contractor**, with respect to any omitted **Work**, has purchased any non-cancelable material and/or equipment that is not capable of use except in the performance of this **Contract** and has been specifically fabricated for the sole purpose of this **Contract**, but not yet incorporated into the **Work**, the **Contractor** shall be paid for such material and/or equipment in accordance with Article 64.2.1(b); provided, however, such payment is contingent upon the **Contractor's** delivery of such material and/or equipment in acceptable condition to a location designated by the **City**.

29.5 The **Contractor** agrees to make no claim for damages or for loss of overhead and profit with regard to any omitted **Work**.

#### **ARTICLE 30. NOTICE AND DOCUMENTATION OF COSTS AND DAMAGES; PRODUCTION OF FINANCIAL RECORDS**

30.1 If the **Contractor** shall claim to be sustaining damages by reason of any act or omission of the **City** or its agents, it shall submit to the **Commissioner** within forty-five (45) **Days** from the time such damages are first incurred, and every thirty (30) **Days** thereafter to the extent additional damages are being incurred for the same condition, verified statements of the details and the amounts of such



damages, together with documentary evidence of such damages. The **Contractor** may submit any of the above statements within such additional time as may be granted by the **Commissioner** in writing upon written request therefor. Failure of the **Commissioner** to respond in writing to a written request for additional time within thirty (30) **Days** shall be deemed a denial of the request. On failure of the **Contractor** to strictly comply with the foregoing provisions, such claims shall be deemed waived and no right to recover on such claims shall exist. Damages that the **Contractor** may claim in any action or dispute resolution procedure arising under or by reason of this **Contract** shall not be different from or in excess of the statements and documentation made pursuant to this Article 30. This Article 30.1 does not apply to claims submitted to the **Commissioner** pursuant to Article 11 or to claims disputing a determination under Article 27.

30.2 In addition to the foregoing statements, the **Contractor** shall, upon notice from the **Commissioner**, produce for examination at the **Contractor's** office, by the **Engineer, Architect or Project Manager**, all of its books of account, bills, invoices, payrolls, subcontracts, time books, daily reports, bank deposit books, bank statements, check books, and cancelled checks, showing all of its acts and transactions in connection with or relating to or arising by reason of this **Contract**, and submit itself and persons in its employment, for examination under oath by any person designated by the **Commissioner** or **Comptroller** to investigate claims made or disputes against the **City** under this **Contract**. At such examination, a duly authorized representative of the **Contractor** may be present.

30.3 In addition to the statements required under Article 28 and this Article 30, the **Contractor** and/or its **Subcontractor** shall, within thirty (30) **Days** upon notice from the **Commissioner** or **Comptroller**, produce for examination at the **Contractor's** and/or **Subcontractor's** office, by a representative of either the **Commissioner** or **Comptroller**, all of its books of account, bid documents, financial statements, accountant workpapers, bills, invoices, payrolls, subcontracts, time books, daily reports, bank deposit books, bank statements, check books, and cancelled checks, showing all of its acts and transactions in connection with or relating to or arising by reason of this **Contract**. Further, the **Contractor** and/or its **Subcontractor** shall submit any person in its employment, for examination under oath by any person designated by the **Commissioner** or **Comptroller** to investigate claims made or disputes against the **City** under this **Contract**. At such examination, a duly authorized representative of the **Contractor** may be present.

30.4 Unless the information and examination required under Article 30.3 is provided by the **Contractor** and/or its **Subcontractor** upon thirty (30) **Days'** notice from the **Commissioner** or **Comptroller**, or upon the **Commissioner's** or **Comptroller's** written authorization to extend the time to comply, the **City** shall be released from all claims arising under, relating to or by reason of this **Contract**, except for sums certified by the **Commissioner** to be due under the provisions of this **Contract**. It is further stipulated and agreed that no person has the power to waive any of the foregoing provisions and that in any action or dispute resolution procedure against the **City** to recover any sum in excess of the sums certified by the **Commissioner** to be due under or by reason of this **Contract**, the **Contractor** must allege in its complaint and prove, at trial or during such dispute resolution procedure, compliance with the provisions of this Article 30.

30.5 In addition, after the commencement of any action or dispute resolution procedure by the **Contractor** arising under or by reason of this **Contract**, the **City** shall have the right to require the **Contractor** to produce for examination under oath, up until the trial of the action or hearing before the Contract Dispute Resolution Board, the books and documents described in Article 30.3 and submit itself and all persons in its employ for examination under oath. If this Article 30 is not complied with as required, then the **Contractor** hereby consents to the dismissal of the action or dispute resolution procedure.

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

### **ARTICLE 31. THE RESIDENT ENGINEER**

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

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

32.1 The **Engineer** or **Architect** or **Project Manager**, in addition to those matters elsewhere herein delegated to the **Engineer** and expressly made subject to his/her determination, direction or approval, shall have the power, subject to review by the **Commissioner**:

32.1.1 To determine the amount, quality, and location of the **Work** to be paid for hereunder; and

32.1.2 To determine all questions in relation to the **Work**, to interpret the **Contract Drawings, Specifications, and Addenda**, and to resolve all patent inconsistencies or ambiguities therein; and

32.1.3 To determine how the **Work** of this **Contract** shall be coordinated with **Work** of **Other Contractors** engaged simultaneously on this **Project**, including the power to suspend any part of the **Work**, but not the whole thereof; and

32.1.4 To make minor changes in the **Work** as he/she deems necessary, provided such changes do not result in a net change in the cost to the **City** or to the **Contractor** of the **Work** to be done under the **Contract**; and

32.1.5 To amplify the **Contract Drawings**, add explanatory information and furnish additional **Specifications** and drawings, consistent with this **Contract**.

32.2 The foregoing enumeration shall not imply any limitation upon the power of the **Engineer** or **Architect** or **Project Manager**, for it is the intent of this **Contract** that all of the **Work** shall generally be subject to his/her determination, direction, and approval, except where the determination, direction or approval of someone other than the **Engineer** or **Architect** or **Project Manager** is expressly called for herein.

32.3 The **Engineer** or **Architect** or **Project Manager** shall not, however, have the power to issue an **Extra Work** order, except as specifically designated in writing by the **Commissioner**.

### **ARTICLE 33. THE COMMISSIONER**

33.1 The **Commissioner**, in addition to those matters elsewhere herein expressly made subject to his/her determination, direction or approval, shall have the power:

33.1.1 To review and make determinations on any and all questions in relation to this **Contract** and its performance; and

33.1.2 To modify or change this **Contract** so as to require the performance of **Extra Work** (subject, however, to the limitations specified in Article 25) or the omission of **Contract Work**; and

33.1.3 To suspend the whole or any part of the **Work** whenever in his/her judgment such suspension is required:

33.1.3(a) In the interest of the **City** generally; or

33.1.3(b) To coordinate the **Work** of the various contractors engaged on this **Project** pursuant to the provisions of Article 12; or

33.1.3(c) To expedite the completion of the entire **Project** even though the completion of this particular **Contract** may thereby be delayed.

#### **ARTICLE 34. NO ESTOPPEL**

34.1 Neither the **City** nor any **Agency**, official, agent or employee thereof, shall be bound, precluded or estopped by any determination, decision, approval, order, letter, payment or certificate made or given under or in connection with this **Contract** by the **City**, the **Commissioner**, the **Engineer**, the **Resident Engineer**, or any other official, agent or employee of the **City**, either before or after the final completion and acceptance of the **Work** and payment therefor:

34.1.1 From showing the true and correct classification, amount, quality or character of the **Work** actually done; or that any such determination, decision, order, letter, payment or certificate was untrue, incorrect or improperly made in any particular, or that the **Work**, or any part thereof, does not in fact conform to the requirements of this **Contract**; and

34.1.2 From demanding and recovering from the **Contractor** any overpayment made to it, or such damages as the **City** may sustain by reason of the **Contractor's** failure to perform each and every part of its **Contract**.

### **CHAPTER VIII: LABOR PROVISIONS**

#### **ARTICLE 35. EMPLOYEES**

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

35.1.1 Anyone who is not competent, faithful and skilled in the **Work** for which he/she shall be employed; and whenever the **Commissioner** shall inform the **Contractor**, in writing, that any employee is, in his/her opinion, incompetent, unfaithful or disobedient, that employee shall be discharged from the **Work** forthwith, and shall not again be employed upon it; or

35.1.2 Any labor, materials or means whose employment, or utilization during the course of this **Contract**, may tend to or in any way cause or result in strikes, work stoppages, delays, suspension of **Work** or similar troubles by workers employed by the **Contractor** or its **Subcontractors**, or by any of the trades working in or about the buildings and premises where **Work** is being performed under this **Contract**, or by **Other Contractors** or their **Subcontractors** pursuant to other contracts, or on any other building or premises owned or operated by the **City**, its **Agencies**, departments, boards or authorities. Any violation by the **Contractor** of this requirement may, upon certification of the **Commissioner**, be considered as proper and sufficient cause for declaring the **Contractor** to be in default, and for the **City** to take action against it as set forth in Chapter X of this **Contract**, or such other article of this **Contract** as the Commissioner may deem proper; or

35.1.3 In accordance with Section 220.3-e of the Labor Law of the State of New York (hereinafter "Labor Law"), the **Contractor** and its **Subcontractors** shall not employ on the **Work** any apprentice, unless he/she is a registered individual, under a bona fide program registered with the New York State Department of Labor. The allowable ratio of apprentices to journey-level workers in any craft classification shall not be greater than the ratio permitted to the **Contractor** as to its work force on any job under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered as above, shall be paid the wage rate determined by the **Comptroller** of the **City** for the classification of **Work** actually performed. The **Contractor** or **Subcontractor** will be required to furnish written evidence of the registration of its program and apprentices as well as all the appropriate ratios and wage rates, for the area of the construction prior to using any apprentices on the **Contract Work**.

35.2 If the total cost of the **Work** under this **Contract** is at least two hundred fifty thousand (\$250,000) dollars, all laborers, workers, and mechanics employed in the performance of the **Contract** on the public work site, either by the **Contractor**, **Subcontractor** or other person doing or contracting to do the whole or a part of the **Work** contemplated by the **Contract**, shall be certified prior to performing any **Work** as having successfully completed a course in construction safety and health approved by the United States Department of Labor's Occupational Safety and Health Administration that is at least ten (10) hours in duration.

35.3 In accordance with Local Law Nos. 30-2012 and 33-2012, codified at sections 6-132 and 12-113 of the Administrative Code, respectively,

35.3.1 The **Contractor** shall not take an adverse personnel action with respect to an officer or employee in retaliation for such officer or employee making a report of information concerning conduct which such officer or employee knows or reasonably believes to involve corruption, criminal activity, conflict of interest, gross mismanagement or abuse of authority by any officer or employee relating to this **Contract** to (a) the Commissioner of the Department of Investigation, (b) a member of the New York City Council, the Public Advocate, or the **Comptroller**, or (c) the **CCPO**, **ACCO**, **Agency** head, or **Commissioner**.

35.3.2 If any of the **Contractor's** officers or employees believes that he or she has been the subject of an adverse personnel action in violation of Article 35.3.1, he or she shall be entitled to bring a cause of action against the **Contractor** to recover all relief necessary to make him or her whole. Such relief may include but is not limited to: (a) an injunction to restrain continued retaliation, (b) reinstatement to the position such employee would have had but for the retaliation or to an equivalent position, (c) reinstatement of full fringe benefits and seniority rights, (d) payment of two times back

pay, plus interest, and (e) compensation for any special damages sustained as a result of the retaliation, including litigation costs and reasonable attorney's fees.

35.3.3 The **Contractor** shall post a notice provided by the **City** in a prominent and accessible place on any site where work pursuant to the **Contract** is performed that contains information about:

35.3.3(a) how its employees can report to the New York City Department of Investigation allegations of fraud, false claims, criminality or corruption arising out of or in connection with the **Contract**; and

35.3.3(b) the rights and remedies afforded to its employees under Administrative Code sections 7-805 (the New York City False Claims Act) and 12-113 (the Whistleblower Protection Expansion Act) for lawful acts taken in connection with the reporting of allegations of fraud, false claims, criminality or corruption in connection with the **Contract**.

35.3.4 For the purposes of this Article 35.3, "adverse personnel action" includes dismissal, demotion, suspension, disciplinary action, negative performance evaluation, any action resulting in loss of staff, office space, equipment or other benefit, failure to appoint, failure to promote, or any transfer or assignment or failure to transfer or assign against the wishes of the affected officer or employee.

35.3.5 This Article 35.3 is applicable to all of the **Contractor's Subcontractors** having subcontracts with a value in excess of \$100,000; accordingly, the **Contractor** shall include this rider in all subcontracts with a value in excess of \$100,000.

35.4 Article 35.3 is not applicable to this **Contract** if it is valued at \$100,000 or less. Articles 35.3.1, 35.3.2, 35.3.4, and 35.3.5 are not applicable to this **Contract** if it was solicited pursuant to a finding of an emergency.

#### 35.5 Paid Sick Leave Law.

##### 35.5.1 Introduction and General Provisions.

35.5.1(a) The Earned Sick Time Act, also known as the Paid Sick Leave Law ("PSLL"), requires covered employees who annually perform more than 80 hours of work in New York City to be provided with paid sick time.<sup>2</sup> Contractors of the **City** or of other governmental entities may be required to provide sick time pursuant to the PSLL.

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

<sup>2</sup> 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.

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

35.5.1(d) The **Contractor** must notify the **Agency Chief Contracting Officer** of the **Agency** with whom it is contracting in writing within ten (10) days of receipt of a complaint (whether oral or written) regarding the PSLL involving the performance of this **Contract**. Additionally, the **Contractor** must cooperate with DCA's education efforts and must comply with DCA's subpoenas and other document demands as set forth in the PSLL and Rules.

35.5.1(e) The PSLL is summarized below for the convenience of the **Contractor**. The **Contractor** is advised to review the PSLL and Rules in their entirety. On the website [www.nyc.gov/PaidSickLeave](http://www.nyc.gov/PaidSickLeave) there are links to the PSLL and the associated Rules as well as additional resources for employers, such as Frequently Asked Questions, timekeeping tools and model forms, and an event calendar of upcoming presentations and webinars at which the **Contractor** can get more information about how to comply with the PSLL. The **Contractor** acknowledges that it is responsible for compliance with the PSLL notwithstanding any inconsistent language contained herein.

#### 35.5.2 Pursuant to the PSLL and the Rules: Applicability, Accrual, and Use.

35.5.2(a) An employee who works within the City of New York for more than eighty hours in any consecutive 12-month period designated by the employer as its "calendar year" pursuant to the PSLL ("Year") must be provided sick time. Employers must provide a minimum of one hour of sick time for every 30 hours worked by an employee and compensation for such sick time must be provided at the greater of the employee's regular hourly rate or the minimum wage. Employers are not required to provide more than 40 hours of sick time to an employee in any Year.

35.5.2(b) An employee has the right to determine how much sick time he or she will use, provided that employers may set a reasonable minimum increment for the use of sick time not to exceed four hours per **Day**. In addition, an employee may carry over up to 40 hours of unused sick time to the following Year, provided that no employer is required to allow the use of more than forty hours of sick time in a Year or carry over unused paid sick time if the employee is paid for such unused sick time and the employer provides the employee with at least the legally required amount of paid sick time for such employee for the immediately subsequent Year on the first **Day** of such Year.

35.5.2(c) An employee entitled to sick time pursuant to the PSLL may use sick time for any of the following:

- i. such employee's mental illness, physical illness, injury, or health condition or the care of such illness, injury, or condition or such employee's need for medical diagnosis or preventive medical care;
- ii. such employee's care of a family member (an employee's child, spouse, domestic partner, parent, sibling, grandchild or grandparent, or the child or parent of an employee's spouse or domestic partner) who has a mental

- illness, physical illness, injury or health condition or who has a need for medical diagnosis or preventive medical care;
- iii. closure of such employee's place of business by order of a public official due to a public health emergency; or
  - iv. such employee's need to care for a child whose school or childcare provider has been closed due to a public health emergency.

35.5.2(d) An employer must not require an employee, as a condition of taking sick time, to search for a replacement. However, an employer may require an employee to provide: reasonable notice of the need to use sick time; reasonable documentation that the use of sick time was needed for a reason above if for an absence of more than three consecutive work days; and/or written confirmation that an employee used sick time pursuant to the PSL. However, an employer may not require documentation specifying the nature of a medical condition or otherwise require disclosure of the details of a medical condition as a condition of providing sick time and health information obtained solely due to an employee's use of sick time pursuant to the PSL must be treated by the employer as confidential.

35.5.2(e) If an employer chooses to impose any permissible discretionary requirement as a condition of using sick time, it must provide to all employees a written policy containing those requirements, using a delivery method that reasonably ensures that employees receive the policy. If such employer has not provided its written policy, it may not deny sick time to an employee because of non-compliance with such a policy.

35.5.2(f) Sick time to which an employee is entitled must be paid no later than the payday for the next regular payroll period beginning after the sick time was used.

35.5.3 Exemptions and Exceptions. Notwithstanding the above, the PSL does not apply to any of the following:

35.5.3(a) an independent contractor who does not meet the definition of employee under section 190(2) of the New York State Labor Law;

35.5.3(b) an employee covered by a valid collective bargaining agreement in effect on April 1, 2014, until the termination of such agreement;

35.5.3(c) an employee in the construction or grocery industry covered by a valid collective bargaining agreement if the provisions of the PSL are expressly waived in such collective bargaining agreement;

35.5.3(d) an employee covered by another valid collective bargaining agreement if such provisions are expressly waived in such agreement and such agreement provides a benefit comparable to that provided by the PSL for such employee;

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

35.5.3(f) an employee in a work study program under Section 2753 of Chapter 42 of the United States Code;

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

35.5.3(h) a participant in a Work Experience Program (WEP) under section 336-c of the New York State Social Services Law.

35.5.4 Retaliation Prohibited. An employer may not threaten or engage in retaliation against an employee for exercising or attempting in good faith to exercise any right provided by the PSL. In addition, an employer may not interfere with any investigation, proceeding, or hearing pursuant to the PSL.

35.5.5 Notice of Rights.

35.5.5(a) An employer must provide its employees with written notice of their rights pursuant to the PSL. Such notice must be in English and the primary language spoken by an employee, provided that DCA has made available a translation into such language. Downloadable notices are available on DCA's website at <http://www.nyc.gov/html/dca/html/law/PaidSickLeave.shtml>.

35.5.5(b) Any person or entity that willfully violates these notice requirements is subject to a civil penalty in an amount not to exceed fifty dollars for each employee who was not given appropriate notice.

35.5.6 Records. An employer must retain records documenting its compliance with the PSL 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 PSL.

35.5.7 Enforcement and Penalties.

35.5.7(a) Upon receiving a complaint alleging a violation of the PSL, 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 PSL has occurred, it has the right to issue a notice of violation to the employer.

35.5.7(b) DCA has the power to grant an employee or former employee all appropriate relief as set forth in New York City Administrative Code § 20-924(d). Such relief may include, among other remedies, treble damages for the wages that should have been paid, damages for unlawful retaliation, and damages and reinstatement for unlawful discharge. In addition, DCA may impose on an employer found to have violated the PSL civil penalties not to exceed \$500 for a first violation, \$750 for a second violation within two years of the first violation, and \$1,000 for each succeeding violation within two years of the previous violation.

35.5.8 More Generous Policies and Other Legal Requirements. Nothing in the PSL is intended to discourage, prohibit, diminish, or impair the adoption or retention of a more generous sick time policy, or the obligation of an employer to comply with any contract,



collective bargaining agreement, employment benefit plan or other agreement providing more generous sick time. The PSLL provides minimum requirements pertaining to sick time and does not preempt, limit or otherwise affect the applicability of any other law, regulation, rule, requirement, policy or standard that provides for greater accrual or use by employees of sick leave or time, whether paid or unpaid, or that extends other protections to employees. The PSLL may not be construed as creating or imposing any requirement in conflict with any federal or state law, rule or regulation.

35.6 HireNYC: Hiring and Reporting Requirements. This Article 35.6 applies to construction contracts of \$1,000,000 or more. The **Contractor** shall comply with the requirements of Articles 35.6.1-35.6.5 for all non-trades jobs (e.g., for an administrative position arising out of **Work** ant located in New York City). The **Contractor** shall reasonably cooperate with SBS and the **City** on specific outreach events, including "Hire-on-the-Spot" events, for the hiring of trades workers in connection with the **Work**. If provided elsewhere in this **Contract**, this **Contract** is subject to a project labor agreement.

35.6.1 Enrollment. The **Contractor** shall enroll with the HireNYC system, found at [www.nyc.gov/sbs](http://www.nyc.gov/sbs), within thirty (30) days after the registration of this **Contract** pursuant to Section 328 of the New York City Charter. The **Contractor** shall provide information about the business, designate a primary contact and say whether it intends to hire for any entry to mid-level job opportunities arising from this **Contract** and located in New York City, and, if so, the approximate start date of the first hire.

35.6.2 Job Posting Requirements.

35.6.2(a) Once enrolled in HireNYC, the **Contractor** agrees to update the HireNYC portal with all entry to mid-level job opportunities arising from this **Contract** and located in New York City, if any, which shall be defined as jobs requiring no more than an associate degree, as provided by the New York State Department of Labor (see Column F of <https://labor.ny.gov/stats/2012-2022-NYS-Employment-Prospects.xls>). The information to be updated includes the types of entry and mid-level positions made available from the work arising from the **Contract** and located in New York City, the number of positions, the anticipated schedule of initiating the hiring process for these positions, and the contact information for the **Contractor's** representative charged with overseeing hiring. The **Contractor** must update the HireNYC portal with any hiring needs arising from the contract and located in New York City, and the requirements of the jobs to be filled, no less than three weeks prior to the intended first day of employment for each new position, except with the permission of SBS, not to be unreasonably withheld, and must also update the HireNYC portal as set forth below.

35.6.2(b) After enrollment through HireNYC and submission of relevant information, SBS will work with the **Contractor** to develop a recruitment plan which will outline the candidate screening process, and will provide clear instructions as to when, where, and how interviews will take place. HireNYC will screen applicants based on employer requirements and refer applicants whom it believes are qualified to the **Contractor** for interviews. The **Contractor** must interview referred applicants whom it believes are qualified.

35.6.2(c) After completing an interview of a candidate referred by HireNYC, the **Contractor** must provide feedback via the portal within twenty (20) business days to indicate which candidates were interviewed and hired, if any. In addition, the **Contractor** shall provide the start date of new hires, and additional information

reasonably related to such hires, within twenty (20) business days after the start date. In the event the **Contractor** does not have any job openings covered by this Rider in any given year, the **Contractor** shall be required to provide an annual update to HireNYC to that effect. For this purpose, the reporting year shall run from the date of the registration of the **Contract** pursuant to Charter section 328 and each anniversary date.

35.6.2(d) These requirements do not limit the **Contractor's** ability to assess the qualifications of prospective workers, and to make final hiring and retention decisions. No provision of this Article 35.6 shall be interpreted so as to require the **Contractor** to employ any particular worker.

35.6.2(e) In addition, the provisions of this Article 35.6 shall not apply to positions that the **Contractor** intends to fill with employees employed pursuant to the job retention provision of Section 22-505 of the Administrative Code of the City of New York. The **Contractor** shall not be required to report such openings with HireNYC. However, the **Contractor** shall enroll with the HireNYC system pursuant to Article 35.6.1, above, and, if such positions subsequently become open, then the remaining provisions of this Article 35.6 will apply.

35.6.3 Breach and Liquidated Damages. If the **Contractor** fails to comply with the terms of the **ContrSact** and this Article 35.6 (1) by not enrolling its business with HireNYC; (2) by not informing HireNYC, as required, of open positions; or (3) by failing to interview a qualified candidate, the **Agency** may assess liquidated damages in the amount of two-thousand five hundred dollars (\$2,500) per breach. For all other events of noncompliance with the terms of this Article 35.6, the **Agency** may assess liquidated damages in the amount of five hundred dollars (\$500) per breach. Furthermore, in the event the **Contractor** breaches the requirements of this Article 35.6 during the term of the **Contract**, the **City** may hold the **Contractor** in default of this **Contract**.

35.6.4 Audit Compliance. In addition to the auditing requirements set forth in other parts of the **Contract**, the **Contractor** shall permit SBS and the **City** to inspect any and all records concerning or relating to job openings or the hiring of individuals for work arising from the **Contract** and located in New York City. The **Contractor** shall permit an inspection within seven (7) business days of the request.

35.6.5 Other Reporting Requirements. The **Contractor** shall report to the **City**, on a monthly basis, all information reasonably requested by the **City** that is necessary for the **City** to comply with any reporting requirements imposed by **Law**, including any requirement that the **City** maintain a publicly accessible database. In addition, the **Contractor** agrees to comply with all reporting requirements imposed by **Law**, or as otherwise requested by the **City**.

35.6.6 Federal Hiring Requirements. If this **Contract** is federally funded (as indicated elsewhere in this **Contract**), the **Contractor** shall comply with all federal hiring requirements as may be set forth in this **Contract**, including, as applicable: (a) Section 3 of the HUD Act of 1968, which requires, to the greatest extent feasible, economic opportunities for 30 percent of new hires be given to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing and Executive Order 11246, which prohibits discrimination in employment due to race, color, religion, sex or national origin, and requires the implementation of goals for minority and female participation for work involving any construction trade.

## ARTICLE 36. NO DISCRIMINATION

36.1 The **Contractor** specifically agrees, as required by Labor Law Section 220-e, as amended, that:

36.1.1 In the hiring of employees for the performance of **Work** under this **Contract** or any subcontract hereunder, neither the **Contractor**, **Subcontractor**, nor any person acting on behalf of such **Contractor** or **Subcontractor**, shall by reason of race, creed, color or national origin discriminate against any citizen of the State of New York who is qualified and available to perform the **Work** to which the employment relates;

36.1.2 Neither the **Contractor**, **Subcontractor**, nor any person on its behalf shall, in any manner, discriminate against or intimidate any employee hired for the performance of **Work** under this **Contract** on account of race, creed, color or national origin;

36.1.3 There may be deducted from the amount payable to the **Contractor** by the **City** under this **Contract** a penalty of fifty (\$50.00) dollars for each person for each **Day** during which such person was discriminated against or intimidated in violation of the provisions of this **Contract**; and

36.1.4 This **Contract** may be cancelled or terminated by the **City** and all moneys due or to become due hereunder may be forfeited, for a second or any subsequent violation of the terms or conditions of this Article 36.

36.1.5 This Article 36 covers all construction, alteration and repair of any public building or public work occurring in the State of New York and the manufacture, sale, and distribution of materials, equipment, and supplies to the extent that such operations are performed within the State of New York pursuant to this **Contract**.

36.2 The **Contractor** specifically agrees, as required by Section 6-108 of the Administrative Code, as amended, that:

36.2.1 It shall be unlawful for any person engaged in the construction, alteration or repair of buildings or engaged in the construction or repair of streets or highways pursuant to a **Contract** with the **City** or engaged in the manufacture, sale or distribution of materials, equipment or supplies pursuant to a **Contract** with the **City** to refuse to employ or to refuse to continue in any employment any person on account of the race, color or creed of such person.

36.2.2 It shall be unlawful for any person or any servant, agent or employee of any person, described in Article 36.1.2, to ask, indicate or transmit, orally or in writing, directly or indirectly, the race, color or creed or religious affiliation of any person employed or seeking employment from such person, firm or corporation.

36.2.3 Breach of the foregoing provisions shall be deemed a violation of a material provision of this **Contract**.

36.2.4 Any person, or the employee, manager or owner of or officer of such firm or corporation who shall violate any of the provisions of this Article 36.2 shall, upon

conviction thereof, be punished by a fine of not more than one hundred (\$100.00) dollars or by imprisonment for not more than thirty (30) **Days**, or both.

36.3 This **Contract** is subject to the requirements of Executive Order No. 50 (1980) ("E.O. 50"), as revised, and the rules and regulations promulgated thereunder. No contract will be awarded unless and until these requirements have been complied with in their entirety. By signing this **Contract**, the **Contractor** agrees that it:

36.3.1 Will not engage in any unlawful discrimination against any employee or applicant for employment because of race, creed, color, national origin, sex, age, disability, marital status or sexual orientation with respect to all employment decisions including, but not limited to, recruitment, hiring, upgrading, demotion, downgrading, transfer, training, rates of pay or other forms of compensation, layoff, termination, and all other terms and conditions of employment; and

36.3.2 Will not engage in any unlawful discrimination in the selection of **Subcontractors** on the basis of the owner's race, color, creed, national origin, sex, age, disability, marital status or sexual orientation; and

36.3.3 Will state in all solicitations or advertisements for employees placed by or on behalf of the **Contractor** that all qualified applicants will receive consideration for employment without unlawful discrimination based on race, creed, color, national origin, sex, age, citizens status, disability, marital status, sexual orientation, or that it is an equal employment opportunity employer; and

36.3.4 Will send to each labor organization or representative of workers with which it has a collective bargaining agreement or other contract or memorandum of understanding, written notification of its equal employment opportunity commitments under E.O. 50 and the rules and regulations promulgated thereunder; and

36.3.5 Will furnish, before the award of the **Contract**, all information and reports, including an employment report, that are required by E.O. 50, the rules and regulations promulgated thereunder, and orders of the City Department of Business Services, Division of Labor Services (**DLS**) and will permit access to its books, records, and accounts by the **DLS** for the purposes of investigation to ascertain compliance with such rules, regulations, and orders.

36.4 The **Contractor** understands that in the event of its noncompliance with the nondiscrimination clauses of this **Contract** or with any of such rules, regulations, or orders, such noncompliance shall constitute a material breach of this **Contract** and noncompliance with E.O. 50 and the rules and regulations promulgated thereunder. After a hearing held pursuant to the rules of the **DLS**, the Director of the **DLS** may direct the **Commissioner** to impose any or all of the following sanctions:

36.4.1 Disapproval of the **Contractor**; and/or

36.4.2 Suspension or termination of the **Contract**; and/or

36.4.3 Declaring the **Contractor** in default; and/or

36.4.4 In lieu of any of the foregoing sanctions, the Director of the **DLS** may impose an employment program.

In addition to any actions taken under this **Contract**, failure to comply with E.O. 50 and the rules and regulations promulgated thereunder, in one or more instances, may result in a **City Agency** declaring the **Contractor** to be non-responsible in future procurements. The **Contractor** further agrees that it will refrain from entering into any **Contract** or **Contract** modification subject to E.O. 50 and the rules and regulations promulgated thereunder with a **Subcontractor** who is not in compliance with the requirements of E.O. 50 and the rules and regulations promulgated thereunder.

36.5 The **Contractor** specifically agrees, as required by Section 6-123 of the Administrative Code, that:

36.5.1 The **Contractor** will not engage in any unlawful discriminatory practice in violation of Title 8 of the Administrative Code; and

36.5.2 Any failure to comply with this Article 36.5 may subject the **Contractor** to the remedies set forth in Section 6-123 of the Administrative Code, including, where appropriate, sanctions such as withholding of payment, imposition of an employment program, finding the **Contractor** to be in default, cancellation of the **Contract**, or any other sanction or remedy provided by **Law** or **Contract**.

#### **ARTICLE 37. LABOR LAW REQUIREMENTS**

37.1 The **Contractor** shall strictly comply with all applicable provisions of the Labor Law, as amended. Such compliance is a material term of this **Contract**.

37.2 The **Contractor** specifically agrees, as required by Labor Law Sections 220 and 220-d, as amended, that:

37.2.1 **Hours of Work:** No laborer, worker, or mechanic in the employ of the **Contractor**, **Subcontractor** or other person doing or contracting to do the whole or a part of the **Work** contemplated by this **Contract** shall be permitted or required to work more than eight (8) hours in any one (1) **Day**, or more than five (5) **Days** in any one (1) week, except as provided in the Labor Law and in cases of extraordinary emergency including fire, flood, or danger to life or property, or in the case of national emergency when so proclaimed by the President of the United States of America.

37.2.2 In situations in which there are not sufficient laborers, workers, and mechanics who may be employed to carry on expeditiously the **Work** contemplated by this **Contract** as a result of such restrictions upon the number of hours and **Days** of labor, and the immediate commencement or prosecution or completion without undue delay of the **Work** is necessary for the preservation of the **Site** and/or for the protection of the life and limb of the persons using the same, such laborers, workers, and mechanics shall be permitted or required to work more than eight (8) hours in any one (1) **Day**; or five (5) **Days** in any one (1) week; provided, however, that upon application of any **Contractor**, the **Commissioner** shall have first certified to the Commissioner of Labor of the State of New York (hereinafter "Commissioner of Labor") that such public **Work** is of an important nature and that a delay in carrying it to completion would result in serious disadvantage to the public; and provided, further, that such Commissioner of Labor shall have determined that such an emergency does in fact exist as provided in Labor Law Section 220.2.

37.2.3 Failure of the **Commissioner** to make such a certification to the Commissioner of Labor shall not entitle the **Contractor** to damages for delay or for any cause whatsoever.

37.2.4 Prevailing Rate of Wages: The wages to be paid for a legal day's **Work** to laborers, workers, or mechanics employed upon the **Work** contemplated by this **Contract** or upon any materials to be used thereon shall not be less than the "prevailing rate of wage" as defined in Labor Law Section 220, and as fixed by the **Comptroller** in the attached Schedule of Wage Rates and in updated schedules thereof. The prevailing wage rates and supplemental benefits to be paid are those in effect at the time the **Work** is being performed.

37.2.5 Requests for interpretation or correction in the Information for Bidders includes all requests for clarification of the classification of trades to be employed in the performance of the **Work** under this **Contract**. In the event that a trade not listed in the **Contract** is in fact employed during the performance of this **Contract**, the **Contractor** shall be required to obtain from the **Agency** the prevailing wage rates and supplementary benefits for the trades used and to complete the performance of this **Contract** at the price at which the **Contract** was awarded.

37.2.6 Minimum Wages: Except for employees whose wage is required to be fixed pursuant to Labor Law Section 220, all persons employed by the **Contractor** and any **Subcontractor** in the manufacture or furnishing of the supplies, materials, or equipment, or the furnishing of work, labor, or services, used in the performance of this **Contract**, shall be paid, without subsequent deduction or rebate unless expressly authorized by **Law**, not less than the sum mandated by **Law**.

37.3 Working Conditions: No part of the **Work**, labor or services shall be performed or rendered by the **Contractor** in any plants, factories, buildings or surroundings or under working conditions which are unsanitary or hazardous or dangerous to the health and safety of employees engaged in the performance of this **Contract**. Compliance with the safety, sanitary, and factory inspection **Laws** of the state in which the **Work** is to be performed shall be prima facie evidence of compliance with this Article 37.3.

37.4 Prevailing Wage Enforcement: The **Contractor** agrees to pay for all costs incurred by the **City** in enforcing prevailing wage requirements, including the cost of any investigation conducted by or on behalf of the **Agency** or the **Comptroller**, where the **City** discovers a failure to comply with any of the requirements of this Article 37 by the **Contractor** or its **Subcontractor(s)**. The **Contractor** also agrees that, should it fail or refuse to pay for any such investigation, the **Agency** is hereby authorized to deduct from a **Contractor's** account an amount equal to the cost of such investigation.

37.4.1 The Labor Law Section 220 and Section 220-d, as amended, provide that this **Contract** shall be forfeited and no sum paid for any **Work** done hereunder on a second conviction for willfully paying less than:

37.4.1(a) The stipulated prevailing wage scale as provided in Labor Law section 220, as amended, or

37.4.1(b) The stipulated minimum hourly wage scale as provided in Labor Law section 220-d, as amended.

37.4.2 For any breach or violation of either working conditions (Article 37.3) or minimum wages (Article 37.2.6) provisions, the party responsible therefor shall be liable to the **City** for liquidated damages, which may be withheld from any amounts due on any contracts with the **City** of such party responsible, or may be recovered in actions brought by the **City**

Corporation Counsel in the name of the **City**, in addition to damages for any other breach of this **Contract**, for a sum equal to the amount of any underpayment of wages due to any employee engaged in the performance of this **Contract**. In addition, the **Commissioner** shall have the right to cancel contracts and enter into other contracts for the completion of the original contract, with or without public letting, and the original **Contractor** shall be liable for any additional cost. All sums withheld or recovered as deductions, rebates, refunds, or underpayment of wages hereunder, shall be held in a special deposit account and shall be paid without interest, on order of the **Comptroller**, directly to the employees who have been paid less than minimum rates of pay as set forth herein and on whose account such sums were withheld or recovered, provided that no claims by employees for such payments shall be entertained unless made within two (2) years from the date of actual notice to the **Contractor** of the withholding or recovery of such sums by the **City**.

37.4.3 A determination by the **Comptroller** that a **Contractor** and/or its **Subcontractor** willfully violated Labor Law Section 220 will be forwarded to the **City's** five District Attorneys for review.

37.4.4 The **Contractor's** or **Subcontractor's** noncompliance with this Article 37.4 and Labor Law Section 220 may result in an unsatisfactory performance evaluation and the **Comptroller** may also find and determine that the **Contractor** or **Subcontractor** willfully violated the New York Labor Law.

37.4.4(a) An unsatisfactory performance evaluation for noncompliance with this Article 37.4 may result in a determination that the **Contractor** is a non-responsible bidder on subsequent procurements with the **City** and thus a rejection of a future award of a contract with the **City**, as well as any other sanctions provided for by Law.

37.4.4(b) Labor Law Section 220-b, as amended, provides that when two (2) final determinations have been rendered against a **Contractor** or **Subcontractor** within any consecutive six (6) year period determining that such **Contractor** or **Subcontractor** has willfully failed to pay the prevailing rate of wages or to provide supplements in accordance with the Labor Law and this Article 37.4, whether such failures were concurrent or consecutive and whether or not such final determinations concerning separate public works projects are rendered simultaneously, such **Contractor** or **Subcontractor** shall be ineligible to submit a bid on or be awarded any public works contract with the **City** for a period of five (5) years from the second final determination. If the final determination involves the falsification of payroll records or the kickback of wages or supplements, the **Contractor** or **Subcontractor** shall be ineligible to submit a bid on or be awarded any public works contract with the **City** for a period of five (5) years from the first final determination.

37.4.4(c) Labor Law Section 220, as amended, provides that the **Contractor** or **Subcontractor** found to have violated this Article 37.4 may be directed to make payment of wages or supplements including interest found to be due, and the **Contractor** or **Subcontractor** may be directed to make payment of a further sum as a civil penalty in an amount not exceeding twenty-five (25%) percent of the total amount found to be due.

37.5 The **Contractor** and its **Subcontractors** shall within ten (10) **Days** after mailing of a Notice of Award or written order, post in prominent and conspicuous places in each and every plant, factory, building, and structure where employees of the **Contractor** and its **Subcontractors** engaged in the

performance of this **Contract** are employed, notices furnished by the **City**, in relation to prevailing wages and supplements, minimum wages, and other stipulations contained in Sections 220 and 220-h of the Labor Law, and the **Contractor** and its **Subcontractors** shall continue to keep such notices posted in such prominent and conspicuous places until **Final Acceptance** of the supplies, materials, equipment, or **Work**, labor, or services required to be furnished or rendered under this **Contract**.

37.6 The **Contractor** shall strictly comply with all of the provisions of Articles 37.6.1 through 37.6.5, and provide for all workers, laborers or mechanics in its employ, the following:

37.6.1 Notices Posted At **Site**: Post, in a location designated by the **City**, schedules of prevailing wages and supplements for this **Project**, a copy of all re-determinations of such schedules for the **Project**, the Workers' Compensation Law Section 51 notice, all other notices required by **Law** to be posted at the **Site**, the **City** notice that this **Project** is a public works project on which each worker is entitled to receive the prevailing wages and supplements for the occupation at which he or she is working, and all other notices which the **City** directs the **Contractor** to post. The **Contractor** shall provide a surface for such notices which is satisfactory to the **City**. The **Contractor** shall maintain and keep current such notices in a legible manner and shall replace any notice or schedule which is damaged, defaced, illegible or removed for any reason. The **Contractor** shall post such notices before commencing any **Work** on the **Site** and shall maintain such notices until all **Work** on the **Site** is complete; and

37.6.2 Daily **Site** Sign-in Sheets: Maintain daily **Site** sign-in sheets, and require that **Subcontractors** maintain daily **Site** sign-in sheets for its employees, which include blank spaces for an employee's name to be both printed and signed, job title, date started and Social Security number, the time the employee began work and the time the employee left work, until **Final Acceptance** of the supplies, materials, equipment, or **Work**, labor, or services to be furnished or rendered under this **Contract** unless exception is granted by the **Comptroller** upon application by the **Agency**. In the alternative, subject to the approval of the **CCPO**, the **Contractor** and **Subcontractor** may maintain an electronic or biometric sign-in system, which provides the information required by this Article 37.6.2; and

37.6.3 Individual Employee Information Notices: Distribute a notice to each worker, laborer or mechanic employed under this **Contract**, in a form provided by the **Agency**, that this **Project** is a public works project on which each worker, laborer or mechanic is entitled to receive the prevailing rate of wages and supplements for the occupation at which he or she is working. If the total cost of the **Work** under this **Contract** is at least two hundred fifty thousand (\$250,000) dollars, such notice shall also include a statement that each worker, laborer or mechanic must be certified prior to performing any **Work** as having successfully completed a course in construction safety and health approved by the United States Department of Labor's Occupational Safety and Health Administration that is at least ten (10) hours in duration. Such notice shall be distributed to each worker before he or she starts performing any **Work** of this **Contract** and with the first paycheck after July first of each year. "Worker, laborer or mechanic" includes employees of the **Contractor** and all **Subcontractors** and all employees of suppliers entering the **Site**. At the time of distribution, the **Contractor** shall have each worker, laborer or mechanic sign a statement, in a form provided by the **Agency**, certifying that the worker has received the notice required by this Article 37.6.3, which signed statement shall be maintained with the payroll records required by this **Contract**; and

37.6.3(a) The **Contractor** and each **Subcontractor** shall notify each worker, laborer or mechanic employed under this **Contract** in writing of the prevailing rate of



wages for their particular job classification. Such notification shall be given to every worker, laborer, and mechanic on their first pay stub and with every pay stub thereafter; and

37.6.4 **Site Laminated Identification Badges:** The **Contractor** shall provide laminated identification badges which include a photograph of the worker's, laborer's or mechanic's face and indicate the worker's, laborer's or mechanic's name, trade, employer's name, and employment starting date (month/day/year). Further, the **Contractor** shall require as a condition of employment on the **Site**, that each and every worker, laborer or mechanic wear the laminated identification badge at all times and that it may be seen by any representative of the **City**. The **Commissioner** may grant a written waiver from the requirement that the laminated identification badge include a photograph if the **Contractor** demonstrates that the identity of an individual wearing a laminated identification badge can be easily verified by another method; and

37.6.5 **Language Other Than English Used On Site:** Provide the **ACCO** notice when three (3) or more employees (worker and/or laborer and/or mechanic) on the **Site**, at any time, speak a language other than English. The **ACCO** will then provide the **Contractor** the notices described in Article 37.6.1 in that language or languages as may be required. The **Contractor** is responsible for all distributions under this Article 37; and

37.6.6 **Provision of Records:** The **Contractor** and **Subcontractor(s)** shall produce within five (5) **Days** on the **Site** of the **Work** and upon a written order of the **Engineer**, the **Commissioner**, the **ACCO**, the **Agency EAO**, or the **Comptroller**, such records as are required to be kept by this Article 37.6; and

37.6.7 The **Contractor** and **Subcontractor(s)** shall pay employees by check or direct deposit. If this **Contract** is for an amount greater than one million (\$1,000,000) dollars, checks issued by the **Contractor** to covered employees shall be generated by a payroll service or automated payroll system (an in-house system may be used if approved by the **Agency**). For any subcontract for an amount greater than seven hundred fifty thousand (\$750,000) dollars, checks issued by a **Subcontractor** to covered employees shall be generated by a payroll service or automated payroll system (an in-house system may be used if approved by the **Agency**); and

37.6.8 The failure of the **Contractor** or **Subcontractor(s)** to comply with the provisions of Articles 37.6.1 through 37.6.7 may result in the **Commissioner** declaring the **Contractor** in default and/or the withholding of payments otherwise due under the **Contract**.

37.7 The **Contractor** and its **Subcontractors** shall keep such employment and payroll records as are required by Section 220 of the Labor Law. The failure of the **Contractor** or **Subcontractor(s)** to comply with the provisions of this Article 37.7 may result in the **Commissioner** declaring the **Contractor** in default and/or the withholding of payments otherwise due under the **Contract**.

37.8 At the time the **Contractor** makes application for each partial payment and for final payment, the **Contractor** shall submit to the **Commissioner** a written payroll certification, in the form provided by this **Contract**, of compliance with the prevailing wage, minimum wage, and other provisions and stipulations required by Labor Law Section 220 and of compliance with the training requirements of Labor Law Section 220-h set forth in Article 35.2. This certification of compliance shall be a condition precedent to payment and no payment shall be made to the **Contractor** unless and until each such certification shall have been submitted to and received by the **Commissioner**.

37.9 This **Contract** is executed by the **Contractor** with the express warranty and representation that the **Contractor** is not disqualified under the provisions of Section 220 of the Labor Law from the award of the **Contract**.

37.10 Any breach or violation of any of the foregoing shall be deemed a breach or violation of a material provision of this **Contract**, and grounds for cancellation thereof by the **City**.

#### **ARTICLE 38. PAYROLL REPORTS**

38.1 The **Contractor** and its **Subcontractor(s)** shall maintain on the **Site** during the performance of the **Work** the original payrolls or transcripts thereof which the **Contractor** and its **Subcontractor(s)** are required to maintain and shall submit such original payrolls or transcripts, subscribed and affirmed by it as true, within thirty (30) **Days** after issuance of its first payroll, and every thirty (30) **Days** thereafter, pursuant to Labor Law Section 220(3-a)(a)(iii). The **Contractor** and **Subcontractor(s)** shall submit such original payrolls or transcripts along with each and every payment requisition. If payment requisitions are not submitted at least once a month, the **Contractor** and its **Subcontractor(s)** shall submit original payrolls and transcripts both along with its payment requisitions and independently of its payment requisitions.

38.2 The **Contractor** shall maintain payrolls or transcripts thereof for six (6) years from the date of completion of the **Work** on this **Contract**. If such payrolls and transcripts are maintained outside of New York City after the completion of the **Work** and their production is required pursuant to this Article 38, the **Contractor** shall produce such records in New York City upon request by the **City**.

38.3 The **Contractor** and **Subcontractor(s)** shall comply with any written order, direction, or request made by the **Engineer**, the **Commissioner**, the **ACCO**, the **Agency EAO**, the **Agency Labor Law Investigator(s)**, or the **Comptroller**, to provide to the requesting party any of the following information and/or records within five (5) **Days** of such written order, direction, or request:

38.3.1 Such original payrolls or transcripts thereof subscribed and affirmed by it as true and the statements signed by each worker pursuant to this Chapter VIII; and/or

38.3.2 Attendance sheets for each **Day** on which any employee of the **Contractor** and/or any of the **Subcontractor(s)** performed **Work** on the **Site**, which attendance sheet shall be in a form acceptable to the **Agency** and shall provide information acceptable to the **Agency** to identify each such employee; and/or

38.3.3 Any other information to satisfy the **Engineer**, the **Commissioner**, the **ACCO**, the **Agency EAO**, the **Agency Labor Law Investigator(s)** or the **Comptroller**, that this Chapter VIII and the Labor Law, as to the hours of employment and prevailing rates of wages and/or supplemental benefits, are being observed.

38.4 The failure of the **Contractor** or **Subcontractor(s)** to comply with the provisions of Articles 38.1 and/or 38.2 may result in the **Commissioner** declaring the **Contractor** in default and/or the withholding of payments otherwise due under the **Contract**.

#### **ARTICLE 39. DUST HAZARDS**

39.1 Should a harmful dust hazard be created in performing the **Work** of this **Contract**, for the elimination of which appliances or methods have been approved by the Board of Standards and Appeals

of the City of New York, such appliances and methods shall be installed, maintained, and effectively operated during the continuance of such harmful dust hazard. Failure to comply with this provision after notice shall make this **Contract** voidable at the sole discretion of the **City**.

## **CHAPTER IX: PARTIAL AND FINAL PAYMENTS**

### **ARTICLE 40. CONTRACT PRICE**

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

### **ARTICLE 41. BID BREAKDOWN ON LUMP SUM**

41.1 Within fifteen (15) **Days** after the commencement date specified in the **Notice to Proceed** or **Order to Work**, unless otherwise directed by the **Resident Engineer**, the **Contractor** shall submit to the **Resident Engineer** a breakdown of its bid price, or of lump sums bid for items of the **Contract**, showing the various operations to be performed under the **Contract**, as directed in the progress schedule required under Article 9, and the value of each of such operations, the total of such items to equal the lump sum price bid. Said breakdown must be approved in writing by the **Resident Engineer**.

41.2 No partial payment will be approved until the **Contractor** submits a bid breakdown that is acceptable to the **Resident Engineer**.

41.3 The **Contractor** shall also submit such other information relating to the bid breakdown as directed by the **Resident Engineer**. Thereafter, the breakdown may be used only for checking the **Contractor's** applications for partial payments hereunder, but shall not be binding upon the **City**, the **Commissioner**, or the **Engineer** for any purpose whatsoever.

### **ARTICLE 42. PARTIAL PAYMENTS**

42.1 From time to time as the **Work** progresses satisfactorily, but not more often than once each calendar month (except where the **Commissioner** approves in writing the submission of invoices on a more frequent basis and for invoices relating to **Work** performed pursuant to a change order), the **Contractor** may submit to the **Engineer** a requisition for a partial payment in the prescribed form, which shall contain an estimate of the quantity and the fair value of the **Work** done during the payment period.

42.2 Partial payments may be made for materials, fixtures, and equipment in advance of their actual incorporation in the **Work**, as the **Commissioner** may approve, and upon the terms and conditions set forth in the General Conditions.

42.3 The **Contractor** shall also submit to the **Commissioner** in connection with every application for partial payment a verified statement in the form prescribed by the **Comptroller** setting forth the information required under Labor Law Section 220-a.

42.4 Within thirty (30) **Days** after receipt of a satisfactory payment application, and within sixty (60) **Days** after receipt of a satisfactory payment application in relation to **Work** performed pursuant to a change order, the **Engineer** will prepare and certify, and the **Commissioner** will approve, a voucher for a partial payment in the amount of such approved estimate, less any and all deductions authorized to be made by the **Commissioner** under the terms of this **Contract** or by **Law**.

#### **ARTICLE 43. PROMPT PAYMENT**

43.1 The Prompt Payment provisions of the **PPB Rules** in effect at the time of the bid will be applicable to payments made under this **Contract**. The provisions require the payment to the **Contractor** of interest on payments made after the required payment date, except as set forth in the **PPB Rules**.

43.2 The **Contractor** shall submit a proper invoice to receive payment, except where the **Contract** provides that the **Contractor** will be paid at predetermined intervals without having to submit an invoice for each scheduled payment.

43.3 Determination of interest due will be made in accordance with the **PPB Rules**.

43.4 If the **Contractor** is paid interest, the proportionate share(s) of that interest shall be forwarded by the **Contractor** to its **Subcontractor(s)**.

43.5 The **Contractor** shall pay each **Subcontractor** or **Materialman** not later than seven (7) **Days** after receipt of payment out of amounts paid to the **Contractor** by the **City** for **Work** performed by the **Subcontractor** or **Materialman** under this **Contract**.

43.5.1 If **Contractor** fails to make any payment to any **Subcontractor** or **Materialman** within seven (7) **Days** after receipt of payment by the **City** pursuant to this Article 43.5, then the **Contractor** shall pay interest on amounts due to such **Subcontractor** or **Materialman** at the rate of interest in effect on the date such payment is made by the **Contractor** computed in accordance with Section 756-b (1)(b) of the New York General Business Law. Accrual of interest shall commence on the **Day** immediately following the expiration of the seventh **Day** following receipt of payment by the **Contractor** from the **City** and shall end on the date on which payment is made.

43.6 The **Contractor** shall include in each of its subcontracts a provision requiring each **Subcontractor** to make payment to each of its **Subcontractors** or **Materialmen** for **Work** performed under this **Contract** in the same manner and within the same time period set forth above.

#### **ARTICLE 44. SUBSTANTIAL COMPLETION PAYMENT**

44.1 The **Contractor** shall submit with the **Substantial Completion** requisition:

44.1.1 A final verified statement of any pending Article 27 disputes in accordance with the **PPB Rules** and this **Contract** and any and all alleged claims against the **City**, in any way connected with or arising out of this **Contract** (including those as to which details may have been furnished pursuant to Articles 11, 27, 28, and 30) setting forth with respect to each such claim the total amount thereof, the various items of labor and materials included therein, and the alleged value of each item; and if the alleged claim be one for delay, the alleged cause of each such delay, the period or periods of time, giving the dates when the

**Contractor** claims the performance of the **Work** or a particular part thereof was delayed, and an itemized statement and breakdown of the amount claimed for each such delay.

44.1.1(a) With respect to each such claim, the **Commissioner**, the **Comptroller** and, in the event of litigation, the **City Corporation Counsel** shall have the same right to inspect, and to make extracts or copies of, the **Contractor's** books, vouchers, records, etc., as is referred to in Articles 11, 27, 28, and 30. Nothing contained in this Article 44.1.1(a) is intended to or shall relieve the **Contractor** from the obligation of complying strictly with Articles 11, 27, 28, and 30. The **Contractor** is warned that unless such claims are completely set forth as herein required, the **Contractor** upon acceptance of the **Substantial Completion** payment pursuant to this Article 44, will have waived any such claims.

44.1.2 A Final Approved Punch List.

44.1.3 Where required, a request for an extension of time to achieve **Substantial Completion** or final extension of time.

44.2 The **Commissioner** shall issue a voucher calling for payment of any part or all of the balance due for **Work** performed under the **Contract**, including monies retained under Article 21, less any and all deductions authorized to be made by the **Commissioner**, under this **Contract** or by **Law**, and less twice the amount the **Commissioner** considers necessary to ensure the completion of the balance of the **Work** by the **Contractor**. Such a payment shall be considered a partial and not a final payment. No **Substantial Completion** payment shall be made under this Article 44 where the **Contractor** failed to complete the **Work** within the time fixed for such completion in the Schedule A of the General Conditions, or within the time to which completion may have been extended, until an extension or extensions of time for the completion of **Work** have been acted upon pursuant to Article 13.

44.3 No further partial payments shall be made to the **Contractor** after **Substantial Completion**, except the **Substantial Completion** payment and payment pursuant to any **Contractor's** requisition that were properly filed with the **Commissioner** prior to the date of **Substantial Completion**; however, the **Commissioner** may grant a waiver for further partial payments after the date of **Substantial Completion** to permit payments for change order **Work** and/or release of retainage and deposits pursuant to Articles 21 and 24. Such waiver shall be in writing.

44.4 The **Contractor** acknowledges that nothing contained in this Article 44 is intended to or shall in any way diminish the force and effect of Article 13.

#### ARTICLE 45. FINAL PAYMENT

45.1 After completion and **Final Acceptance** of the **Work**, the **Contractor** shall submit all required certificates and documents, together with a requisition for the balance claimed to be due under the **Contract**, less the amount authorized to be retained for maintenance under Article 24. Such submission shall be within 90 days of the date of the **Commissioner's** written determination of **Final Acceptance**, or within such additional time as may be granted by the **Commissioner** in writing. If the **Contractor** fails to submit all required certificates and documents within the time allowed, no payment of the balance claimed shall be made to the **Contractor** and the **Contractor** shall be deemed to have forfeited its right to payment of any balance claimed. A verified statement similar to that required in connection with applications for partial payments shall also be submitted to the **Commissioner**.

45.2 Amended Verified Statement of Claims: The **Contractor** shall also submit with the final requisition any amendments to the final verified statement of any pending dispute resolution procedures in accordance with the **PPB Rules** and this **Contract** and any and all alleged claims against the **City**, in any way connected with or arising out of this **Contract** (including those as to which details may have been furnished pursuant to Articles 11, 27, 28, and 30) that have occurred subsequent to **Substantial Completion**, setting forth with respect to each such claim the total amount thereof, the various items of labor and materials included therein, and the alleged value of each such item; and if the alleged claim be one for delay, the alleged cause of each such delay, the period or periods of time, giving the dates when the **Contractor** claims the performance of the **Work** or a particular part thereof was delayed, and an itemized statement and breakdown of the amount claimed for each such delay. With reference to each such claim, the **Commissioner**, the **Comptroller** and, in the event of litigation, the **City Corporation Counsel** shall have the same right to inspect, and to make extracts or copies of, the **Contractor's** books, vouchers, records, etc., as is referred to in Articles 11, 27, 28, and 30. Nothing contained in this Article 45.2, is intended to or shall relieve the **Contractor** from the obligation of complying strictly with Articles 11, 27, 28, and 30. The **Contractor** is warned that unless such claims are completely set forth as herein required, the **Contractor**, upon acceptance of the Final Payment pursuant to Article 46, will have waived any such claims.

45.3 Preparation of Final Voucher: Upon determining the balance due hereunder other than on account of claims, the **Engineer** will prepare and certify, for the **Commissioner's** approval, a voucher for final payment in that amount less any and all deductions authorized to be made by the **Commissioner** under this **Contract** or by **Law**. In the case of a lump sum **Contract**, the **Commissioner** shall certify the voucher for final payment within thirty (30) **Days** from the date of completion and acceptance of the **Work**, provided all requests for extensions of time have been acted upon.

45.3.1 All prior certificates and vouchers upon which partial payments were made, being merely estimates made to enable the **Contractor** to prosecute the **Work** more advantageously, shall be subject to correction in the final voucher, and the certification of the **Engineer** thereon and the approval of the **Commissioner** thereof, shall be conditions precedent to the right of the **Contractor** to receive any money hereunder. Such final voucher shall be binding and conclusive upon the **Contractor**.

45.3.2 Payment pursuant to such final voucher, less any deductions authorized to be made by the **Commissioner** under this **Contract** or by **Law**, shall constitute the final payment, and shall be made by the **Comptroller** within thirty (30) **Days** after the filing of such voucher in his/her office.

45.4 The **Contractor** acknowledges that nothing contained in this Article 45 is intended to or shall in any way diminish the force and effect of Article 13.

#### **ARTICLE 46. ACCEPTANCE OF FINAL PAYMENT**

46.1 The acceptance by the **Contractor**, or by anyone claiming by or through it, of the final payment, whether such payment be made pursuant to any judgment of any court, or otherwise, shall constitute and operate as a release of the **City** from any and all claims of and liability to the **Contractor** for anything heretofore done or furnished for the **Contractor** relating to or arising out of this **Contract** and the **Work** done hereunder, and for any prior act, neglect or default on the part of the **City** or any of its officials, agents or employees, excepting only a claim against the **City** for the amounts deducted or retained in accordance with the terms and provisions of this **Contract** or by **Law**, and excepting any claims, not otherwise waived, or any pending dispute resolution procedures which are contained in the

verified statement filed with the **Contractor's** substantial and final requisitions pursuant to Articles 44 and 45.

46.2 The **Contractor** is warned that the execution by it of a release, in connection with the acceptance of the final payment, containing language purporting to reserve claims other than those herein specifically excepted from the operation of this Article 46, or those for amounts deducted by the **Commissioner** from the final requisition or from the final payment as certified by the **Engineer** and approved by the **Commissioner**, shall not be effective to reserve such claims, anything stated to the **Contractor** orally or in writing by any official, agent or employee of the **City** to the contrary notwithstanding.

46.3 Should the **Contractor** refuse to accept the final payment as tendered by the **Comptroller**, it shall constitute a waiver of any right to interest thereon.

46.4 The **Contractor**, however, shall not be barred by this Article 46 from commencing an action for breach of **Contract** to the extent permitted by **Law** and by the terms of the **Contract** for any claims that are contained in the verified statement filed with the **Contractor's** substantial and final requisitions pursuant to Articles 44 and 45 or that arose after submission of the final payment requisition, provided that a detailed and verified statement of claim is served upon the contracting **Agency** and **Comptroller** not later than forty (40) **Days** after the making of such final payment by electronic funds transfer (EFT) or the mailing of such final payment. The statement shall specify the items upon which the claim will be based and any such claim shall be limited to such items.

#### **ARTICLE 47. APPROVAL BY PUBLIC DESIGN COMMISSION**

47.1 All works of art, including paintings, mural decorations, stained glass, statues, bas-reliefs, and other sculptures, monuments, fountains, arches, and other structures of a permanent character intended for ornament or commemoration, and every design of the same to be used in the performance of this **Contract**, and the design of all bridges, approaches, buildings, gates, fences, lamps, or structures to be erected, pursuant to the terms of this **Contract**, shall be submitted to the Art Commission, d/b/a the Public Design Commission of the City of New York, and shall be approved by the Public Design Commission prior to the erection or placing in position of the same. The final payment shall not become due or payable under this **Contract** unless and until the Public Design Commission shall certify that the design for the **Work** herein contracted for has been approved by the said Public Design Commission, and that the same has been executed in substantial accordance with the design so approved, pursuant to the provisions of Chapter 37, Section 854 of the City Charter, as amended.

### **CHAPTER X: CONTRACTOR'S DEFAULT**

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

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

48.1.1 The **Contractor** fails to commence **Work** when notified to do so by the **Commissioner**; or if

48.1.2 The **Contractor** shall abandon the **Work**; or if

48.1.3 The **Contractor** shall refuse to proceed with the **Work** when and as directed by the **Commissioner**; or if

48.1.4 The **Contractor** shall, without just cause, reduce its working force to a number which, if maintained, would be insufficient, in the opinion of the **Commissioner**, to complete the **Work** in accordance with the progress schedule; or if

48.1.5 The **Contractor** shall fail or refuse to increase sufficiently such working force when ordered to do so by the **Commissioner**; or if

48.1.6 The **Contractor** shall sublet, assign, transfer, convert or otherwise dispose of this **Contract** other than as herein specified; or sell or assign a majority interest in the **Contractor**; or if

48.1.7 The **Contractor** fails to secure and maintain all required insurance; or if

48.1.8 A receiver or receivers are appointed to take charge of the **Contractor's** property or affairs; or if

48.1.9 The **Commissioner** shall be of the opinion that the **Contractor** is or has been unnecessarily or unreasonably or willfully delaying the performance and completion of the **Work**, or the award of necessary subcontracts, or the placing of necessary material and equipment orders; or if

48.1.10 The **Commissioner** shall be of the opinion that the **Contractor** is or has been willfully or in bad faith violating any of the provisions of this **Contract**; or if

48.1.11 The **Commissioner** shall be of the opinion that the **Work** cannot be completed within the time herein provided therefor or within the time to which such completion may have been extended; provided, however, that the impossibility of timely completion is, in the **Commissioner's** opinion, attributable to conditions within the **Contractor's** control; or if

48.1.12 The **Work** is not completed within the time herein provided therefor or within the time to which the **Contractor** may be entitled to have such completion extended; or if

48.1.13 Any statement or representation of the **Contractor** in the **Contract** or in any document submitted by the **Contractor** with respect to the **Work**, the **Project**, or the **Contract** (or for purposes of securing the **Contract**) was untrue or incorrect when made; or if

48.1.14 The **Contractor** or any of its officers, directors, partners, five (5%) percent shareholders, principals, or other persons substantially involved in its activities, commits any of the acts or omissions specified as the grounds for debarment in the **PPB Rules**.

48.2 Before the **Commissioner** shall exercise his/her right to declare the **Contractor** in default, the **Commissioner** shall give the **Contractor** an opportunity to be heard, upon not less than two (2) **Days'** notice.



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

49.1 The right to declare the **Contractor** in default for any of the grounds specified or referred to in Article 48 shall be exercised by sending the **Contractor** a notice, signed by the **Commissioner**, setting forth the ground or grounds upon which such default is declared (hereinafter referred to as a "Notice of Default").

49.2 The **Commissioner's** determination that the **Contractor** is in default shall be conclusive, final, and binding on the parties and such a finding shall preclude the **Contractor** from commencing a plenary action for any damages relating to the **Contract**. If the **Contractor** protests the determination of the **Commissioner**, the **Contractor** may commence an action in a court of competent jurisdiction of the State of New York under Article 78 of the New York Civil Practice Law and Rules.

#### **ARTICLE 50. QUITTING THE SITE**

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

#### **ARTICLE 51. COMPLETION OF THE WORK**

51.1 The **Commissioner**, after declaring the **Contractor** in default, may then have the **Work** completed by such means and in such manner, by contract with or without public letting, or otherwise, as he/she may deem advisable, utilizing for such purpose such of the **Contractor's** plant, materials, equipment, tools, and supplies remaining on the **Site**, and also such **Subcontractors**, as he/she may deem advisable.

51.2 After such completion, the **Commissioner** shall make a certificate stating the expense incurred in such completion, which shall include the cost of re-letting and also the total amount of liquidated damages (at the rate provided for in the **Contract**) from the date when the **Work** should have been completed by the **Contractor** in accordance with the terms hereof to the date of actual completion of the **Work**. Such certificate shall be binding and conclusive upon the **Contractor**, its sureties, and any person claiming under the **Contractor**, as to the amount thereof.

51.3 The expense of such completion, including any and all related and incidental costs, as so certified by the **Commissioner**, and any liquidated damages assessed against the **Contractor**, shall be charged against and deducted out of monies which are earned by the **Contractor** prior to the date of default. Should the expense of such completion, as certified by the **Commissioner**, exceed the total sum which would have been payable under the **Contract** if it had been completed by the **Contractor**, any excess shall be paid by the **Contractor**.

#### **ARTICLE 52. PARTIAL DEFAULT**

52.1 In case the **Commissioner** shall declare the **Contractor** in default as to a part of the **Work** only, the **Contractor** shall discontinue such part, shall continue performing the remainder of the **Work** in strict conformity with the terms of this **Contract**, and shall in no way hinder or interfere with any **Other Contractor(s)** or persons whom the **Commissioner** may engage to complete the **Work** as to which the **Contractor** was declared in default.

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

#### **ARTICLE 53. PERFORMANCE OF UNCOMPLETED WORK**

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

#### **ARTICLE 54. OTHER REMEDIES**

54.1 In addition to the right to declare the **Contractor** in default pursuant to this Chapter X, the **Commissioner** shall have the absolute right, in his/her sole discretion and without a hearing, to complete or cause to be completed in the same manner as described in Articles 51 and 53, any or all unsatisfactory or uncompleted punch list **Work** that remains after the completion date specified in the **Final Approved Punch List**. A written notice of the exercise of this right shall be sent to the **Contractor** who shall immediately quit the **Site** in accordance with the provisions of Article 50.

54.2 The expense of completion permitted under Article 54.1, including any and all related and incidental costs, as so certified by the **Commissioner**, shall be charged against and deducted out of monies which have been earned by the **Contractor** prior to the date of the exercise of the right set forth in Article 54.1; the balance of such monies, if any, subject to the other provisions of this **Contract**, to be paid to the **Contractor** without interest after such completion. Should the expense of such completion, as certified by the **Commissioner**, exceed the total sum which would have been payable under the **Contract** if it had been completed by the **Contractor**, any excess shall be paid by the **Contractor**.

54.3 The previous provisions of this Chapter X shall be in addition to any and all other remedies available under **Law** or in equity.

54.4 The exercise by the **City** of any remedy set forth herein shall not be deemed a waiver by the **City** of any other legal or equitable remedy contained in this **Contract** or provided under **Law**.

### **CHAPTER XI: MISCELLANEOUS PROVISIONS**

#### **ARTICLE 55. CONTRACTOR'S WARRANTIES**

55.1 In consideration of, and to induce, the award of this **Contract** to the **Contractor**, the **Contractor** represents and warrants:

55.1.1 That it is financially solvent, sufficiently experienced and competent to perform the **Work**; and

55.1.2 That the facts stated in its bid and the information given by it pursuant to the Information for Bidders is true and correct in all respects; and

55.1.3 That it has read and complied with all requirements set forth in the **Contract**.

#### **ARTICLE 56. CLAIMS AND ACTIONS THEREON**

56.1 Any claim, that is not subject to dispute resolution under the **PPB Rules** or this **Contract**, against the **City** for damages for breach of **Contract** shall not be made or asserted in any action, unless the **Contractor** shall have strictly complied with all requirements relating to the giving of notice and of information with respect to such claims, as herein before provided.

56.2 Nor shall any action be instituted or maintained on any such claims unless such action is commenced within six (6) months after **Substantial Completion**; except that:

56.2.1 Any claims arising out of events occurring after **Substantial Completion** and before **Final Acceptance** of the **Work** shall be asserted within six (6) months of **Final Acceptance** of the **Work**;

56.2.2 If the **Commissioner** exercises his/her right to complete or cause to complete any or all unsatisfactory or uncompleted punch list **Work** that remains after the completion date specified in the **Final Approved Punch List** pursuant to Article 54, any such action shall be commenced within six (6) months from the date the **Commissioner** notifies the **Contractor** in writing that he/she has exercised such right. Any claims for monies deducted, retained or withheld under the provisions of this **Contract** shall be asserted within six (6) months after the date when such monies otherwise become due and payable hereunder; and

56.2.3 If the **Commissioner** exercises his/her right to terminate the **Contract** pursuant to Article 64, any such action shall be commenced within six (6) months of the date the **Commissioner** exercises said right.

#### **ARTICLE 57. INFRINGEMENT**

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

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

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

## **ARTICLE 59. SERVICE OF NOTICES**

59.1 The **Contractor** hereby designates the business address, fax number, and email address specified in its bid, as the place where all notices, directions or other communications to the **Contractor** may be delivered, or to which they may be mailed. Any notice, direction, or communication from either party to the other shall be in writing and shall be deemed to have been given when (i) delivered personally; (ii) sent by certified mail, return receipt requested; (iii) delivered by overnight or same day courier service in a properly addressed envelope with confirmation; or (iv) sent by fax or email and, unless receipt of the fax or e-mail is acknowledged by the recipient by fax or e-mail, deposited in a post office box regularly maintained by the United States Postal Service in a properly addressed, postage pre-paid envelope.

59.2 **Contractor's** notice address, email address, or fax number may be changed at any time by an instrument in writing, executed and acknowledged by the **Contractor**, and delivered to the **Commissioner**.

59.3 Nothing herein contained shall, however, be deemed to preclude or render inoperative the service of any notice, direction or other communication upon the **Contractor** personally, or, if the **Contractor** is a corporation, upon any officer thereof.

## **ARTICLE 60. UNLAWFUL PROVISIONS DEEMED STRICKEN FROM CONTRACT**

60.1 If this **Contract** contains any unlawful provision not an essential part of the **Contract** and which shall not appear to have been a controlling or material inducement to the making thereof, the same shall be deemed of no effect and shall, upon notice by either party, be deemed stricken from the **Contract** without affecting the binding force of the remainder.

## **ARTICLE 61. ALL LEGAL PROVISIONS DEEMED INCLUDED**

61.1 It is the intent and understanding of the parties to this **Contract** that each and every provision of **Law** required to be inserted in this **Contract** shall be and is inserted herein. Furthermore, it is hereby stipulated that every such provision is to be deemed to be inserted herein, and if, through mistake or otherwise, any such provision is not inserted, or is not inserted in correct form, then this **Contract** shall forthwith upon the application of either party be amended by such insertion so as to comply strictly with the **Law** and without prejudice to the rights of either party hereunder.

## **ARTICLE 62. TAX EXEMPTION**

62.1 The **City** is exempt from payment of Federal, State, and local taxes, including sales and compensating use taxes of the State of New York and its cities and counties on all tangible personal property sold to the **City** pursuant to the provisions of this **Contract**. These taxes are not to be included in bids. However, this exemption does not apply to tools, machinery, equipment or other property leased by or to the **Contractor**, **Subcontractor** or **Materialman** or to tangible personal property which, even

though it is consumed, is not incorporated into the completed **Work** (consumable supplies) and tangible personal property that the **Contractor** is required to remove from the **Site** during or upon completion of the **Work**. The **Contractor** and its **Subcontractors** and **Materialmen** shall be responsible for and pay any and all applicable taxes, including sales and compensating use taxes, on such leased tools, machinery, equipment or other property and upon all such consumable supplies and tangible personal property that the **Contractor** is required to remove from the **Site** during or upon completion of the **Work**.

62.2 The **Contractor** agrees to sell and the **City** agrees to purchase all tangible personal property, other than consumable supplies and other tangible personal property that the **Contractor** is required to remove from the **Site** during or upon completion of the **Work**, that is required, necessary or proper for or incidental to the construction of the **Project** covered by this **Contract**. The sum paid under this **Contract** for such tangible personal property shall be in full payment and consideration for the sale of such tangible personal property.

62.2.1 The **Contractor** agrees to construct the **Project** and to perform all **Work**, labor and services rendered, necessary, proper or incidental thereto for the sum shown in the bid for the performance of such **Work**, labor, and services, and the sum so paid pursuant to this **Contract** for such **Work**, labor, and services, shall be in full consideration for the performance by the **Contractor** of all its duties and obligations under this **Contract** in connection with said **Work**, labor, and services.

62.3 20 NYCRR Section 541.3(d) provides that a **Contractor's** purchases of tangible personal property that is either incorporated into real property owned by a governmental entity or purchased for and sold to a governmental entity are exempt from sales and use tax. The **City** shall not pay sales tax for any such tangible personal property that it purchases from the **Contractor** pursuant to the **Contract**. With respect to such tangible personal property, the **Contractor**, at the request of the **City**, shall furnish to the **City** such bills of sale and other instruments as may be required by the **City**, properly executed, acknowledged and delivered assuring to the **City** title to such tangible personal property, free of liens and/or encumbrances, and the **Contractor** shall mark or otherwise identify all such tangible personal property as the property of the **City**.

62.4 Title to all tangible personal property to be sold by the **Contractor** to the **City** pursuant to the provisions of the **Contract** shall immediately vest in and become the sole property of the **City** upon delivery of such tangible personal property to the **Site**. Notwithstanding such transfer of title, the **Contractor** shall have the full and continuing responsibility to install such tangible personal property in accordance with the provisions of this **Contract**, protect it, maintain it in a proper condition and forthwith repair, replace and make good any damage thereto, theft or disappearance thereof, and furnish additional tangible personal property in place of any that may be lost, stolen or rendered unusable, without cost to the **City**, until such time as the **Work** covered by the **Contract** is fully accepted by the **City**. Such transfer of title shall in no way affect any of the **Contractor's** obligations hereunder. In the event that, after title has passed to the **City**, any of the tangible personal property is rejected as being defective or otherwise unsatisfactory, title to all such tangible personal property shall be deemed to have been transferred back to the **Contractor**.

62.5 The purchase by **Subcontractors** or **Materialmen** of tangible personal property to be sold hereunder shall be a purchase or procurement for resale to the **Contractor** (either directly or through other **Subcontractors**) and therefore not subject to the aforesaid sales and compensating use taxes, provided that the subcontracts and purchase agreements provide for the resale of such tangible personal property and that such subcontracts and purchase agreements are in a form similar to this **Contract** with respect to the separation of the sale of consumable supplies and tangible personal property that the

**Contractor** is required to remove from the **Site** during or upon completion of the **Work** from the **Work** and labor, services, and any other matters to be provided, and provided further that the subcontracts and purchase agreements provide separate prices for tangible personal property and all other services and matters. Such separation shall actually be followed in practice, including the separation of payments for tangible personal property from the payments for other **Work** and labor and other things to be provided.

62.6 The **Contractor** and its **Subcontractors** and **Materialmen** shall furnish a **Contractor Exempt Purchase Certificate** to all persons, firms or corporations from which they purchase tangible personal property for the performance of the **Work** covered by this **Contract**.

62.7 In the event any of the provisions of this Article 62 shall be deemed to be in conflict with any other provisions of this **Contract** or create any ambiguity, then the provisions of this Article 62 shall control.

### **ARTICLE 63. INVESTIGATION(S) CLAUSE**

63.1 The parties to this **Contract** agree to cooperate fully and faithfully with any investigation, audit or inquiry conducted by a United States, a State of New York (State) or a **City** governmental agency or authority that is empowered directly or by designation to compel the attendance of witnesses and to examine witnesses under oath, or conducted by the Inspector General of a governmental agency that is a party in interest to the transaction, submitted bid, submitted proposal, contract, lease, permit or license that is the subject of the investigation, audit or inquiry.

63.2 If any person who has been advised that his/her statement, and any information from such statement, will not be used against him/her in any subsequent criminal proceeding refuses to testify before a grand jury or other governmental agency or authority empowered directly or by designation to compel the attendance of witnesses and to examine witnesses under oath concerning the award of or performance under any transaction, agreement, lease, permit, contract, or license entered into with the **City**, the State, or any political subdivision or public authority thereof, or the Port Authority of New York and New Jersey, or any local development corporation within the **City**, or any public benefit corporation organized under the **Laws** of the State of New York, or;

63.3 If any person refuses to testify for a reason other than the assertion of his/her privilege against self incrimination in an investigation, audit or inquiry conducted by a **City** or State governmental agency or authority empowered directly or by designation to compel the attendance of witnesses and to take testimony under oath, or by the Inspector General of the governmental agency that is a party in interest in, and is seeking testimony concerning the award of, or performance under any transaction, agreement, lease, permit, contract, or license entered into with the **City**, the State, or any political subdivision thereof or any local development corporation within the **City**, then;

63.4 The **Commissioner** whose **Agency** is a party in interest to the transaction, submitted bid, submitted proposal, contract, lease, permit, or license shall convene a hearing, upon not less than five (5) **Days'** written notice to the parties involved to determine if any penalties should attach for the failure of a person to testify.

63.5 If any non-governmental party to the hearing requests an adjournment, the **Commissioner** who convened the hearing may, upon granting the adjournment, suspend any contract, lease, permit, or license, pending the final determination pursuant to Article 63.7 without the **City** incurring any penalty or damages for delay or otherwise.

63.6 The penalties which may attach after a final determination by the **Commissioner** may include but shall not exceed:

63.6.1 The disqualification for a period not to exceed five (5) years from the date of an adverse determination for any person, or any entity of which such person was a member at the time the testimony was sought, from submitting bids for, or transacting business with, or entering into or obtaining any contract, lease, permit or license with or from the **City**; and/or

63.6.2 The cancellation or termination of any and all such existing **City** contracts, leases, permits or licenses that the refusal to testify concerns and that have not been assigned as permitted under this **Contract**, nor the proceeds of which pledged, to an unaffiliated and unrelated institutional lender for fair value prior to the issuance of the notice scheduling the hearing, without the **City** incurring any penalty or damages on account of such cancellation or termination; monies lawfully due for goods delivered, work done, rentals, or fees accrued prior to the cancellation or termination shall be paid by the **City**.

63.7 The **Commissioner** shall consider and address in reaching his/her determination and in assessing an appropriate penalty the factors in Articles 63.7.1 and 63.7.2. The **Commissioner** may also consider, if relevant and appropriate, the criteria established in Articles 63.7.3 and 63.7.4, in addition to any other information which may be relevant and appropriate:

63.7.1 The party's good faith endeavors or lack thereof to cooperate fully and faithfully with any governmental investigation or audit, including but not limited to the discipline, discharge, or disassociation of any person failing to testify, the production of accurate and complete books and records, and the forthcoming testimony of all other members, agents, assignees or fiduciaries whose testimony is sought.

63.7.2 The relationship of the person who refused to testify to any entity that is a party to the hearing, including but not limited to, whether the person whose testimony is sought has an ownership interest in the entity and/or the degree of authority and responsibility the person has within the entity.

63.7.3 The nexus of the testimony sought to the subject entity and its contracts, leases, permits or licenses with the **City**.

63.7.4 The effect a penalty may have on an unaffiliated and unrelated party or entity that has a significant interest in an entity subject to penalties under Article 63.6, provided that the party or entity has given actual notice to the **Commissioner** upon the acquisition of the interest, or at the hearing called for in Article 63.4, gives notice and proves that such interest was previously acquired. Under either circumstance the party or entity shall present evidence at the hearing demonstrating the potential adverse impact a penalty will have on such person or entity.

#### 63.8 Definitions:

63.8.1 The term "license" or "permit" as used in this Article 63 shall be defined as a license, permit, franchise or concession not granted as a matter of right.

63.8.2 The term "person" as used in this Article 63 shall be defined as any natural person doing business alone or associated with another person or entity as a partner, director, officer, principal or employee.

63.8.3 The term "entity" as used in this Article 63 shall be defined as any firm, partnership, corporation, association, joint venture, or person that receives monies, benefits, licenses, leases, or permits from or through the **City** or otherwise transacts business with the **City**.

63.8.4 The term "member" as used in this Article 63 shall be defined as any person associated with another person or entity as a partner, director, officer, principal or employee.

63.9 In addition to and notwithstanding any other provision of this **Contract**, the **Commissioner** may in his/her sole discretion terminate this **Contract** upon not less than three (3) **Days**' written notice in the event the **Contractor** fails to promptly report in writing to the **Commissioner** of the Department of Investigations ("DOI") of the **City** any solicitation of money, goods, requests for future employment or other benefit or thing of value, by or on behalf of any employee of the **City** or other person, firm, corporation or entity for any purpose which may be related to the procurement or obtaining of this **Contract** by the **Contractor**, or affecting the performance of this **Contract**.

#### **ARTICLE 64. TERMINATION BY THE CITY**

64.1 In addition to termination pursuant to any other article of this **Contract**, the **Commissioner** may, at any time, terminate this **Contract** by written notice to the **Contractor**. In the event of termination, the **Contractor** shall, upon receipt of such notice, unless otherwise directed by the **Commissioner**:

64.1.1 Stop **Work** on the date specified in the notice;

64.1.2 Take such action as may be necessary for the protection and preservation of the **City's** materials and property;

64.1.3 Cancel all cancelable orders for material and equipment;

64.1.4 Assign to the **City** and deliver to the **Site** or another location designated by the **Commissioner**, any non-cancelable orders for material and equipment that is not capable of use except in the performance of this **Contract** and has been specifically fabricated for the sole purpose of this **Contract** and not incorporated in the **Work**;

64.1.5 Take no action which will increase the amounts payable by the **City** under this **Contract**.

64.2 In the event of termination by the **City** pursuant to this Article 64, payment to the **Contractor** shall be in accordance with Articles 64.2.1, 64.2.2 or 64.2.3, to the extent that each respective article applies.

64.2.1 Lump Sum Contracts or Items: On all lump sum **Contracts**, or on lump sum items in a **Contract**, the **City** will pay the **Contractor** the sum of the amounts described in Articles 64.2.1(a) and 64.2.1(b), less all payments previously made pursuant to this **Contract**. On lump sum **Contracts** only, the **City** will also pay the **Contractor** an additional sum as provided in Article 64.2.1(c).

64.2.1(a) For **Work** completed prior to the notice of termination, the **Contractor** shall be paid a pro rata portion of the lump sum bid amount, plus approved change orders, based upon the percent completion of the **Work**, as determined by the



**Commissioner.** For the purpose of determining the pro rata portion of the lump sum bid amount to which the **Contractor** is entitled, the bid breakdown submitted in accordance with Article 41 shall be considered, but shall not be dispositive. The **Commissioner's** determination hereunder shall be final, binding, and conclusive.

64.2.1(b) For non-cancelable material and equipment that is not capable of use except in the performance of this **Contract** and has been specifically fabricated for the sole purpose of this **Contract**, but not yet incorporated in the **Work**, the **Contractor** shall be paid the lesser of the following, less salvage value:

64.2.1(b)(i) The Direct Cost, as defined in Article 64.2.4; or

64.2.1(b)(ii) The fair and reasonable value, if less than Direct Cost, of such material and equipment, plus necessary and reasonable delivery costs.

64.2.1(b)(iii) In addition, the **Contractor** shall be paid five (5%) percent of the amount described in Article 64.2.1(b)(i) or Article 64.2.1(b)(ii), whichever applies.

64.2.1(c) Except as otherwise provided in Article 64.2.1(d), on all lump sum **Contracts**, the **Contractor** shall be paid the percentage indicated below applied to the difference between the total lump sum bid amount and the total of all payments made prior to the notice of termination plus all payments allowed pursuant to Articles 64.2.1(a) and 64.2.1(b):

64.2.1(c)(i) Five (5%) percent of the first five million (\$5,000,000) dollars; and

64.2.1(c)(ii) Three (3%) percent of any amount between five million (\$5,000,000) dollars and fifteen million (\$15,000,000) dollars; plus

64.2.1(c)(iii) One (1%) percent of any amount over fifteen million (\$15,000,000) dollars.

64.2.1(d) In the event the **City** terminates a lump sum **Contract** pursuant to this Article 64 within ninety (90) **Days** after registration of the **Contract** with the **Comptroller**, the **Contractor** shall be paid one (1%) percent of the difference between the lump sum bid amount and the total of all payments made pursuant to this Article 64.2.

64.2.2 Unit Price Contracts or Items: On all unit price **Contracts**, or on unit price items in a **Contract**, the **City** will pay the **Contractor** the sum of the amounts described in Articles 64.2.2(a) and 64.2.2(b), less all payments previously made pursuant to this **Contract**:

64.2.2(a) For all completed units, the unit price stated in the **Contract**, and

64.2.2(b) For units that have been ordered but are only partially completed, the **Contractor** will be paid:

64.2.2(b)(i) A pro rata portion of the unit price stated in the **Contract** based upon the percent completion of the unit and

64.2.2(b)(ii) For non-cancelable material and equipment, payment will be made pursuant to Article 64.2.1(b).

64.2.3 Time and Materials Contracts or Items Based on Time and Material Records: On all **Contracts** or items in a **Contract** where payment for the **Work** is based on time and material records, the **Contractor** shall be paid in accordance with Article 26, less all payments previously made pursuant to this **Contract**.

64.2.4 Direct Costs: Direct Costs as used in this Article 64.2 shall mean:

64.2.4(a) The actual purchase price of material and equipment, plus necessary and reasonable delivery costs,

64.2.4(b) The actual cost of labor involved in construction and installation at the **Site**, and

64.2.4(c) The actual cost of necessary bonds and insurance purchased pursuant to requirements of this **Contract** less any amounts that have been or should be refunded by the **Contractor's** sureties or insurance carriers.

64.2.4(d) Direct Costs shall not include overhead.

64.3 In no event shall any payments under this Article 64 exceed the **Contract** price for such items.

64.4 All payments pursuant to Article 64 shall be in the nature of liquidated damages and shall be accepted by the **Contractor** in full satisfaction of all claims against the **City**.

64.5 The **City** may deduct or set off against any sums due and payable pursuant to this Article 64, any deductions authorized by this **Contract** or by **Law** (including but not limited to liquidated damages) and any claims it may have against the **Contractor**. The **City's** exercise of the right to terminate the **Contract** pursuant to this Article 64 shall not impair or otherwise effect the **City's** right to assert any claims it may have against the **Contractor** in a plenary action.

64.6 Where the **Work** covered by the **Contract** has been substantially completed, as determined in writing by the **Commissioner**, termination of the **Work** shall be handled as an omission of **Work** pursuant to Articles 29 and 33, in which case a change order will be issued to reflect an appropriate reduction in the **Contract** sum, or if the amount is determined after final payment, such amount shall be paid by the **Contractor**.

#### **ARTICLE 65. CHOICE OF LAW, CONSENT TO JURISDICTION AND VENUE**

65.1 This **Contract** shall be deemed to be executed in the **City** regardless of the domicile of the **Contractor**, and shall be governed by and construed in accordance with the **Laws** of the State of New York and the **Laws** of the United States, where applicable.

65.2 The parties agree that any and all claims asserted against the **City** arising under this **Contract** or related thereto shall be heard and determined in the courts of the State of New York ("New York State Courts") located in the **City** and County of New York. To effect this **Contract** and intent, the **Contractor** agrees:

65.2.1 If the **City** initiates any action against the **Contractor** in Federal court or in a New York State Court, service of process may be made on the **Contractor** either in person, wherever such **Contractor** may be found, or by registered mail addressed to the **Contractor** at its address as set forth in this **Contract**, or to such other address as the **Contractor** may provide to the **City** in writing; and

65.2.2 With respect to any action between the **City** and the **Contractor** in a New York State Court, the **Contractor** hereby expressly waives and relinquishes any rights it might otherwise have:

65.2.2(a) To move to dismiss on grounds of forum non conveniens;

65.2.2(b) To remove to Federal Court; and

65.2.2(c) To move for a change of venue to a New York State Court outside New York County.

65.2.3 With respect to any action brought by the **City** against the **Contractor** in a Federal Court located in the **City**, the **Contractor** expressly waives and relinquishes any right it might otherwise have to move to transfer the action to a Federal Court outside the **City**.

65.2.4 If the **Contractor** commences any action against the **City** in a court located other than in the **City** and County of New York, upon request of the **City**, the **Contractor** shall either consent to a transfer of the action to a New York State Court of competent jurisdiction located in the **City** and County of New York or, if the Court where the action is initially brought will not or cannot transfer the action, the **Contractor** shall consent to dismiss such action without prejudice and may thereafter reinstate the action in a New York State Court of competent jurisdiction in New York County.

65.3 If any provision(s) of this Article 65 is held unenforceable for any reason, each and all other provision(s) shall nevertheless remain in full force and effect.

#### **ARTICLE 66. PARTICIPATION IN AN INTERNATIONAL BOYCOTT**

66.1 The **Contractor** agrees that neither the **Contractor** nor any substantially owned affiliated company is participating or shall participate in an international boycott in violation of the provisions of the Federal Export Administration Act of 1979, as amended, or the regulations of the United States Department of Commerce (Commerce Department) promulgated thereunder.

66.2 Upon the final determination by the Commerce Department or any other agency of the United States as to, or conviction of the **Contractor** or a substantially-owned affiliated company thereof for participation in an international boycott in violation of the provisions of the Export Administration Act of 1979, as amended, or the regulations promulgated thereunder, the **Comptroller** may, at his/her option, render forfeit and void this **Contract**.

66.3 The **Contractor** shall comply in all respects, with the provisions of Section 6-114 of the Administrative Code and the rules and regulations issued by the **Comptroller** thereunder.

## **ARTICLE 67. LOCALLY BASED ENTERPRISE PROGRAM**

67.1 This **Contract** is subject to the requirements of Section 6-108.1 of the Administrative Code and regulations promulgated thereunder. No construction contract shall be awarded unless and until these requirements have been complied with in their entirety; however, compliance with this Article 67 is not required if the Agency sets Subcontractor Participation Goals for Minority- and Women-Owned Business Enterprises (M/WBEs).

67.2 Unless specifically waived by the **Commissioner** with the approval of the Division of Economic and Financial Opportunity of the **City Department of Business Services**, if any portion of the **Contract** is subcontracted, not less than ten (10%) percent of the total dollar amount of the **Contract** shall be awarded to locally based enterprises (LBEs); except that where less than ten (10%) percent of the total dollar amount of the **Contract** is subcontracted, such lesser percentage shall be so awarded.

67.3 The **Contractor** shall not require performance and payment bonds from LBE **Subcontractors**.

67.4 If the **Contractor** has indicated prior to award that no **Work** will be subcontracted, no **Work** shall be subcontracted without the prior approval of the **Commissioner**, which shall be granted only if the **Contractor** makes a good faith effort beginning at least six (6) weeks before the **Work** is to be performed to obtain LBE **Subcontractors** to perform the **Work**.

67.5 If the **Contractor** has not identified sufficient LBE **Subcontractors** prior to award, it shall sign a letter of compliance stating that it complies with Section 6-108.1 of the Administrative Code, recognizes that achieving the LBE requirement is a condition of its **Contract**, and shall submit documentation demonstrating its good faith efforts to obtain LBEs. After award, the **Contractor** shall begin to solicit LBE's to perform subcontracted **Work** at least six (6) weeks before the date such **Work** is to be performed and shall demonstrate that a good faith effort has been made to obtain LBEs on each subcontract until it meets the required percentage.

67.6 Failure of the **Contractor** to comply with the requirements of Section 6-108.1 of the Administrative Code and the regulations promulgated thereunder shall constitute a material breach of this **Contract**. Remedy for such breach may include the imposition of any or all of the following sanctions:

67.6.1 Reducing the **Contractor's** compensation by an amount equal to the dollar value of the percentage of the LBE subcontracting requirement not complied with;

67.6.2 Declaring the **Contractor** in default;

67.6.3 If the **Contractor** is an LBE, de-certifying and declaring the **Contractor** ineligible to participate in the LBE program for a period of up to three (3) years.

## **ARTICLE 68. ANTITRUST**

68.1 The **Contractor** hereby assigns, sells, and transfers to the **City** all right, title, and interest in and to any claims and causes of action arising under the antitrust **Laws** of New York State or of the United States relating to the particular goods or services purchased or procured by the **City** under this **Contract**.

## **ARTICLE 69. MacBRIDE PRINCIPLES PROVISIONS**

### **69.1 Notice To All Prospective Contractors:**

69.1.1 Local Law No. 34 of 1991 became effective on September 10, 1991 and added Section 6-115.1 of the Administrative Code. The local **Law** provides for certain restrictions on **City Contracts** to express the opposition of the people of the **City** to employment discrimination practices in Northern Ireland to promote freedom of work-place opportunity.

69.1.2 Pursuant to Section 6-115.1, prospective **Contractors** for **Contracts** to provide goods or services involving an expenditure of an amount greater than ten thousand (\$10,000.) dollars, or for construction involving an amount greater than fifteen thousand (\$15,000.) dollars, are asked to sign a rider in which they covenant and represent, as a material condition of their **Contract**, that any business operations in Northern Ireland conducted by the **Contractor** and any individual or legal entity in which the **Contractor** holds a ten (10%) percent or greater ownership interest in the **Contractor** will be conducted in accordance with the MacBride Principles of nondiscrimination in employment.

69.1.3 Prospective **Contractors** are not required to agree to these conditions. However, in the case of **Contracts** let by competitive sealed bidding, whenever the lowest responsible bidder has not agreed to stipulate to the conditions set forth in this notice and another bidder who has agreed to stipulate to such conditions has submitted a bid within five (5%) percent of the lowest responsible bid for a **Contract** to supply goods, services or construction of comparable quality, the **Agency** shall refer such bids to the Mayor, the Speaker or other officials, as appropriate, who may determine, in accordance with applicable **Law**, that it is in the best interest of the **City** that the **Contract** be awarded to other than the lowest responsible pursuant to Section 313(b)(2) of the **City Charter**.

69.1.4 In the case of **Contracts** let by other than competitive sealed bidding, if a prospective **Contractor** does not agree to these conditions, no **Agency**, elected official or the **City Council** shall award the **Contract** to that bidder unless the **Agency** seeking to use the goods, services or construction certifies in writing that the **Contract** is necessary for the **Agency** to perform its functions and there is no other responsible **Contractor** who will supply goods, services or construction of comparable quality at a comparable price.

69.2 In accordance with Section 6-115.1 of the Administrative Code, the **Contractor** stipulates that such **Contractor** and any individual or legal entity in which the **Contractor** holds a ten (10%) percent or greater ownership interest in the **Contractor** either:

69.2.1 Have no business operations in Northern Ireland, or

69.2.2 Shall take lawful steps in good faith to conduct any business operations they have in Northern Ireland in accordance with the MacBride Principles, and shall permit independent monitoring of their compliance with such principles.

69.3 For purposes of this Article, the following terms shall have the following meanings:

69.3.1 "MacBride Principles" shall mean those principles relating to nondiscrimination in employment and freedom of work-place opportunity which require employers doing business in Northern Ireland to:

69.3.1(a) increase the representation of individuals from under-represented religious groups in the workforce, including managerial, supervisory, administrative, clerical and technical jobs;

69.3.1(b) take steps to promote adequate security for the protection of employees from under-represented religious groups both at the work-place and while traveling to and from **Work**;

69.3.1(c) ban provocative religious or political emblems from the workplace;

69.3.1(d) publicly advertise all job openings and make special recruitment efforts to attract applicants from under-represented religious groups;

69.3.1(e) establish layoff, recall, and termination procedures which do not in practice favor a particular religious group;

69.3.1(f) abolish all job reservations, apprenticeship restrictions and different employment criteria which discriminate on the basis of religion;

69.3.1(g) develop training programs that will prepare substantial numbers of current employees from under-represented religious groups for skilled jobs, including the expansion of existing programs and the creation of new programs to train, upgrade, and improve the skills of workers from under-represented religious groups;

69.3.1(h) establish procedures to assess, identify, and actively recruit employees from under-represented religious groups with potential for further advancement; and

69.3.1(i) appoint a senior management staff member to oversee affirmative action efforts and develop a timetable to ensure their full implementation.

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

## **ARTICLE 70. ELECTRONIC FILING/NYC DEVELOPMENT HUB**

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

## **ARTICLE 71. PROHIBITION OF TROPICAL HARDWOODS**

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

## **ARTICLE 72. CONFLICTS OF INTEREST**

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

## **ARTICLE 73. MERGER CLAUSE**

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

## **ARTICLE 74. STATEMENT OF WORK**

74.1 The **Contractor** shall furnish all labor and materials and perform all **Work** in strict accordance with the **Specifications** and **Addenda** thereto, numbered as shown in Schedule A.

## **ARTICLE 75. COMPENSATION TO BE PAID TO CONTRACTOR**

75.1 The **City** will pay and the **Contractor** will accept in full consideration for the performance of the **Contract**, subject to additions and deductions as provided herein, the total sum shown in Schedule A, this said sum being the amount at which the **Contract** was awarded to the **Contractor** at a public letting thereof, based upon the **Contractor's** bid for the **Contract**.

## **ARTICLE 76. ELECTRONIC FUNDS TRANSFER**

76.1 In accordance with Section 6-107.1 of the Administrative Code, the **Contractor** agrees to accept payments under this **Contract** from the **City** by electronic funds transfer (EFT). An EFT is any

transfer of funds, other than a transaction originated by check, draft or similar paper instrument, which is initiated through an electronic terminal, telephonic instrument or computer or magnetic tape so as to order, instruct or authorize a financial institution to debit or credit an account. Prior to the first payment made under this **Contract**, the **Contractor** shall designate one financial institution or other authorized payment agent and shall complete the attached "EFT Vendor Payment Enrollment Form" in order to provide the Commissioner of the City Department of Finance with information necessary for the **Contractor** to receive electronic funds transfer payments through a designated financial institution or authorized payment agent. The crediting of the amount of a payment to the appropriate account on the books of a financial institution or other authorized payment agent designated by the **Contractor** shall constitute full satisfaction by the City for the amount of the payment under this **Contract**. The account information supplied by the **Contractor** to facilitate the electronic funds transfer shall remain confidential to the fullest extent provided by Law.

76.2 The **Commissioner** may waive the application of the requirements of this Article 76 to payments on contracts entered into pursuant to Section 315 of the City Charter. In addition, the Commissioner of the Department of Finance and the Comptroller may jointly issue standards pursuant to which the **Agency** may waive the requirements of this Article 76 for payments in the following circumstances: (i) for individuals or classes of individuals for whom compliance imposes a hardship; (ii) for classifications or types of checks; or (iii) in other circumstances as may be necessary in the interest of the City.

#### **ARTICLE 77. RECORDS RETENTION**

77.1 The **Contractor** agrees to retain all books, records, and other documents relevant to this **Contract** for six years after the final payment or termination of this **Contract**, whichever is later. City, state, and federal auditors and any other persons duly authorized by the City shall have full access to and the right to examine any such books, records, and other documents during the retention period.

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

78.1 Pre-Bidding (Investigation) Viewing of Site – Bidders must carefully view and examine the **Site** of the proposed **Work**, as well as its adjacent area, and seek other usual sources of information, for they will be conclusively presumed to have full knowledge of any and all conditions and hazards on, about or above the **Site** relating to or affecting in any way the performance of the **Work** to be done under the **Contract** that were or should have been known by a reasonably prudent bidder. To arrange a date for visiting the **Site**, bidders are to contact the **Agency** contact person specified in the bid documents.

78.2 Should the **Contractor** encounter during the progress of the Work site conditions or environmental hazards at the **Site** materially differing from any shown on the **Contract Drawings** or indicated in the **Specifications** or such conditions or environmental hazards as could not reasonably have been anticipated by the **Contractor**, which conditions or hazards will materially affect the cost of the **Work** to be done under the **Contract**, the attention of the **Commissioner** must be called immediately to such conditions or hazards before they are disturbed. The **Commissioner** shall thereupon promptly investigate the conditions or hazards. If the **Commissioner** finds that they do so materially differ, and that they could not have been reasonably anticipated by the **Contractor**, the **Contract** may be modified with the **Commissioner's** written approval.



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

**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 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 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 6-129(c)(22)). **PLEASE NOTE: If this Contract is a public works project subject to GML §101(5) (i.e., a contract valued at or below \$3M for projects in New York City) or if the Contract is subject to a project labor agreement in accordance with Labor Law §222, and the bidder is required to identify at the time of bid submission its intended subcontractors for the Wicks trades (plumbing and gas fitting; steam heating, hot water heating, ventilating and air conditioning (HVAC); and electric wiring), the Contractor must identify all those to which it intends to award construction subcontracts for any portion of the Wicks trade work at the time of bid submission, regardless of what point in the life of the contract such subcontracts will occur. In identifying intended subcontractors in the bid submission, bidders may satisfy any Participation Goals established for this Contract by proposing one or more subcontractors that are MBEs and/or WBEs for any portion of the Wicks trade work. In the event that the Contractor's selection of a subcontractor is disapproved, the Contractor shall have a reasonable time to propose alternate subcontractors.**

6. MBE and WBE firms must be certified by DSBS in order for the Contractor to credit such firms' participation toward the attainment of the **Participation Goals**. Such certification must occur prior to the

firms' commencement of work. A list of MBE and WBE firms may be obtained from the DSBS website at [www.nyc.gov/buycertified](http://www.nyc.gov/buycertified), by emailing DSBS at [buyer@sbs.nyc.gov](mailto: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](http://www.nyc.gov/getcertified), emailing [MWBE@sbs.nyc.gov](mailto:MWBE@sbs.nyc.gov), or calling the DSBS certification helpline at (212) 513-6311. A firm that is certified as both an MBE and a WBE may be counted either toward the goal for MBEs or the goal for WBEs, but not both. No credit shall be given for participation by a graduate MBE or graduate WBE, as defined in Section 6-129(c)(20).

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

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

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

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

(b) To apply for a full or partial waiver of the **Participation Goals**, a bidder, proposer, or contractor, as applicable, must complete Part 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](mailto: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 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, including but not limited to, by reviewing the percentage of work the Contractor has actually awarded to MBE and/or WBE subcontractors and the payments the Contractor made to such subcontractors.

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 6-129. See §6-129(e)(10). Furthermore, such resulting contract may also be examined by the City's Comptroller to assess compliance with the **M/WBE** Utilization Plan.

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

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

- (a) entering into an agreement with the Contractor allowing the Contractor to cure the violation;
- (b) revoking the Contractor's pre-qualification to bid or make proposals for future contracts;
- (c) making a finding that the Contractor is in default of the Contract;
- (d) terminating the Contract;
- (e) declaring the Contractor to be in breach of Contract;
- (f) withholding payment or reimbursement;
- (g) determining not to renew the Contract;
- (h) assessing actual and consequential damages;
- (i) assessing liquidated damages or reducing fees, provided that liquidated damages may be based on amounts representing costs of delays in carrying out the purposes of the M/WBE Program, or in meeting the purposes of the Contract, the costs of meeting utilization goals through additional procurements, the administrative costs of investigation and enforcement, or other factors set forth in the Contract;
- (j) exercising rights under the Contract to procure goods, services or construction from another contractor and charge the cost of such contract to the Contractor that has been found to be in noncompliance; or
- (k) taking any other appropriate remedy.

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

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

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

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



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.

THE CITY OF NEW YORK

By: 

Commissioner


CONTRACTOR:

By: 

Secretary/Treasurer  
(Member of Firm or Officer of Corporation)

Title: SECRETARY/TREASURER

(Where Contractor is a Corporation, add):  
Attest:

  
Secretary

(Seal)

ACKNOWLEDGEMENT OF PRINCIPAL, IF A CORPORATION

State of New York County of Queens ss:

On this 20 day of November, 2017, before me personally came STEVEN VESCO  
to me known who, being by me duly sworn did depose and say that he resides at  
BRIARCLIFF MANOR, NY 10510 that he is the SECRETARY / TREASURER  
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.

VICTORIA AYO-VAUGHAN  
Notary Public, State of New York  
Registration #01AY5014042  
Qualified in Queens County  
Commission Expires July 15, 2019  
Notary Public or Commissioner of Deeds

ACKNOWLEDGEMENT OF PRINCIPAL, IF A PARTNERSHIP

State of \_\_\_\_\_ County of \_\_\_\_\_ ss:

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

\_\_\_\_\_  
Notary Public or Commissioner of Deeds

ACKNOWLEDGEMENT OF PRINCIPAL, IF AN INDIVIDUAL

State of \_\_\_\_\_ County of \_\_\_\_\_ ss:

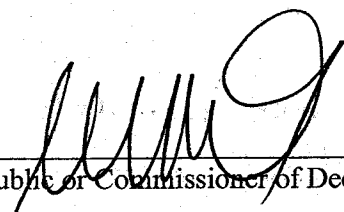
On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, before me personally appeared \_\_\_\_\_  
to me known, and known to me to be the person described in and who executed the foregoing instrument;  
and acknowledged that he executed the same.

\_\_\_\_\_  
Notary Public or Commissioner of Deeds

ACKNOWLEDGEMENT BY COMMISSIONER

State of New York County of Queens ss:

On this 20<sup>th</sup> day of Nov., 2017, before me personally came Eric MacFarlane 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.

  
\_\_\_\_\_  
Notary Public or Commissioner of Deeds

VICTORIA AYO-VAUGHAN  
Notary Public, State of New York  
Registration #01AY5014042  
Qualified in Queens County  
Commission Expires July 15, 2019

AUTHORITY

MAYOR'S CERTIFICATE NO. CBX  
BUDGET DIRECTOR'S CERTIFICATE NO.

DATED  
DATED

APPROPRIATION  
COMMISSIONER'S 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

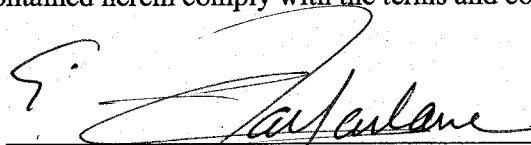
Five million three hundred  
eighty six thousand —

Dollars (\$ 5,386,000.00)

is chargeable to the fund of the Department of Design and Construction entitled Code

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Department of Design and Construction

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

  
\_\_\_\_\_  
Commissioner

COMPTROLLER'S CERTIFICATE

The City of New York \_\_\_\_\_

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:

\$ \_\_\_\_\_

\_\_\_\_\_  
Comptroller

MAYOR'S CERTIFICATE OR  
CERTIFICATE OF THE DIRECTOR  
OF THE BUDGET

**Payment Bond (Pages 108 to 111): Use for any contract for which a Payment Bond is required.**

PAYMENT BOND (Page 1)

PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS, That we, \_\_\_\_\_

LAWS CONSTRUCTION CORP.

34 IRVINGTON STREET, PLEASANTVILLE, NY 10570

hereinafter referred to as the "Principal", and Fidelity and Deposit Company of Maryland

600 Red Brook Blvd., Suite 600, Owings Mills, MD 21117

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

Five Million Three Hundred Eighty Six Thousand Dollars and 00/100

(\$ 5,386,000.00 ) 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  
FMS ID: HWXS511 - DDC PIN: 8502017HW0043C - RECONSTRUCTION OF WEST TREMONT  
AVENUE STEP STREET/THE BRONX

a copy of which Contract is annexed to and hereby made a part of this bond as though herein set forth in full;

NOW, THEREFORE, the conditions of this obligation are such that if the Principal, his or its representatives or assigns and other Subcontractors to whom Work under this Contract is sublet and his or their successors and assigns shall promptly pay or cause to be paid all lawful claims for

(a) Wages and compensation for labor performed and services rendered by all persons engaged in the prosecution of the Work under said Contract, and any amendment or extension thereof or addition thereto, whether such persons be agents servants or employees of the Principal or any such Subcontractor, including all persons so engaged who perform the work of laborers or mechanics at or in the vicinity of the site

CITY OF NEW YORK  
DDC

STANDARD CONSTRUCTION CONTRACT  
March 2017

**Payment Bond (Pages 108 to 111): Use for any contract for which a Payment Bond is required.**

**PAYMENT BOND (Page 2)**

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 structure or not), as well as teams, fuels, oils, implements or machinery furnished, used or consumed by said Principal or any subcontractor at or in the vicinity of the site of the Project in the prosecution of the Work under said Contract and any amendment or extension thereof or addition thereto; then this obligation shall be void, otherwise to remain in full force and effect.

This bond is subject to the following additional conditions, limitations and agreements:

(a) The Principal and Surety (Sureties) agree that this bond shall be for the benefit of any materialmen or laborer having a just claim, as well as the City itself.

(b) All persons who have performed labor, rendered services or furnished materials and supplies, as aforesaid, shall have a direct right of action against the Principal and his, its or their successors and assigns, and the Surety (Sureties) herein, or against either or both or any of them and their successors and assigns. Such persons may sue in their own name, and may prosecute the suit to judgment and execution without the necessity of joining with any other persons as party plaintiff.

(c) The Principal and Surety (Sureties) agree that neither of them will hold the City liable for any judgment for costs of otherwise, obtained by either or both of them against a laborer or materialman in a suit brought by either a laborer or materialman under this bond for moneys allegedly due for performing work or furnishing material.

(d) The Surety (Sureties) or its successors and assigns shall not be liable for any compensation recoverable by an employee or laborer under the Workmen's Compensation Law.

(e) In no event shall the Surety (Sureties), or its successors or assigns, be liable for a greater sum than the penalty of this bond or be subject to any suit, action or proceeding hereon that is instituted by any person, firm, or corporation hereunder later than two years after the complete performance of said Contract and final settlement thereof.

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

And the Surety (Sureties), for value received, for itself and its successors and assigns, hereby stipulates and agrees that the obligation of said Surety (Sureties), and its bonds shall be in no way impaired or affected by any extension of time, modification, omission, addition, or change in or of the said Contract or the work to be performed thereunder, or by any payment thereunder before the time required therein, or by any waiver of any provisions thereof, or by any assignment, subletting or other transfer thereof or of any part thereof, or of any Work to be performed, or any moneys due to become due thereunder and said Surety (Sureties) does hereby waive notice of any and all of such extensions, modifications, omissions, additions, changes, payments, waivers, assignments, subcontracts and transfers, and hereby expressly stipulates and agrees that any and all things done and omitted to be done by and in relation to assignees, Subcontractors, and other transferees shall have the same effect as to said Surety (Sureties) as though done or omitted to be done or in relation to said Principal.

**Payment Bond (Pages 108 to 111): Use for any contract for which a Payment Bond is required.**

**PAYMENT BOND (Page 3)**

IN WITNESS WHEREOF, the Principal and the Surety (Sureties) have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereunto affixed and these presents to be signed by their proper officers, this 15th day of November, 2017.

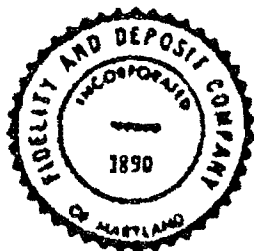
(Seal)

LAWS CONSTRUCTION CORP. (L.S.)

Principal

By: [Signature]

(Seal)



Fidelity and Deposit Company of Maryland

Surety

By: [Signature]

William D. Haas, Attorney-in-Fact

(Seal)

Surety

By: \_\_\_\_\_

(Seal)

Surety

By: \_\_\_\_\_

(Seal)

Surety

By: \_\_\_\_\_

If the Contractor (Principal) is a partnership, the bond should be signed by each of the individuals who are partners.

If the Contractor (Principal) is a corporation, the bond should be signed in its correct corporate name by 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.



**Payment Bond (Pages 108 to 111): Use for any contract for which a Payment Bond is required.**

PAYMENT BOND (Page 4)

**ACKNOWLEDGMENT OF PRINCIPAL, IF A CORPORATION**

State of NEW YORK County of WESTCHESTER ss:

On this 15<sup>th</sup> day of NOVEMBER, 2017, before me personally came WILLIAM J. VESCO to me known, who, being by me duly sworn did depose and say that he resides at BRIARCLIFF MANOR NEW YORK that he is the 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.

Elizabeth A. Bruno  
Notary Public or Commissioner of Deeds

Elizabeth A. Bruno  
Notary Public, State of New York  
No. 01BR26075295  
Qualified in Dutchess County  
Commission Expires June 03, 20 18

**ACKNOWLEDGMENT OF PRINCIPAL, IF A PARTNERSHIP**

State of \_\_\_\_\_ County of \_\_\_\_\_ ss:

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

\_\_\_\_\_  
Notary Public or Commissioner of Deeds

**ACKNOWLEDGMENT OF PRINCIPAL, IF AN INDIVIDUAL**

State of \_\_\_\_\_ County of \_\_\_\_\_ ss:

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

\_\_\_\_\_  
Notary Public or Commissioner of Deeds

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

\*\*\*\*\*

Affix Acknowledgments and Justification of Sureties.

BOND

BOND

**ACKNOWLEDGMENT BY SURETY COMPANY**  
**(Signed by One Authorized Person)**

STATE OF NEW YORK )  
COUNTY OF WESTCHESTER) ss.:

On this 15 day of November, 2017, before me personally came

WILLIAM D. HAAS  
(Name) to me known, and known to me to be the

ATTORNEY-IN-FACT of FIDELITY AND DEPOSIT COMPANY OF MARYLAND,  
(Title) (Name of Corporation)

the Corporation described in and which executed the within instrument, who being by me duly sworn did depose and say that he/she resides at RYE, NEW YORK

\_\_\_\_\_ and that he/she is the ATTORNEY-IN-FACT of said Corporation  
(Title)

and knows the Corporate Seal of the said Corporation; that the seal affixed to the within instrument is such Corporate Seal and so affixed by order of the Board of Directors of said Corporation and that he/she signed his/her name thereto by like order; and that the said Corporation has received from the Superintendent of Insurance of the State of New York a Certificate of Solvency, and of its sufficiency as Surety or Guarantor, pursuant to Section 327 of the Insurance Law of the State of New York as amended, and that such Certificate has not been revoked.

Notary Public

ALICE MCCARTHY  
NOTARY PUBLIC, State of New York  
No. 01MC5079342  
Qualified in Dutchess County  
Commission Expires June 02, 2019

# FIDELITY AND DEPOSIT COMPANY

OF MARYLAND

600 Red Brook Blvd., Suite 600, Owings Mills, MD 21117

## Statement of Financial Condition

As Of December 31, 2016

### ASSETS

Bonds .....	\$ 141,903,342
Stocks .....	22,845,654
Cash and Short Term Investments .....	3,080,053
Reinsurance Recoverable .....	13,996,720
Other Accounts Receivable .....	27,147,872
<b>TOTAL ADMITTED ASSETS .....</b>	<b>\$ 208,973,641</b>

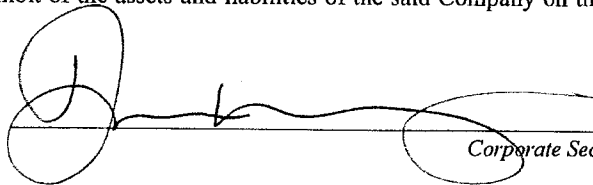
### LIABILITIES, SURPLUS AND OTHER FUNDS

Reserve for Taxes and Expenses .....	\$ 896,428
Ceded Reinsurance Premiums Payable .....	40,193,693
Securities Lending Collateral Liability .....	0
<b>TOTAL LIABILITIES .....</b>	<b>\$ 41,090,121</b>
Capital Stock, Paid Up .....	\$ 5,000,000
Surplus .....	162,883,521
<b>Surplus as regards Policyholders .....</b>	<b>167,883,520</b>
<b>TOTAL .....</b>	<b>\$ 208,973,641</b>

Securities carried at \$62,166,344 in the above statement are deposited with various states as required by law.

Securities carried on the basis prescribed by the National Association of Insurance Commissioners. On the basis of market quotations for all bonds and stocks owned, the Company's total admitted assets at December 31, 2016 would be \$209,350,832 and surplus as regards policyholders \$168,260,711.

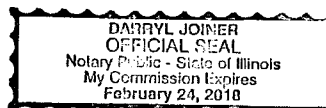
I, DENNIS F. KERRIGAN, Corporate Secretary of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing statement is a correct exhibit of the assets and liabilities of the said Company on the 31st day of December, 2016.

  
Corporate Secretary

State of Illinois }  
City of Schaumburg } SS:

Subscribed and sworn to, before me, a Notary Public of the State of Illinois, in the City of Schaumburg, this 1<sup>st</sup> day of March, 2017.

  
Notary Public



Bond Number PRF9258500

Obligee: City of New York

**ZURICH AMERICAN INSURANCE COMPANY  
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY  
FIDELITY AND DEPOSIT COMPANY OF MARYLAND  
POWER OF ATTORNEY**

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Maryland, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Maryland (herein collectively called the "Companies"), by **Michael P. Bond, Vice President**, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint **William D. Haas**, its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: **any and all bonds and undertakings**, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND, this 24th day of April, A.D. 2017.

ATTEST:  
ZURICH AMERICAN INSURANCE COMPANY  
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY  
FIDELITY AND DEPOSIT COMPANY OF MARYLAND

*Michael P. Bond*

By: **Michael P. Bond**  
Vice President



*Dawn E. Brown*

By: **Dawn E. Brown**  
Secretary

State of Maryland  
County of Baltimore

On this 24th day of April, A.D. 2017, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **Michael P. Bond, Vice President and Dawn E. Brown, Secretary** of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, depose and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.

*Constance A. Dunn*  
Constance A. Dunn, Notary Public  
My Commission Expires: July 9, 2019



## EXTRACT FROM BY-LAWS OF THE COMPANIES

"Article V, Section 8, Attorneys-in-Fact. The Chief Executive Officer, the President, or any Executive Vice President or Vice President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Company, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify or revoke any such appointment or authority at any time."

### CERTIFICATE

I, the undersigned, Vice President of the ZURICH AMERICAN INSURANCE COMPANY, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that Article V, Section 8, of the By-Laws of the Companies is still in force.

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the ZURICH AMERICAN INSURANCE COMPANY at a meeting duly called and held on the 15th day of December 1998.

RESOLVED: "That the signature of the President or a Vice President and the attesting signature of a Secretary or an Assistant Secretary and the Seal of the Company may be affixed by facsimile on any Power of Attorney....Any such Power or any certificate thereof bearing such facsimile signature and seal shall be valid and binding on the Company."

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at a meeting duly called and held on the 5th day of May, 1994, and the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990.

RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this 15th day of November, 2017.



*Michael C. Fay*

Michael C. Fay, Vice President

**TO REPORT A CLAIM WITH REGARD TO A SURETY BOND, PLEASE SUBMIT A COMPLETE DESCRIPTION OF THE CLAIM INCLUDING THE PRINCIPAL ON THE BOND, THE BOND NUMBER, AND YOUR CONTACT INFORMATION TO:**

Zurich Surety Claims  
1299 Zurich Way  
Schaumburg, IL 60196-1056  
[www.zurichna.com/en/claims](http://www.zurichna.com/en/claims)

Bond No PRF9258500

**Performance Bond #2 (Pages 104 to 107): Use if the total contract price is more than \$5 Million.**

PERFORMANCE BOND #2 (Page 1)

**PERFORMANCE BOND #2**

**KNOW ALL PERSONS BY THESE PRESENTS:**  
That we, LAWS CONSTRUCTION CORP.

34 IRVINGTON STREET, PLEASANTVILLE, NY 10570

hereinafter referred to as the "Principal,"  
and, Fidelity and Deposit Company of Maryland

600 Red Brook Blvd., Suite 600, Owings Mills, MD 21117

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 Five Million Three Hundred Eighty Six Thousand Dollars and 00/100

(\$ 5,386,000.00) 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

FMS ID: HWXS511 - DDC PIN: 8502017HW0043C - RECONSTRUCTION OF WEST TREMONT

AVENUE STEP STREET/THE BRONX

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

CITY OF NEW YORK  
DDC

STANDARD CONSTRUCTION CONTRACT  
March 2017

**Performance Bond #2 (Pages 104 to 107): Use if the total contract price is more than \$5 Million.**

**PERFORMANCE BOND #2 (Page 2)**

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 either (1) pay the full amount of the above penal sum in complete discharge and exoneration of this bond and of all the liabilities of the Surety relating to this bond, or (2) fully perform and complete the Work to be performed under the Contract, pursuant to the terms, conditions, and covenants thereof. The Surety (Sureties) further agrees, at its option, either to tender the penal sum or to commence and diligently perform the Work specified in the Contract, including physical site work, within twenty-five (25) business days after written notice thereof from the City and to complete all Work within the time set forth in the Contract or such other time as agreed to between the City and Surety in accordance with the Contract. The Surety and the City reserve all rights and defenses each may have against the other; provided, however, that the Surety expressly agrees that its reservation of rights shall not provide a basis for non-performance of its obligation to commence and to complete all Work as provided herein.

The Surety (Sureties), for value received, for itself and its successors and assigns, hereby stipulates and agrees that the obligation of said Surety (Sureties) and its bond shall be in no way impaired or affected by any extension of time, modification, omission, addition, or change in or to the said Contract or the Work to be performed thereunder, or by any payment thereunder before the time required therein, or by any waiver of any provisions thereof, or by any assignment, subletting or other transfer thereof or of any Work to be performed or any moneys due or to become due thereunder; and said Surety (Sureties) does hereby waive notice of any and all of such extensions, modifications, omissions, additions, changes, payments, waivers, assignments, subcontracts and transfers, and hereby expressly stipulates and agrees that any and all things done and omitted to be done by and in relation to assignees, subcontractors, and other transferees shall have the same effect as to said Surety (Sureties) as though done or omitted to be done by or in relation to said Principal.

**Performance Bond #2 (Pages 104 to 107): Use if the total contract price is more than \$5 Million.**

**PERFORMANCE BOND #2 (Page 3)**

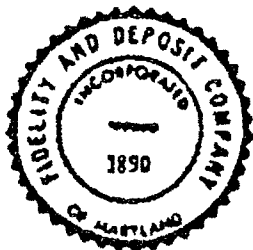
IN WITNESS WHEREOF, The Principal and the Surety (Sureties) have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereunto affixed and these presents to be signed by their proper officers, this 15th day of November, 2017.

(Seal)

LAWS CONSTRUCTION CORP. (L.S.)  
Principal

By: [Signature]

(Seal)



Fidelity and Deposit Company of Maryland  
Surety

By: [Signature]

William D. Haas, Attorney-in-Fact

(Seal)

Surety

By: \_\_\_\_\_

(Seal)

Surety

By: \_\_\_\_\_

(Seal)

Surety

By: \_\_\_\_\_

(Seal)

Surety

By: \_\_\_\_\_

Bond Premium Rate 16.56 SLIDE  
Bond Premium Cost 52,477

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.



**ACKNOWLEDGMENT OF PRINCIPAL IF A CORPORATION**

State of NEW YORK County of WESTCHESTER ss:

On this 15<sup>th</sup> day of NOVEMBER, 2017 before me personally came WILLIAM J. VESCO

to me known, who, being by me duly sworn did depose and say that he/she resides at BRIARCLIFF MANOR

NEW YORK; that he/she is the PRESIDENT of the corporation described in and which executed the foregoing instrument; and that he/she signed his/her name to the foregoing instrument by order of the directors of said corporation as the duly authorized and binding act thereof.

Elizabeth A. Bruno  
Notary Public, State of New York  
No. 01BR26075295  
Qualified in Dutchess County  
Notary Public or Commissioner of Deeds Commission Expires June 03, 20 18

**ACKNOWLEDGMENT OF PRINCIPAL IF A PARTNERSHIP**

State of \_\_\_\_\_ County of \_\_\_\_\_ ss:

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me personally came \_\_\_\_\_

to me known, who, being by me duly sworn did depose and say that he/she resides at \_\_\_\_\_

\_\_\_\_\_; that he/she is \_\_\_\_\_ partner of \_\_\_\_\_, a limited/general partnership existing under the laws of the State of \_\_\_\_\_, the partnership described in and which executed the foregoing instrument; and that he/she signed his/her name to the foregoing instrument as the duly authorized and binding act of said partnership.

\_\_\_\_\_  
Notary Public or Commissioner of Deeds

**ACKNOWLEDGMENT OF PRINCIPAL IF AN INDIVIDUAL**

State of \_\_\_\_\_ County of \_\_\_\_\_ ss:

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me personally came \_\_\_\_\_

to me known, who, being by me duly sworn did depose and say that he/she resides at \_\_\_\_\_

\_\_\_\_\_, and that he/she is the individual whose name is subscribed to the within instrument and acknowledged to me that by his/her signature on the instrument, said individual executed the instrument.

\_\_\_\_\_  
Notary Public or Commissioner of Deeds

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

\*\*\*\*\*

Affix Acknowledgments and Justification of Sureties.

CITY OF NEW YORK  
DDC

STANDARD CONSTRUCTION CONTRACT  
March 2017

BOND

BOND

ACKNOWLEDGMENT BY SURETY COMPANY  
(Signed by One Authorized Person)

STATE OF NEW YORK        )  
                                  ) ss.:  
COUNTY OF WESTCHESTER)

On this 15 day of November, 2017, before me personally came

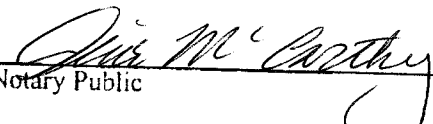
WILLIAM D. HAAS  
(Name) to me known, and known to me to be the

ATTORNEY-IN-FACT of FIDELITY AND DEPOSIT COMPANY OF MARYLAND,  
(Title) (Name of Corporation)

the Corporation described in and which executed the within instrument, who being by me duly sworn did depose and say that he/she resides at RYE, NEW YORK

\_\_\_\_\_ and that he/she is the ATTORNEY-IN-FACT of said Corporation  
(Title)

and knows the Corporate Seal of the said Corporation; that the seal affixed to the within instrument is such Corporate Seal and so affixed by order of the Board of Directors of said Corporation and that he/she signed his/her name thereto by like order; and that the said Corporation has received from the Superintendent of Insurance of the State of New York a Certificate of Solvency, and of its sufficiency as Surety or Guarantor, pursuant to Section 327 of the Insurance Law of the State of New York as amended, and that such Certificate has not been revoked.

  
Notary Public

ALICE MCCARTHY  
NOTARY PUBLIC, State of New York  
No. 01MC5079342  
Qualified in Dutchess County  
Commission Expires June 02, 2019

# FIDELITY AND DEPOSIT COMPANY

OF MARYLAND

600 Red Brook Blvd., Suite 600, Owings Mills, MD 21117

## Statement of Financial Condition

As Of December 31, 2016

### ASSETS

Bonds .....	\$ 141,903,342
Stocks .....	22,845,654
Cash and Short Term Investments .....	3,080,053
Reinsurance Recoverable .....	13,996,720
Other Accounts Receivable .....	27,147,872
TOTAL ADMITTED ASSETS .....	<u>\$ 208,973,641</u>

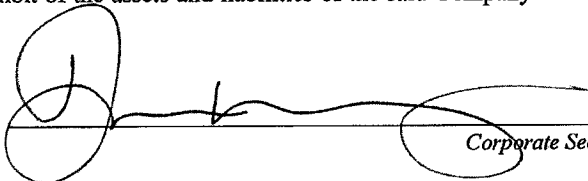
### LIABILITIES, SURPLUS AND OTHER FUNDS

Reserve for Taxes and Expenses .....	\$ 896,428
Ceded Reinsurance Premiums Payable .....	40,193,693
Securities Lending Collateral Liability .....	0
TOTAL LIABILITIES .....	<u>\$ 41,090,121</u>
Capital Stock, Paid Up .....	\$ 5,000,000
Surplus .....	<u>162,883,521</u>
Surplus as regards Policyholders .....	167,883,520
TOTAL .....	<u>\$ 208,973,641</u>

Securities carried at \$62,166,344 in the above statement are deposited with various states as required by law.

Securities carried on the basis prescribed by the National Association of Insurance Commissioners. On the basis of market quotations for all bonds and stocks owned, the Company's total admitted assets at December 31, 2016 would be \$209,350,832 and surplus as regards policyholders \$168,260,711.

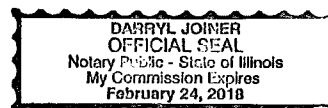
I, DENNIS F. KERRIGAN, Corporate Secretary of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing statement is a correct exhibit of the assets and liabilities of the said Company on the 31st day of December, 2016.

  
Corporate Secretary

State of Illinois }  
City of Schaumburg } SS:

Subscribed and sworn to, before me, a Notary Public of the State of Illinois, in the City of Schaumburg, this 1<sup>st</sup> day of March, 2017.

  
Notary Public



Bond Number PRF9258500

Obligee: City of New York

**ZURICH AMERICAN INSURANCE COMPANY  
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY  
FIDELITY AND DEPOSIT COMPANY OF MARYLAND  
POWER OF ATTORNEY**

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Maryland, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Maryland (herein collectively called the "Companies"), by **Michael P. Bond, Vice President**, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint **William D. Haas**, its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: **any and all bonds and undertakings**, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND, this 24th day of April, A.D. 2017.

ATTEST:  
ZURICH AMERICAN INSURANCE COMPANY  
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY  
FIDELITY AND DEPOSIT COMPANY OF MARYLAND

*Michael P. Bond*

By: **Michael P. Bond**  
Vice President



*Dawn E. Brown*

By: **Dawn E. Brown**  
Secretary

State of Maryland  
County of Baltimore

On this 24th day of April, A.D. 2017, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **Michael P. Bond, Vice President and Dawn E. Brown, Secretary** of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, depose and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.

*Constance A. Dunn*  
Constance A. Dunn, Notary Public  
My Commission Expires: July 9, 2019



## EXTRACT FROM BY-LAWS OF THE COMPANIES

"Article V, Section 8, Attorneys-in-Fact. The Chief Executive Officer, the President, or any Executive Vice President or Vice President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Company, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify or revoke any such appointment or authority at any time."

### CERTIFICATE

I, the undersigned, Vice President of the ZURICH AMERICAN INSURANCE COMPANY, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that Article V, Section 8, of the By-Laws of the Companies is still in force.

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RESOLVED: "That the signature of the President or a Vice President and the attesting signature of a Secretary or an Assistant Secretary and the Seal of the Company may be affixed by facsimile on any Power of Attorney...Any such Power or any certificate thereof bearing such facsimile signature and seal shall be valid and binding on the Company."

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at a meeting duly called and held on the 5th day of May, 1994, and the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990.

RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this 15th day of November, 2017.



*Michael C. Fay*

Michael C. Fay, Vice President

**TO REPORT A CLAIM WITH REGARD TO A SURETY BOND, PLEASE SUBMIT A COMPLETE DESCRIPTION OF THE CLAIM INCLUDING THE PRINCIPAL ON THE BOND, THE BOND NUMBER, AND YOUR CONTACT INFORMATION TO:**

Zurich Surety Claims  
1299 Zurich Way  
Schaumburg, IL 60196-1056  
[www.zurichna.com/en/claims](http://www.zurichna.com/en/claims)



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)  
11/20/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must have **ADDITIONAL INSURED** provisions or be endorsed. If **SUBROGATION IS WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Construction Risk Partners a JLT Group Company Campus View Plaza 1250 Route 28, Suite 201 Branchburg, NJ 08876	1-908-566-1010	<b>CONTACT NAME:</b> Evan Gilbert <b>PHONE (A/C, No, Ext):</b> 516-962-8170 <b>FAX (A/C, No):</b> 516-962-8180 <b>E-MAIL ADDRESS:</b> certs@constructionriskpartners.com																					
<b>INSURED</b> Laws Construction Corp.  34 Irvington Street  Pleasantville, NY 10571		<table border="1"><thead><tr><th colspan="2">INSURER(S) AFFORDING COVERAGE</th><th>NAIC #</th></tr></thead><tbody><tr><td>INSURER A:</td><td>STARR IND &amp; LIAB CO</td><td>38318</td></tr><tr><td>INSURER B:</td><td>ASPEN AMER INS CO</td><td>43460</td></tr><tr><td>INSURER C:</td><td></td><td></td></tr><tr><td>INSURER D:</td><td></td><td></td></tr><tr><td>INSURER E:</td><td></td><td></td></tr><tr><td>INSURER F:</td><td></td><td></td></tr></tbody></table>	INSURER(S) AFFORDING COVERAGE		NAIC #	INSURER A:	STARR IND & LIAB CO	38318	INSURER B:	ASPEN AMER INS CO	43460	INSURER C:			INSURER D:			INSURER E:			INSURER F:		
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INSURER E:																							
INSURER F:																							

**COVERAGES****CERTIFICATE NUMBER:** 51397833**REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input checked="" type="checkbox"/> LOC <input type="checkbox"/> OTHER:	X	X	1000025421161	10/21/16	01/21/18	EACH OCCURRENCE \$ 2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 2,000,000 GENERAL AGGREGATE \$ 4,000,000 PRODUCTS - COMP/OP AGG \$ 4,000,000
A	<b>AUTOMOBILE LIABILITY</b> <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY	X	X	SISIPCA08212716	10/21/16	01/21/18	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
A	<b>UMBRELLA LIAB</b> <input checked="" type="checkbox"/> OCCUR <b>EXCESS LIAB</b> <input type="checkbox"/> CLAIMS-MADE  DED <input type="checkbox"/> RETENTION \$			1000022096	10/21/16	01/21/18	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000
A	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) <input type="checkbox"/> Y/N If yes, describe under DESCRIPTION OF OPERATIONS below		N/A	100 0001036	10/21/17	01/21/18	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
B	<b>Property/Equipment</b>			IMZ064417	10/21/17	01/21/18	Engineers Field Office-Business Personal Property 40,000

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

Re: FMS ID: HWXS511 DDC Pin: 8502017 HW0043C Reconstruction of West Tremont Avenue Step Street, Borough of the Bronx  
The city of New York including its officials and employees are an additional insured as required by written contract.

**CERTIFICATE HOLDER****CANCELLATION**

New York City Department of Design and Construction

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

0-30 Thomson Avenue

AUTHORIZED REPRESENTATIVE

Long Island City, NY 11101-3045

USA

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**Workers'  
Compensation  
Board**

**CERTIFICATE OF INSURANCE COVERAGE  
UNDER THE NYS DISABILITY BENEFITS LAW**

**PART 1. To be completed by Disability Benefits Carrier or Licensed Insurance Agent of that Carrier**

1a. Legal Name and Address of Insured (Use street address only)

LAWS CONSTRUCTION CORP.  
34 IRVINGTON STREET  
PLEASANTVILLE, NY 10570

Work Location of Insured (Only required if coverage is specifically limited to certain locations in New York State, i.e., a Wrap-Up Policy)

1b. Business Telephone Number of Insured

914 741-2100

1c. NYS Unemployment Insurance Employer Registration Number of Insured

45383104

1d. Federal Employer Identification Number of Insured or Social Security Number

13 3209931

2. Name and Address of the Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder)

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION  
30-30 THOMSON AVENUE  
LONG ISLAND CITY, NY 11101

3a. Name of Insurance Carrier

**The Guardian Life Insurance Company of America**

3b. Policy Number of entity listed in box "1a":

00971321-002

3c. Policy effective period:

07/21/2017

to 07/21/2018

4. Policy Covers:

- a. ☒ All of the employer's employees eligible under the New York Disability Benefits Law  
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 insurance carrier referenced above and that the named insured has NYS Disability Benefits insurance coverage as described above.

*Stuart J. Shaw*

Date Signed: 11/14/2017

By: Stuart J. Shaw, FSA, MAAA

(Signature of insurance carrier's authorized representative or NYS Licensed Insurance Agent of that insurance carrier)

Telephone Number: 1-888-278-4542

Title: Vice President, Group Insurance

**IMPORTANT:** If Box "4a" is checked, and this form is signed by the insurance carrier's authorized representative or NYS Licensed Insurance Agent of that carrier, this certificate is **COMPLETE**. Mail it directly to the certificate holder.  
If Box "4b" is checked, this certificate is **NOT COMPLETE** for purposes of Section 220, Subd. 8 of the Disability Benefits Law. It must be mailed for completion to the Workers' Compensation Board, DB Plans Acceptance Unit, 328 State Street, Schenectady, NY 12305

**PART 2. To be completed by NYS Workers' Compensation Board (Only if box "4b" of Part 1 has been checked)**

**State Of New York  
Workers' Compensation Board**

According to information maintained by the NYS Workers' Compensation Board, the above-named employer has complied with the NYS Disability Benefits Law with respect to all of his/her employees.

Date Signed: \_\_\_\_\_

By: \_\_\_\_\_

(Signature of NYS Workers' Compensation Board Employee)

Telephone Number: \_\_\_\_\_ Title: \_\_\_\_\_

**Please Note:** Only insurance carriers licensed to write NYS disability benefits insurance policies and NYS licensed insurance agents of those insurance carriers are authorized to issue Form DB-120.1. **Insurance brokers are NOT authorized to issue this form.**

## Additional Instructions for Form DB-120.1

By signing this form, the insurance carrier identified in box "3" on this form is certifying that it is insuring the business referenced in box "1a" for disability benefits under the New York State Disability Benefits Law. The Insurance Carrier or its licensed agent will send this Certificate of Insurance to the entity listed as the certificate holder in box "2".

Will the carrier notify the certificate holder within 10 days of a policy being cancelled for non-payment of premium or within 30 days if cancelled for any other reason or if the insured is otherwise eliminated from the coverage indicated on this certificate prior to the end of the policy effective period? ☐ YES ☒ NO

This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policy listed, nor does it confer any rights or responsibilities beyond those contained in the referenced policy.

This certificate may be used as evidence of a Disability Benefits contract of insurance only while the underlying policy is in effect.

**Please Note: Upon the cancellation of the disability benefits policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of NYS Disability Benefits Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Disability Benefits Law.**

### DISABILITY BENEFITS LAW

#### §220.Subd. 8

- (a) The head of a state or municipal department, board, commission or office authorized or required by law to issue any permit for or in connection with any work involving the employment of employees in employment as defined in this article, and notwithstanding any general or special statute requiring or authorizing the issue of such permits, shall not issue such permit unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits for all employees has been secured as provided by this article. Nothing herein, however, shall be construed as creating any liability on the part of such state or municipal department, board, commission or office to pay any disability benefits to any such employee if so employed.
- (b) The head of a state or municipal department, board, commission or office authorized or required by law to enter into any contract for or in connection with any work involving the employment of employees in employment as defined in this article and notwithstanding any general or special statute requiring or authorizing any such contract, shall not enter into any such contract unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits for all employees has been secured as provided by this article.





**Workers'  
Compensation  
Board**

**CERTIFICATE OF  
NYS WORKERS' COMPENSATION INSURANCE COVERAGE**

<b>1a. Legal Name &amp; Address of Insured (use street address only)</b>  Laws Construction Corporation 34 Irvington Street Pleasantville, NY 10571  <i>Work Location of Insured (Only required if coverage is specifically limited to certain locations in New York State, i.e., a Wrap-Up Policy)</i>	<b>1b. Business Telephone Number of Insured</b> (814)741-2100  <b>1c. NYS Unemployment Insurance Employer Registration Number of Insured</b>  <b>1d. Federal Employer Identification Number of Insured or Social Security Number</b> 133209931
<b>2. Name and Address of Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder)</b>  New York City Department of Design and Construction 30-30 Thomson Avenue Long Island City, NY 11101	<b>3a. Name of Insurance Carrier</b> Starr Indemnity & Liability Company  <b>3b. Policy Number of Entity Listed in Box "1a"</b> 100 0001036  <b>3c. Policy effective period</b> 10/21/2017 to 01/21/2018  <b>3d. The Proprietor, Partners or Executive Officers are</b> <input checked="" type="checkbox"/> Included. (Only check box if all partners/officers included) <input type="checkbox"/> all excluded or certain partners/officers excluded.

This certifies that the insurance carrier indicated above in box "3" insures the business referenced above in box "1a" for workers' compensation under the New York State Workers' Compensation Law. (To use this form, New York (NY) must be listed under **Item 3A** on the **INFORMATION PAGE** of the workers' compensation insurance policy). The Insurance Carrier or its licensed agent will send this Certificate of Insurance to the entity listed above as the certificate holder in box "2".

Will the carrier notify the certificate holder within 10 days of a policy being cancelled for non-payment of premium or within 30 days if cancelled for any other reason or if the insured is otherwise eliminated from the coverage indicated on this certificate prior to the end of the policy effective period? ☐ YES ☒ NO

This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policy listed, nor does it confer any rights or responsibilities beyond those contained in the referenced policy.

This certificate may be used as evidence of a Workers' Compensation contract of insurance only while the underlying policy is in effect.

**Please Note:** Upon cancellation of the workers' compensation policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of Workers' Compensation Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Workers' Compensation Law.

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has the coverage as depicted on this form.

Approved by: Anthony Valentino

(Print name of authorized representative or licensed agent of insurance carrier)

Approved by: [Signature]

(Signature)

11/15/17  
(Date)

Title: Authorized Representative

Telephone Number of authorized representative or licensed agent of insurance carrier: (646)227-6300

**Please Note:** Only insurance carriers and their licensed agents are authorized to issue Form C-105.2. Insurance brokers are **NOT** authorized to issue it.

## **Workers' Compensation Law**

### **Section 57. Restriction on issue of permits and the entering into contracts unless compensation is secured.**

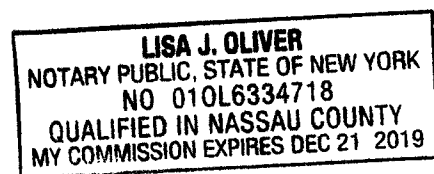
1. The head of a state or municipal department, board, commission or office authorized or required by law to issue any permit for or in connection with any work involving the employment of employees in a hazardous employment defined by this chapter, and notwithstanding any general or special statute requiring or authorizing the issue of such permits, shall not issue such permit unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that compensation for all employees has been secured as provided by this chapter. Nothing herein, however, shall be construed as creating any liability on the part of such state or municipal department, board, commission or office to pay any compensation to any such employee if so employed.
2. The head of a state or municipal department, board, commission or office authorized or required by law to enter into any contract for or in connection with any work involving the employment of employees in a hazardous employment defined by this chapter, notwithstanding any general or special statute requiring or authorizing any such contract, shall not enter into any such contract unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that compensation for all employees has been secured as provided by this chapter.

The undersigned insurance broker or agent represents to the City of New York that the attached Certificate of Insurance is accurate in all material respects.

Evan Gilbert, Account Manager

---

[Name and title of authorized official, broker, or agent (typewritten)]



**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE**

**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 §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 651, 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 §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](http://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](http://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) 669-4443, Monday through Friday between the hours of 9 a.m. and 5 p.m.

**OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE**

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 applicable to work performed outside of the regular workday. More information is available at the Mayor's Office of Contract Services (MOCS) web page at <http://www.nyc.gov/html/mocs/html/vendors/pla.shtml>.

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.

Although prevailing wage laws do not require employers to provide benefits (as opposed to wage supplements) to their employees, other laws may. For example, the Employee Retirement Income Security Act, 29 U.S.C. § 1001 et seq., the Patient Protection and Affordable Care Act, 42 U.S.C. § 18001 et seq., and the New York City Paid Sick Leave Law, N.Y.C. Admin. Code § 20-911 et seq., require certain employers to provide certain benefits to their employees. Labor agreements to which employers are a party may also require certain benefits. The Comptroller's Office does not enforce these laws or agreements.

**Employers must provide prevailing supplemental benefits at the straight time rate for each hour worked unless otherwise noted in the classification.**

**Wasył Kinach, P.E.  
Director of Classifications  
Bureau of Labor Law**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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## **ASBESTOS HANDLER**

(Hazardous Material; Disturbs, removes, encapsulates, repairs, or encloses friable asbestos material)

### **Asbestos Handler**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$36.00

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.

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)

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## **BLASTER**

### **Blaster**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$44.93

Supplemental Benefit Rate per Hour: \$46.24

### **Blaster (Hydraulic)**

Effective Period: 7/1/2017 - 6/30/2018



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

Wage Rate per Hour: \$45.78  
Supplemental Benefit Rate per Hour: \$46.24

**Blaster - Trac Drill Hydraulic**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$40.12  
Supplemental Benefit Rate per Hour: \$46.24

**Blaster - Wagon: Air Trac: Quarry Bar: Drillrunners**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$39.31  
Supplemental Benefit Rate per Hour: \$46.24

**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: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$38.23  
Supplemental Benefit Rate per Hour: \$46.24

**Blaster - Powder Carriers**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$34.20  
Supplemental Benefit Rate per Hour: \$46.24

**Blaster - Hydraulic Trac Drill Chuck Tender**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$32.88  
Supplemental Benefit Rate per Hour: \$46.24

**Blaster - Chuck Tender & Nipper**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$32.10  
Supplemental Benefit Rate per Hour: \$46.24

**Blaster - Magazine Keepers: (Watch Person)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$17.80  
Supplemental Benefit Rate per Hour: \$46.24

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

## 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 two hours of overtime Monday through Friday, the first ten hours, the first ten hours of work on Saturday and for Make-up Time. Double time for all hours over ten Monday through Saturday (except make-up hours) and for all hours worked on Sunday and Holidays.

## Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Thanksgiving Day

Christmas Day

## Paid Holidays

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 ½ hour unpaid lunch. When three (3) shifts are employed, each shift will work seven and one-half (7 ½) hours, but will be paid for eight (8) hours, since only one-half (½) 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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$55.23

Supplemental Benefit Rate per Hour: \$42.96

Supplemental Note: For time and one half overtime - \$63.82 For double overtime - \$84.68

## 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.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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 (7 ½) hours and receive eight hours at the regular straight time hourly rate plus twenty-five cents (\$0.25) per hour. The third shift shall work seven (7) hours and receive eight hours at the regular straight time hourly rate plus fifty cents (\$0.50) per hour. A thirty (30) minute lunch period shall not be considered as time worked. Work in excess of the above shall be paid overtime at the appropriate new construction work or repair work overtime wage and supplemental benefit hourly rate.

(Local #5)

---

## BRICKLAYER

### Bricklayer

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$55.10

Supplemental Benefit Rate per Hour: \$31.20

### Overtime

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

### Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

### Paid Holidays

None

### Shift Rates

Overtime rates to be paid outside the regular scheduled work day.

(Bricklayer District Council)

---

## CARPENTER - BUILDING COMMERCIAL

### Building Commercial

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$52.50

Supplemental Benefit Rate per Hour: \$46.28

### 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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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.

(Carpenters District Council)

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**CARPENTER - HEAVY CONSTRUCTION WORK**  
(Construction of Engineering Structures and Building Foundations)

**Heavy Construction Work**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$51.63

Supplemental Benefit Rate per Hour: \$48.65

**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**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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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)

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## CARPENTER - HIGH RISE CONCRETE FORMS

### Carpenter High Rise A

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$50.28

Supplemental Benefit Rate per Hour: \$40.18

### Carpenter High Rise B

Carpenter High Rise B worker is excluded from high risk operations such as erection decking, perimeter debris netting, leading edge work, self-climbing form systems, and the installation of cocoon systems unless directly supervised by a Carpenter High Rise A worker.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$39.07

Supplemental Benefit Rate per Hour: \$15.55

### **Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

### **Overtime Holidays**

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

### **Paid Holidays**

None

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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### Shift Rates

The second shift wage rate shall be 113% of the straight time hourly wage rate. There must be a first shift in order to work a second shift.

(Carpenters District Council)

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## CARPENTER - SIDEWALK SHED, SCAFFOLD AND HOIST

### Carpenter - Hod Hoist

(Assisted by Mason Tender)

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$50.50

Supplemental Benefit Rate per Hour: \$39.46

### 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.

(Carpenters District Council)

## **CEMENT & CONCRETE WORKER**

### **Cement & Concrete Worker**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$42.48**

Supplemental Benefit Rate per Hour: **\$23.00**

Supplemental Note: **\$25.75 on Saturdays; \$28.50 on Sundays & Holidays**

### **Cement & Concrete Worker - (Hired after 2/6/2016)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$32.00**

Supplemental Benefit Rate per Hour: **\$16.00**

Supplemental Note: **\$17.25 on Saturdays; \$18.50 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.



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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(Cement Concrete Workers District Council)

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## CEMENT MASON

### Cement Mason

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$42.62**

Supplemental Benefit Rate per Hour: **\$38.96**

Supplemental Note: For time and one half overtime - \$48.21; For double overtime - \$57.46

### Overtime Description

Time and one-half the regular rate after an 8 hour day, double time the regular rate after 10 hours. Time and one-half the regular rate on Saturday, double time the regular rate after 10 hours. Double time the regular rate on Sunday.

### 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) (BCA)

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## CORE DRILLER

### Core Driller

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$38.82

Supplemental Benefit Rate per Hour: \$24.66

**Core Driller Helper**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$30.96

Supplemental Benefit Rate per Hour: \$24.66

**Core Driller Helper(Third year in the industry)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$27.86

Supplemental Benefit Rate per Hour: \$24.66

**Core Driller Helper (Second year in the industry)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$24.77

Supplemental Benefit Rate per Hour: \$24.66

**Core Driller Helper (First year in the industry)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$21.67

Supplemental Benefit Rate per Hour: \$24.66

**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 (8½) 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 (½) hour of employees regular rate of pay for lunch. When two (2) or more

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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 (7 ½) hours paid for eight (8) hours of labor and be permitted one-half (½) hour for mealtime.

(Carpenters District Council)

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## DERRICKPERSON AND RIGGER

### Derrick Person & Rigger

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$46.86

Supplemental Benefit Rate per Hour: \$51.40

Supplemental Note: The above supplemental rate applies for work performed in Manhattan, Bronx, Brooklyn and Queens. \$52.82 - For work performed in Staten Island.

### Derrick Person & Rigger - Site Work

Assists the Stone Mason-Setter in the setting of stone with respect to base course, paving, and flag stone

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$40.29

Supplemental Benefit Rate per Hour: \$39.23

### **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.

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(Local #197)

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## DIVER

### Diver (Marine)

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$65.38**

Supplemental Benefit Rate per Hour: **\$48.65**

### Diver Tender (Marine)

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$46.44**

Supplemental Benefit Rate per Hour: **\$48.65**

### 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

When three shifts are utilized each shift shall work seven and one half-hours (7 1/2 hours) and paid for 8 hours, allowing for one half hour for lunch.

(Carpenters District Council)

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## **DOCKBUILDER - PILE DRIVER**

### **Dockbuilder - Pile Driver**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$51.63**

Supplemental Benefit Rate per Hour: **\$48.65**

#### **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)

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## **DRIVER: TRUCK (TEAMSTER)**

### **Driver - Dump Truck**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$41.18**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Supplemental Benefit Rate per Hour: **\$44.79**

Supplemental Note: Over 40 hours worked: at time and one half rate - \$19.94; at double time rate - \$26.58

**Driver - Tractor Trailer**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$41.46**

Supplemental Benefit Rate per Hour: **\$43.65**

Supplemental Note: Over 40 hours worked: at time and one half rate - \$16.65; at double time rate - \$22.20

**Driver - Euclid & Turnapull Operator**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$42.03**

Supplemental Benefit Rate per Hour: **\$43.65**

Supplemental Note: Over 40 hours worked: at time and one half rate - \$16.65; at double time rate - \$22.20

**Overtime Description**

For Paid Holidays: Holiday pay for all holidays shall be prorated based two hours per day for each day worked in the holiday week, not to exceed 8 hours of holiday pay. For Thanksgiving week, the prorated share shall be 5 1/3 hours of holiday pay for each day worked in Thanksgiving week.

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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## 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 for one half hour for lunch and receive 9 hours pay for 8 hours of work.

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## Driver Redi-Mix (Sand & Gravel)

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$38.40

Supplemental Benefit Rate per Hour: \$42.12

Supplemental Note: Over 40 hours worked: time and one half rate \$15.99, double time rate \$21.33

## 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**

(Including all low voltage cabling carrying data; video; and voice in combination with data and or video.)

### **Electrician "A" (Regular Day / Day Shift)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: **\$56.00**

Supplemental Benefit Rate per Hour: **\$54.35**

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: **\$56.00**

Supplemental Benefit Rate per Hour: **\$55.72**

### **Electrician "A" (Regular Day Overtime after 7 hrs / Day Shift Overtime after 8 hrs)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: **\$84.00**

Supplemental Benefit Rate per Hour: **\$57.86**

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: **\$84.00**

Supplemental Benefit Rate per Hour: **\$59.23**

### **Electrician "A" (Swing Shift)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: **\$65.71**

Supplemental Benefit Rate per Hour: **\$61.94**

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: **\$65.71**

Supplemental Benefit Rate per Hour: **\$63.52**

### **Electrician "A" (Swing Shift Overtime After 7.5 hours)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: **\$98.57**

Supplemental Benefit Rate per Hour: **\$66.05**

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: **\$98.57**

Supplemental Benefit Rate per Hour: **\$67.64**

### **Electrician "A" (Graveyard Shift)**



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Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: \$73.60

Supplemental Benefit Rate per Hour: \$68.33

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: \$73.60

Supplemental Benefit Rate per Hour: \$70.09

**Electrician "A" (Graveyard Shift Overtime After 7 hours)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: \$110.40

Supplemental Benefit Rate per Hour: \$72.95

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: \$110.40

Supplemental Benefit Rate per Hour: \$74.70

**Overtime**

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

**Overtime Holidays**

Time and one half the regular rate for work on a holiday.

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

**Paid Holidays**

None

**Shift Rates**

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 \$25.67 and effective 5/10/18 \$25.92.

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**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: 7/1/2017 - 5/9/2018

Wage Rate per Hour: \$28.50

Supplemental Benefit Rate per Hour: \$22.10

First and Second Year "M" Wage Rate Per Hour: \$24.00

First and Second Year "M" Supplemental Rate: \$19.80

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: \$29.00

Supplemental Benefit Rate per Hour: \$22.65

First and Second Year "M" Wage Rate Per Hour: \$24.50

First and Second Year "M" Supplemental Rate: \$20.30

**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: 7/1/2017 - 5/9/2018

Wage Rate per Hour: \$42.75

Supplemental Benefit Rate per Hour: \$23.89

First and Second Year "M" Wage Rate Per Hour: \$36.00

First and Second Year "M" Supplemental Rate: \$21.30

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: \$43.50

Supplemental Benefit Rate per Hour: \$24.47

First and Second Year "M" Wage Rate Per Hour: \$36.75

First and Second Year "M" Supplemental Rate: \$21.84

**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

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

**Paid Holidays**  
None

(Local #3)

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**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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$32.40**

Supplemental Benefit Rate per Hour: **\$16.10**

Supplemental Note: \$14.60 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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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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)

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## ELECTRICIAN-STREET LIGHTING WORKER

### Electrician - Electro Pole Electrician

Effective Period: 7/1/2017 - 5/15/2018

Wage Rate per Hour: \$56.00

Supplemental Benefit Rate per Hour: \$56.26

Effective Period: 5/16/2018 - 6/30/2018

Wage Rate per Hour: \$56.00

Supplemental Benefit Rate per Hour: \$57.63

### Electrician - Electro Pole Foundation Installer

Effective Period: 7/1/2017 - 5/15/2018

Wage Rate per Hour: \$41.54

Supplemental Benefit Rate per Hour: \$41.02

Effective Period: 5/16/2018 - 6/30/2018

Wage Rate per Hour: \$42.16

Supplemental Benefit Rate per Hour: \$42.19

### Electrician - Electro Pole Maintainer

Effective Period: 7/1/2017 - 5/16/2018

Wage Rate per Hour: \$35.58

Supplemental Benefit Rate per Hour: \$36.89

Effective Period: 5/17/2018 - 6/30/2018

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Wage Rate per Hour: **\$36.11**

Supplemental Benefit Rate per Hour: **\$37.93**

### Overtime Description

Electrician - Electro Pole Electrician: Time and one half the regular rate after a 7 hour day and after 5 consecutive days worked per week.

Electrician - Electro Pole Foundation Installer: Time and one half the regular rate after 8 hours within a 24 hour period and Saturday and Sunday.

Electrician - Electro Pole Maintainer: Time and one half the regular rate after a 7 hour day and after 5 consecutive days worked per week. Saturdays and Sundays may be used as a make-up day at straight time when a day is lost during the week to inclement weather.

### Overtime Holidays

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

### Paid Holidays

None

(Local #3)

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## ELEVATOR CONSTRUCTOR

### Elevator Constructor

Effective Period: 7/1/2017 - 3/16/2018

Wage Rate per Hour: **\$62.64**

Supplemental Benefit Rate per Hour: **\$34.25**

Effective Period: 3/17/2018 - 6/30/2018

Wage Rate per Hour: **\$64.48**

Supplemental Benefit Rate per Hour: **\$35.85**

### 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.

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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)

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## ELEVATOR REPAIR & MAINTENANCE

### Elevator Service/Modernization Mechanic

Effective Period: 7/1/2017 - 3/16/2018

Wage Rate per Hour: \$49.14

Supplemental Benefit Rate per Hour: \$34.11

Effective Period: 3/17/2018 - 6/30/2018

Wage Rate per Hour: \$50.49

Supplemental Benefit Rate per Hour: \$35.71

### Overtime Description

For Scheduled Service Work: Double time - work scheduled in advance by two or more workers performed on Sundays, Holidays, and between midnight and 7:00am.

### Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

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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)

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## **ENGINEER**

### **Engineer - Heavy Construction Operating Engineer I**

Cherry pickers 20 tons and over and Loaders (rubber tired and/or tractor type with a manufacturer's minimum rated capacity of six cubic yards and over).

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$65.94**

Supplemental Benefit Rate per Hour: **\$35.41**

Supplemental Note: \$63.67 on overtime

Shift Wage Rate: **\$105.50**

### **Engineer - Heavy Construction Operating Engineer II**

Backhoes, Basin Machines, Groover, Mechanical Sweepers, Bobcat, Boom Truck, Barrier Transport (Barrier Mover) & machines of similar nature. Operation of Churn Drills and machines of a similar nature, Stetco Silent Hoist and machines of similar nature, Vac-Alls, Meyers Machines, John Beam and machines of a similar nature, Ross Carriers and Travel Lifts and machines of a similar nature, Bulldozers, Scrapers and Turn-a-Pulls: Tugger Hoists (Used exclusively for handling excavated material); Tractors with attachments, Hyster and Roustabout Cranes, Cherry pickers. Austin Western, Grove and machines of a similar nature, Scoopmobiles, Monorails, Conveyors, Trenchers: Loaders-Rubber Tired and Tractor: Barber Greene and Eimco Loaders and Eimco

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Backhoes; Mighty Midget and similar breakers and Tampers, Curb and Gutter Pavers and Motor Patrol, Motor Graders and all machines of a similar nature. Locomotives 10 Tons or under. Mini-Max, Break-Tech and machines of a similar nature; Milling machines, robotic and demolition machines and machines of a similar nature, shot blaster, skid steer machines and machines of a similar nature including bobcat, pile rig rubber-tired excavator (37,000 lbs. and under), 2 man auger.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$63.98**

Supplemental Benefit Rate per Hour: **\$35.41**

Supplemental Note: \$63.67 on overtime

Shift Wage Rate: **\$102.37**

**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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$60.69**

Supplemental Benefit Rate per Hour: **\$35.41**

Supplemental Note: \$63.67 on overtime

Shift Wage Rate: **\$97.10**

**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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$63.68**

Supplemental Benefit Rate per Hour: **\$35.41**

Supplemental Note: \$63.67 on overtime

Shift Wage Rate: **\$101.89**

**Engineer - Heavy Construction Maintenance Engineer II**

On Base Mounted Tower Cranes

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$83.66**

Supplemental Benefit Rate per Hour: **\$35.41**

Supplemental Note: \$63.67 on overtime



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Shift Wage Rate: \$133.86

**Engineer - Heavy Construction Maintenance Engineer III**

On Generators, Light Towers

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$42.01

Supplemental Benefit Rate per Hour: \$35.41

Supplemental Note: \$63.67 on overtime

Shift Wage Rate: \$67.22

**Engineer - Heavy Construction Maintenance Engineer IV**

On Pumps and Mixers including mud sucking

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$43.11

Supplemental Benefit Rate per Hour: \$35.41

Supplemental Note: \$63.67 on overtime

Shift Wage Rate: \$68.98

**Engineer - Heavy Construction Oilers I**

Gradalls, Cold Planer Grader, Concrete Pumps, Driving Truck Cranes, Driving and Operating Fuel and Grease Trucks.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$57.42

Supplemental Benefit Rate per Hour: \$35.41

Supplemental Note: \$63.67 on overtime

Shift Wage Rate: \$91.87

**Engineer - Heavy Construction Oilers II**

All gasoline, electric, diesel or air operated Shovels, Draglines, Backhoes, Keystones, Pavers, Guniting Machines, Battery of Compressors, Crawler Cranes, two-person Trenching Machines.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$39.70

Supplemental Benefit Rate per Hour: \$35.41

Supplemental Note: \$63.67 on overtime

Shift Wage Rate: \$63.52

**Engineer - Steel Erection Maintenance Engineers**

Derrick, Travelers, Tower, Crawler Tower and Climbing Cranes

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$61.13

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Supplemental Benefit Rate per Hour: \$35.41  
Supplemental Note: \$63.67 on overtime  
Shift Wage Rate: \$97.81

**Engineer - Steel Erection Oiler I**

On a Truck Crane

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$57.21  
Supplemental Benefit Rate per Hour: \$35.41  
Supplemental Note: \$63.67 on overtime  
Shift Wage Rate: \$91.54

**Engineer - Steel Erection Oiler II**

On a Crawler Crane

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$43.54  
Supplemental Benefit Rate per Hour: \$35.41  
Supplemental Note: \$63.67 on overtime  
Shift Wage Rate: \$69.66

**Overtime Description**

On jobs of more than one shift, if the next shift employee fails to report for work through any cause over which the employer has no control, the employee on duty who works the next shift continues to work at the single time rate.

**Overtime**

Double time the regular rate after an 8 hour day.  
Double time the regular time rate for Saturday.  
Double time the regular rate for Sunday.  
Double time the regular rate for work on the following holiday(s).

**Paid Holidays**

New Year's Day  
Lincoln's Birthday  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Veteran's Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

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**Engineer - Building Work Maintenance Engineers I**

Installing, repairing, maintaining, dismantling (of all equipment including: Steel Cutting and Bending Machines, Mechanical Heaters, Mine Hoists, Climbing Cranes, Tower Cranes, Linden Peine, Lorain, Liebherr, Mannes, or machines of a similar nature, Well Point Systems, Deep Well Pumps, Concrete Mixers with loading Device, Concrete Plants, Motor Generators when used for temporary power and lights), skid steer machines of a similar nature including bobcat.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$58.30**

Supplemental Benefit Rate per Hour: **\$35.41**

Supplemental Note: \$63.67 on overtime

**Engineer - Building Work Maintenance Engineers II**

On Pumps, Generators, Mixers and Heaters

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$45.28**

Supplemental Benefit Rate per Hour: **\$35.41**

Supplemental Note: \$63.67 on overtime

**Engineer - Building Work Oilers I**

All gasoline, electric, diesel or air operated Gradealls: Concrete Pumps, Overhead Cranes in Power Houses: Their duties shall be to assist the Engineer in oiling, greasing and repairing of all machines; Driving Truck Cranes: Driving and Operating Fuel and Grease Trucks, Cherrypickers (hydraulic cranes) over 70,000 GVW, and machines of a similar nature.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$55.42**

Supplemental Benefit Rate per Hour: **\$35.41**

Supplemental Note: \$63.67 on overtime

**Engineer - Building Work Oilers II**

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

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$41.16**

Supplemental Benefit Rate per Hour: **\$35.41**

Supplemental Note: \$63.67 on overtime

**Overtime Description**

On jobs of more than one shift, if an Employee fails to report for work through any cause over which the Employer has no control, the Employee on duty will continue to work at the rate of single time.

**Overtime**

Double time the regular rate after an 8 hour day.

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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)

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**ENGINEER - CITY SURVEYOR AND CONSULTANT**

**Party Chief**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$38.18**

Supplemental Benefit Rate per Hour: **\$20.15**

Supplemental Note: Overtime Benefit Rate - \$27.65 per hour (time & one half) \$35.15 per hour (double time).

**Instrument Person**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$31.47**

Supplemental Benefit Rate per Hour: **\$20.15**

Supplemental Note: Overtime Benefit Rate - \$27.65 per hour (time & one half) \$35.15 per hour (double time).

**Rodperson**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$27.24**

Supplemental Benefit Rate per Hour: **\$20.15**

Supplemental Note: Overtime Benefit Rate - \$27.65 per hour (time & one half) \$35.15 per hour (double time).

**Overtime Description**

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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)

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## **ENGINEER - FIELD (BUILDING CONSTRUCTION)** (Construction of Building Projects, Concrete Superstructures, etc.)

### **Field Engineer - BC Party Chief**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$60.10

Supplemental Benefit Rate per Hour: \$32.15

Supplemental Note: Overtime Benefit Rate - \$44.90 per hour (time & one half) \$57.65 per hour (double time).

### **Field Engineer - BC Instrument Person**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$46.69

Supplemental Benefit Rate per Hour: \$32.15

Supplemental Note: Overtime Benefit Rate - \$44.90 per hour (time & one half) \$57.65 per hour (double time).

### **Field Engineer - BC Rodperson**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$30.20

Supplemental Benefit Rate per Hour: \$32.15

Supplemental Note: Overtime Benefit Rate - \$44.90 per hour (time & one half) \$57.65 per hour (double time).

### **Overtime Description**

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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)

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**ENGINEER - FIELD (HEAVY CONSTRUCTION)**

(Construction of Roads, Tunnels, Bridges, Sewers, Building Foundations, Engineering Structures etc.)

**Field Engineer - HC Party Chief**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$68.09**

Supplemental Benefit Rate per Hour: **\$33.54**

Supplemental Note: Overtime benefit rate - \$46.86 per hour (time & one half), \$60.18 per hour (double time).

**Field Engineer - HC Instrument Person**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$49.98**

Supplemental Benefit Rate per Hour: **\$33.54**

Supplemental Note: Overtime benefit rate - \$46.86 per hour (time & one half), \$60.18 per hour (double time).

**Field Engineer - HC Rodperson**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$41.93**

Supplemental Benefit Rate per Hour: **\$33.54**

Supplemental Note: Overtime benefit rate - \$46.86 per hour (time & one half), \$60.18 per hour (double time).

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### 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)

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## ENGINEER - FIELD (STEEL ERECTION)

### Field Engineer - Steel Erection Party Chief

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$63.64**

Supplemental Benefit Rate per Hour: **\$33.04**

Supplemental Note: Overtime benefit rate - \$46.11 per hour (time & one half), \$59.18 per hour (double time).

### Field Engineer - Steel Erection Instrument Person

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$49.59**

Supplemental Benefit Rate per Hour: **\$33.04**

Supplemental Note: Overtime benefit rate - \$46.11 per hour (time & one half), \$59.18 per hour (double time).

### Field Engineer - Steel Erection Rodperson

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$33.20**

Supplemental Benefit Rate per Hour: **\$33.04**

Supplemental Note: Overtime benefit rate - \$46.11 per hour (time & one half), \$59.18 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.

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**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)

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**ENGINEER - OPERATING**

**Operating Engineer - Road & Heavy Construction I**

Back Filling Machines, Cranes, Mucking Machines and Dual Drum Paver.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$73.90

Supplemental Benefit Rate per Hour: \$31.10

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$118.24

**Operating Engineer - Road & Heavy Construction II**

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

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$76.51

Supplemental Benefit Rate per Hour: \$31.10

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: \$122.42

**Operating Engineer - Road & Heavy Construction III**

Mine Hoists, Cranes, etc. (Used as Mine Hoists)



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**Effective Period: 7/1/2017 - 6/30/2018**

**Wage Rate per Hour: \$78.96**

**Supplemental Benefit Rate per Hour: \$31.10**

**Supplemental Note: \$56.50 overtime hours**

**Shift Wage Rate: \$126.34**

**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: 7/1/2017 - 6/30/2018**

**Wage Rate per Hour: \$77.07**

**Supplemental Benefit Rate per Hour: \$31.10**

**Supplemental Note: \$56.50 overtime hours**

**Shift Wage Rate: \$123.31**

**Operating Engineer - Road & Heavy Construction V**

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

**Effective Period: 7/1/2017 - 6/30/2018**

**Wage Rate per Hour: \$75.55**

**Supplemental Benefit Rate per Hour: \$31.10**

**Supplemental Note: \$56.50 overtime hours**

**Shift Wage Rate: \$120.88**

**Operating Engineer - Road & Heavy Construction VI**

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

**Effective Period: 7/1/2017 - 6/30/2018**

**Wage Rate per Hour: \$71.78**

**Supplemental Benefit Rate per Hour: \$31.10**

**Supplemental Note: \$56.50 overtime hours**

**Shift Wage Rate: \$114.85**

**Operating Engineer - Road & Heavy Construction VII**

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

**Effective Period: 7/1/2017 - 6/30/2018**

**Wage Rate per Hour: \$57.96**

**Supplemental Benefit Rate per Hour: \$31.10**

**Supplemental Note: \$56.50 overtime hours**

**Shift Wage Rate: \$92.74**

**Operating Engineer - Road & Heavy Construction VIII**

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**Utility Compressors**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$44.98**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: **\$56.70**

**Operating Engineer - Road & Heavy Construction IX**

**Horizontal Boring Rig**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$68.25**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: **\$109.20**

**Operating Engineer - Road & Heavy Construction X**

**Elevators (manually operated as personnel hoist).**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$62.73**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: **\$100.37**

**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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$48.73**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: **\$77.97**

**Operating Engineer - Road & Heavy Construction XII**

**All Drills and Machines of a similar nature.**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$72.53**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: **\$116.05**

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**Operating Engineer - Road & Heavy Construction XIII**

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

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$70.24**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: **\$112.38**

**Operating Engineer - Road & Heavy Construction XIV**

Concrete Mixer

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$67.16**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: **\$107.46**

**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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$45.27**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: **\$72.43**

**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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$64.13**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: **\$102.61**

**Operating Engineer - Road & Heavy Construction XVII**

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

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$64.63**

Supplemental Benefit Rate per Hour: **\$31.10**

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Supplemental Note: \$56.50 overtime hours  
Shift Wage Rate: \$103.41

**Operating Engineer - Road & Heavy Construction XVIII**

Tower Crane

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$92.76  
Supplemental Benefit Rate per Hour: \$31.10  
Supplemental Note: \$56.50 overtime hours  
Shift Wage Rate: \$148.42

**Operating Engineer - Paving I**

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

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$71.78  
Supplemental Benefit Rate per Hour: \$31.10  
Supplemental Note: \$56.50 overtime hours  
Shift Wage Rate: \$114.85

**Operating Engineer - Paving II**

Asphalt Roller

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$69.91  
Supplemental Benefit Rate per Hour: \$31.10  
Supplemental Note: \$56.50 overtime hours  
Shift Wage Rate: \$111.86

**Operating Engineer - Paving III**

Asphalt Plants

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$59.14  
Supplemental Benefit Rate per Hour: \$31.10  
Supplemental Note: \$56.50 overtime hours  
Shift Wage Rate: \$94.62

**Operating Engineer - Concrete I**

Cranes

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$76.73

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Supplemental Benefit Rate per Hour: **\$31.10**  
Supplemental Note: \$56.50 overtime hours

**Operating Engineer - Concrete II**

Compressors

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$45.62**  
Supplemental Benefit Rate per Hour: **\$31.10**  
Supplemental Note: \$56.50 overtime hours

**Operating Engineer - Concrete III**

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

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$61.31**  
Supplemental Benefit Rate per Hour: **\$31.10**  
Supplemental Note: \$56.50 overtime hours

**Operating Engineer - Steel Erection I**

Three Drum Derricks

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$79.54**  
Supplemental Benefit Rate per Hour: **\$31.10**  
Supplemental Note: \$56.50 overtime hours  
Shift Wage Rate: **\$127.26**

**Operating Engineer - Steel Erection II**

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

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$76.43**  
Supplemental Benefit Rate per Hour: **\$31.10**  
Supplemental Note: \$56.50 overtime hours  
Shift Wage Rate: **\$122.29**

**Operating Engineer - Steel Erection III**

Compressors, Welding Machines.

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$45.34**  
Supplemental Benefit Rate per Hour: **\$31.10**  
Supplemental Note: \$56.50 overtime hours  
Shift Wage Rate: **\$72.54**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**Operating Engineer - Steel Erection IV**

Compressors - Not Combined with Welding Machine.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$43.17**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: \$56.50 overtime hours

Shift Wage Rate: **\$69.07**

**Operating Engineer - Building Work I**

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

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$63.12**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: \$56.50 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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$47.26**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: \$56.50 overtime hours

**Operating Engineer - Building Work III**

Double Drum

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$71.85**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: \$56.50 overtime hours

**Operating Engineer - Building Work IV**

Stone Derrick, Cranes, Hydraulic Cranes Boom Trucks.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$76.12**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: \$56.50 overtime hours

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

**Operating Engineer - Building Work V**

Dismantling and Erection of Cranes, Relief Engineer.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$70.13**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: \$56.50 overtime hours

**Operating Engineer - Building Work VI**

4 Pole Hoist, Single Drum Hoists.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$69.39**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: \$56.50 overtime hours

**Operating Engineer - Building Work VII**

Rack & Pinion and House Cars

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$55.17**

Supplemental Benefit Rate per Hour: **\$31.10**

Supplemental Note: \$56.50 overtime hours

For New House Car projects Wage Rate per Hour **\$44.02**

**Overtime Description**

On jobs of more than one shift, if an Employee fails to report for work through any cause over which the Employer has no control, the Employee on duty will continue to work at the rate of single time.

For House Cars and Rack & Pinion only: Overtime paid at time and one-half for all hours in excess of eight hours in a day, Saturday, Sunday and Holidays worked.

**Overtime**

Double time the regular rate after an 8 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

Double time the regular rate for work on the following holiday(s).

**Paid Holidays**

New Year's Day

Lincoln's Birthday

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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)

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## 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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$50.50

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

### 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



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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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)

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## **GLAZIER**

### **(New Construction, Remodeling, and Alteration)**

#### **Glazier**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$44.70**

Supplemental Benefit Rate per Hour: **\$38.44**

Supplemental Note: Supplemental Benefit Overtime Rate: **\$47.54**

#### **Overtime Description**

An optional 8th hour can be worked at straight time rate. If 9th hour is worked, then both hours or more (8th & 9th 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**

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.

(Local #1281)

## **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 \$127,628. 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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$23.78**

Supplemental Benefit Rate per Hour: **\$20.14**

### **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)

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## **HEAT AND FROST INSULATOR**

### **Heat & Frost Insulator**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$58.38**

Supplemental Benefit Rate per Hour: **\$39.46**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

### 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  
Martin Luther King Jr. Day  
President's Day  
Memorial Day  
Independence Day  
Columbus Day  
Veteran's Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

Triple time the regular rate for work on the following holiday(s).  
Labor Day

### Paid Holidays

None

### Shift Rates

The first shift shall work seven hours at the regular straight time rate. The second and third shift shall work seven hours the regular straight time hourly rate plus a fourteen percent wage and benefit premium.  
Off hour work in occupied or retail buildings may be worked on weekdays with an 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.

(Local #12) (BCA)

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## 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.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$36.33

Supplemental Benefit Rate per Hour: \$28.72

**House Wrecker - Tier B**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$25.56

Supplemental Benefit Rate per Hour: \$21.13

**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)

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**IRON WORKER - ORNAMENTAL**

**Iron Worker - Ornamental**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$44.00

Supplemental Benefit Rate per Hour: \$50.57

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.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

### Overtime

Double time the regular rate for Sunday.

### Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day  
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)

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## IRON WORKER - STRUCTURAL

### Iron Worker - Structural

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$49.75

Supplemental Benefit Rate per Hour: \$71.10

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

### Overtime Description

Monday through Friday- the first eight hours are paid at straight time, the 9th and 10th hours are paid at time and one-half the regular rate, all additional weekday overtime is paid at double the regular rate. Saturdays- the first eight hours are paid at time and one-half the regular rate, double time thereafter. Sunday-all shifts are paid at double time.

### 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  
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Double time the regular rate for work on the following holiday(s).

New Year's Day  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Thanksgiving Day  
Christmas Day

### **Paid Holidays**

1/2 day on Christmas Eve if work is performed in the A.M.  
1/2 day on New Year's Eve if work is performed in the A.M.

### **Shift Rates**

Monday through Friday - First Shift: First eight hours are paid at straight time, the 9th & 10th hours are paid at time and a half, double time paid thereafter. Second and third Shifts: First eight hours are paid at time and one-half, double time thereafter. Saturdays: All shifts, first eight hours paid at time and one-half, double time thereafter. Sunday all shifts are paid at double time.

(Local #40 & #361)

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## **LABORER**

(Foundation, Concrete, Excavating, Street Pipe Layer and Common)

### **Laborer**

Excavation and foundation work for buildings, heavy construction, engineering work, and hazardous waste removal in connection with the above work. Landscaping tasks in connection with heavy construction work, engineering work and building projects. Projects include, but are not limited to pollution plants, sewers, parks, subways, bridges, highways, etc.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$41.50**

Supplemental Benefit Rate per Hour: **\$40.63**

### **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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Columbus Day  
Thanksgiving Day  
Christmas Day

**Paid Holidays**

Labor Day  
Thanksgiving Day

**Shift Rates**

When two shifts are employed, single time rate shall be paid for each shift. When three shifts are found necessary, each shift shall work seven and one half hours (7 ½), but shall be paid for eight (8) hours of labor, and be permitted one half hour for lunch.

(Local #731)

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**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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$27.75

Supplemental Benefit Rate per Hour: \$15.05

**Landscaper (3 - 6 years experience)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$26.75

Supplemental Benefit Rate per Hour: \$15.05

**Landscaper (up to 3 years experience)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$24.25

Supplemental Benefit Rate per Hour: \$15.05

**Groundperson**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$24.25

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: \$15.05

**Tree Remover / Pruner**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$32.75

Supplemental Benefit Rate per Hour: \$15.05

**Landscaper Sprayer (Pesticide Applicator)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$22.75

Supplemental Benefit Rate per Hour: \$15.05

**Watering - Plant Maintainer**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$17.72

Supplemental Benefit Rate per Hour: \$15.05

**Overtime Description**

For all overtime work performed, supplemental benefits shall include an additional seventy-five (\$0.75) cents per hour.

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Time and one half the regular rate for work on a holiday plus the day's pay.

**Paid Holidays**

New Year's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

**Shift Rates**

Work performed on a 4pm to 12am shift has a 15% differential. Work performed on a 12am to 8am shift has a 20% differential.

(Local #175)



## MARBLE MECHANIC

### Marble Setter

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$52.74**

Supplemental Benefit Rate per Hour: **\$38.67**

### Marble Finisher

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$41.46**

Supplemental Benefit Rate per Hour: **\$36.64**

### Marble Polisher

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$37.93**

Supplemental Benefit Rate per Hour: **\$28.33**

### **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.

### **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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$37.55**

Supplemental Benefit Rate per Hour: **\$29.99**

### **Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

### **Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

### **Paid Holidays**

None

### **Shift Rates**

The Employer may work two (2) shifts with the first shift at the straight time wage rate and the second shift receiving eight (8) hours paid for seven (7) hours work at the straight time wage rate.

(Local #79)

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## **MASON TENDER (INTERIOR DEMOLITION WORKER)**

### **Mason Tender Tier A**

Tier A Interior Demolition Worker performs all burning, chopping, and other technically skilled tasks related to interior demolition work.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$36.19**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: **\$23.75**

**Mason Tender Tier B**

Tier B Interior Demolition Worker performs manual work and work incidental to demolition work, such as loading and carting of debris from the work site to an area where it can be loaded in to bins/trucks for removal. Also performs clean-up of the site when demolition is completed.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$25.38**

Supplemental Benefit Rate per Hour: **\$18.07**

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Sunday.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

**Paid Holidays**

None

(Local #79)

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**METALLIC LATHER**

**Metallic Lather**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$44.53**

Supplemental Benefit Rate per Hour: **\$42.67**

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.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Thanksgiving Day  
Christmas Day

### Paid Holidays

1/2 day on Christmas Eve if work is performed in the A.M.

1/2 day on New Year's Eve if work is performed in the A.M.

### Shift Rates

There will be no shift differential paid on the first shift if more than one shift is employed. The shift differential will remain \$12/hour on the second and third shift for the first eight (8) hours if worked. There will be no pyramiding on overtime worked on second and third shifts. The time and one half (1.5x) rate will be against the base wage rate, not the shift differential

(Local #46)

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## MILLWRIGHT

### Millwright

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$51.50

Supplemental Benefit Rate per Hour: \$52.41

### 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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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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)

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## **MOSAIC MECHANIC**

### **Mosaic Mechanic - Mosaic & Terrazzo Mechanic**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$46.86**

Supplemental Benefit Rate per Hour: **\$40.65**

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$51.67 per hour.

### **Mosaic Mechanic - Mosaic & Terrazzo Finisher**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$45.26**

Supplemental Benefit Rate per Hour: **\$40.63**

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$51.65 per hour.

### **Mosaic Mechanic - Machine Operator Grinder**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$45.26**

Supplemental Benefit Rate per Hour: **\$40.63**

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$51.65 per hour.

### **Overtime**

Time and one half the regular rate after a 7 hour day.  
Time and one half the regular rate for Saturday.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

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)

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## PAINTER

### Painter - Brush & Roller

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$42.50

Supplemental Benefit Rate per Hour: \$28.62

Supplemental Note: \$ 33.25 on overtime

### Spray & Scaffold / Decorative / Sandblast

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$45.50

Supplemental Benefit Rate per Hour: \$28.62

Supplemental Note: \$ 33.25 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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

Independence Day  
Labor Day  
Columbus Day  
Thanksgiving Day  
Christmas Day

**Paid Holidays**  
None

(District Council of Painters #9)

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## **PAINTER - METAL POLISHER**

### **METAL POLISHER**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$28.88  
Supplemental Benefit Rate per Hour: \$6.96

### **METAL POLISHER - NEW CONSTRUCTION**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$29.83  
Supplemental Benefit Rate per Hour: \$6.96

### **METAL POLISHER - SCAFFOLD OVER 34 FEET**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$32.38  
Supplemental Benefit Rate per Hour: \$6.96

### **Overtime Description**

All work performed on Saturdays shall be paid at time-in-a half. The exception being; for suspended scaffold work and work deemed as a construction project; an eight (8) hour shift lost during the week due to circumstances beyond the control of the employer, up to a maximum of eight (8) hours per week, may be worked on Saturday at the straight time rate.

### **Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Triple time the regular rate for work on the following holiday(s).

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**Paid Holidays**

New Year's Day  
Martin Luther King Jr. Day  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Veteran's Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

**Shift Rates**

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

Local 8A-28A

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**PAINTER - STRIPER**

**Striper (paint)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$35.00

Supplemental Benefit Rate per Hour: \$12.32

Supplemental Note: Overtime Supplemental Benefit rate - \$8.02; New Hire Rate (0-3 months) - \$0.00

**Lineperson (thermoplastic)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$39.00

Supplemental Benefit Rate per Hour: \$12.32

Supplemental Note: Overtime Supplemental Benefit rate - \$8.02; New Hire Rate (0-3 months) - \$0.00

**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.

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



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

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: 250 hours worked - 1 day vacation; 500 hours worked - 2 days vacation; 750 hours worked - 3 days vacation; 900 hours worked - 4 days vacation; 1,000 hours worked - 5 days vacation. Employees with two to five years service receive two weeks vacation. Employees with five to twenty years service receive three weeks vacation. Employees with twenty to twenty-five years service receive four weeks vacation. Employees with 25 or more years service receive five weeks vacation. 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)

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## PAINTER - STRUCTURAL STEEL

### Painters on Structural Steel

Effective Period: 7/1/2017 - 9/30/2017

Wage Rate per Hour: **\$49.50**

Supplemental Benefit Rate per Hour: **\$37.08**

Effective Period: 10/1/2017 - 6/30/2018

Wage Rate per Hour: **\$50.00**

Supplemental Benefit Rate per Hour: **\$38.33**

### Painter - Power Tool

Effective Period: 7/1/2017 - 9/30/2017

Wage Rate per Hour: **\$55.50**

Supplemental Benefit Rate per Hour: **\$37.08**

Overtime Wage Rate: \$6.00 above the "Painters on Structural Steel" overtime rate.

Effective Period: 10/1/2017 - 6/30/2018

Wage Rate per Hour: **\$56.00**

Supplemental Benefit Rate per Hour: **\$38.33**

Overtime Wage Rate: \$6.00 above the "Painters on Structural Steel" overtime rate.

### Overtime Description

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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)

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**PAPERHANGER**

**Paperhanger**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$44.89**

Supplemental Benefit Rate per Hour: **\$31.13**

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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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)

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**PAVER AND ROADBUILDER**

**Paver & Roadbuilder - Formsetter**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$45.85**

Supplemental Benefit Rate per Hour: **\$40.98**

**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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$41.98**

Supplemental Benefit Rate per Hour: **\$40.98**

**Production Paver & Roadbuilder - Screed Person**

(Production paving is asphalt paving when using a paving machine or on a project where a paving machine is traditionally used)

Adjustment of paving machinery on production paving jobs.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$46.45**

Supplemental Benefit Rate per Hour: **\$40.98**

**Production Paver & Roadbuilder - Raker**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$45.85**

Supplemental Benefit Rate per Hour: **\$40.98**

**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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$42.37**

Supplemental Benefit Rate per Hour: **\$40.98**

**Overtime Description**

If an employee works New Year's Day or Christmas Day, they receive the single time rate plus 25%.

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

Memorial Day

Independence Day

Labor Day

Columbus Day

Thanksgiving Day

**Shift Rates**

When two shifts are employed, the work period for each shift shall be a continuous eight (8) hours. When three shifts are employed, each shift will work seven and one half (7 ½) hours but will be paid for eight (8) hours since only one half (1/2) hour is allowed for meal time.

When two or more shifts are employed, single time will be paid for each shift.

Night Work - On night work, the first eight (8) hours of work will be paid for at the single time rate, except that production paving work shall be paid at 10% over the single time rate for the screed person, rakers and shovelers directly involved only. This differential is to be paid when there is only one shift and the shift works at night. All other workers will be exempt. Hours worked over eight (8) hours during said shift shall be paid for at the time and one-half rate.

(Local #1010)

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**PLASTERER**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**Plasterer**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$44.93**

Supplemental Benefit Rate per Hour: **\$25.15**

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

**Paid Holidays**

None

**Shift Rates**

When it is not possible to conduct 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 second shift shall be allowed one-half (½) hour to eat with this time being included in the seven (7) hours of work.

(Local #262)

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**PLASTERER - TENDER**

**Plasterer - Tender**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$37.55**

Supplemental Benefit Rate per Hour: **\$29.99**

**Overtime**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

### Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

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)

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## PLUMBER

### Plumber

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$67.25**

Supplemental Benefit Rate per Hour: **\$30.55**

Supplemental Note: Overtime supplemental benefit rate per hour: **\$61.10**

### 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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$53.88**

Supplemental Benefit Rate per Hour: **\$24.36**

### Overtime Description

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

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 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)

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## PLUMBER (MECHANICAL EQUIPMENT AND SERVICE)

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

### Plumber

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$41.20**

Supplemental Benefit Rate per Hour: **\$15.41**

### 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.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**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)

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**PLUMBER (RESIDENTIAL RATES FOR 1, 2 AND 3 FAMILY HOME CONSTRUCTION)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$46.66**

Supplemental Benefit Rate per Hour: **\$22.07**

**Overtime**

Double time the regular rate after an 8 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Veteran's Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

**Paid Holidays**

None

**Shift Rates**



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

30% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shifts Monday to Friday.  
50% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shift work performed on weekends. For shift work on holidays, double time wages and fringe benefits shall be paid.

(Plumbers Local #1)

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**PLUMBER: PUMP & TANK**  
**Oil Trades (Installation and Maintenance)**

**Plumber - Pump & Tank**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$64.22**

Supplemental Benefit Rate per Hour: **\$23.21**

**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

(Plumbers Local #1)

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**POINTER, WATERPROOFER, CAULKER, SANDBLASTER,  
STEAMBLASTER**  
(Exterior Building Renovation)

**Journey person**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$52.57

Supplemental Benefit Rate per Hour: \$25.80

**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)

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**ROOFER**

**Roofer**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$41.50

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: **\$30.87**

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

**Overtime Holidays**

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

**Paid Holidays**

None

**Shift Rates**

Second shift - Regular hourly rate plus a 10% differential. Third shift - Regular hourly rate plus a 15% differential.

(Local #8)

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**SHEET METAL WORKER**

**Sheet Metal Worker**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$48.90**

Supplemental Benefit Rate per Hour: **\$48.00**

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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$39.12**

Supplemental Benefit Rate per Hour: **\$48.00**

**Sheet Metal Worker - Duct Cleaner**

Effective Period: 7/1/2017 - 6/30/2018

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Wage Rate per Hour: **\$12.90**

Supplemental Benefit Rate per Hour: **\$8.07**

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

**Paid Holidays**

None

**Shift Rates**

Work that can only be performed outside regular working hours (eight hours of work between 7:30 A.M. and 3:30 P.M.) - First shift (work between 3:30 P.M. and 11:30 P.M.) - 10% differential above the established hourly rate.

Second shift (work between 11:30 P.M. and 7:30 A.M.) - 15% differential above the established hourly rate.

For Fan Maintenance: On all full shifts of fan maintenance work the straight time hourly rate of pay will be paid for each shift, including nights, Saturdays, Sundays, and holidays.

(Local #28)

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**SHEET METAL WORKER - SPECIALTY**  
**(Decking & Siding)**

**Sheet Metal Specialty Worker**

The first worker to perform this work must be paid at the rate of the Sheet Metal Worker. The second and third workers shall be paid the Specialty Worker Rate. The ratio of One Sheet Metal Worker, then Two Specialty Workers shall be utilized thereafter.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$44.57**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: **\$25.02**

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)

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## SHIPYARD WORKER

### Shipyard Mechanic - First Class

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$28.12**

Supplemental Benefit Rate per Hour: **\$3.03**

### Shipyard Mechanic - Second Class

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$23.35**

Supplemental Benefit Rate per Hour: **\$2.85**

### Shipyard Laborer - First Class

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$20.96**

Supplemental Benefit Rate per Hour: **\$2.76**

### **Shipyard Laborer - Second Class**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$15.24

Supplemental Benefit Rate per Hour: \$2.54

### **Shipyard Dockhand - First Class**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$22.89

Supplemental Benefit Rate per Hour: \$2.83

### **Shipyard Dockhand - Second Class**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$16.51

Supplemental Benefit Rate per Hour: \$2.58

### **Overtime Description**

Work performed on holiday is paid double time the regular hourly wage rate plus holiday pay.

### **Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Time and one half the regular hourly rate after 40 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

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## **SIGN ERECTOR**

(Sheet Metal, Plastic, Electric, and Neon)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

## **Sign Erector**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$47.67**

Supplemental Benefit Rate per Hour: **\$50.67**

### **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)

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## **STEAMFITTER**

### **Steamfitter I**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$55.50**

Supplemental Benefit Rate per Hour: **\$55.29**

Supplemental Note: Overtime supplemental benefit rate: \$109.84

### **Steamfitter -Temporary Services**

The steamfitters shall not do any other work and shall not be permitted to work more than one shift in a twenty-four hour day. When steamfitters are present during the regular working day, no temporary services steamfitter will be required

Effective Period: 7/1/2017 - 6/30/2018

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Wage Rate per Hour: **\$42.18**

Supplemental Benefit Rate per Hour: **\$44.84**

**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.

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**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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$55.50**

Supplemental Benefit Rate per Hour: **\$55.29**

Supplemental Note: Overtime supplemental benefit rate: \$109.84

**Steamfitter -Temporary Services**

The steamfitters shall not do any other work and shall not be permitted to work more than one shift in a twenty-four hour day. When steamfitters are present during the regular working day, no temporary services steamfitter will be required.

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$42.18**

Supplemental Benefit Rate per Hour: **\$44.84**



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

### Overtime

Double time the regular rate after an 8 hour day.  
Double time the regular time rate for Saturday.  
Double time the regular rate for Sunday.

### Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Veteran's Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

### Paid Holidays

None

### Shift Rates

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

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## STEAMFITTER - REFRIGERATION AND AIR CONDITIONER (Maintenance and Installation Service Person)

### Refrigeration and Air Conditioner Mechanic

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$39.50

Supplemental Benefit Rate per Hour: \$15.81

### Refrigeration and Air Conditioner Service Person V

Effective Period: 7/1/2017 - 6/30/2018

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

Wage Rate per Hour: \$32.46

Supplemental Benefit Rate per Hour: \$14.16

**Refrigeration and Air Conditioner Service Person IV**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$26.89

Supplemental Benefit Rate per Hour: \$12.80

**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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$23.08

Supplemental Benefit Rate per Hour: \$11.79

**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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$19.14

Supplemental Benefit Rate per Hour: \$10.85

**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: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$14.00

Supplemental Benefit Rate per Hour: \$9.76

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

Independence Day

Labor Day

Veteran's Day

Thanksgiving Day

Christmas Day

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

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)

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**STONE MASON - SETTER**

**Stone Mason - Setter**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$51.08**

Supplemental Benefit Rate per Hour: **\$38.10**

**Overtime**

Time and one half the regular rate after a 7 hour day.  
Time and one half the regular rate for Saturday.  
Double time the regular rate for Sunday.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day  
Washington's Birthday  
Good Friday  
Memorial Day  
Independence Day  
Labor Day  
Thanksgiving Day  
Christmas Day

**Paid Holidays**

1/2 day on Christmas Eve if work is performed in the A.M.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

**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)

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**TAPER**

**Drywall Taper**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$47.82

Supplemental Benefit Rate per Hour: \$22.68

**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.

(Local #1974)

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**TELECOMMUNICATION WORKER**  
**(Voice Installation Only)**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**Telecommunication Worker**

Effective Period: 7/1/2017 - 6/30/2018

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

Thanksgiving Day

Christmas Day

Employees have the option of observing either Martin Luther King's Birthday or the day after Thanksgiving instead of Lincoln's Birthday

**Shift Rates**

For any workday that starts before 8A.M. or ends after 6P.M. there is a 10% differential for the applicable worker's hourly rate.

**Vacation**

After 6 months.....one week.

After 12 months but less than 7 years.....two weeks.

After 7 or more but less than 15 years.....three weeks.

After 15 years or more but less than 25 years.....four weeks.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

(C.W.A.)

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## TILE FINISHER

### Tile Finisher

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$41.13

Supplemental Benefit Rate per Hour: \$31.18

### 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

### Shift Rates

Off shift work day (work performed outside the regular 8:00 A.M. to 3:30 P.M. workday): shift differential of one and one quarter (1¼) times the regular straight time rate of pay for the seven hours of actual off-shift work.

(Local #7)

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## TILE LAYER - SETTER

### Tile Layer - Setter

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$53.19

Supplemental Benefit Rate per Hour: \$35.35

### Overtime

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

### Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

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

(Local #7)

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## TIMBERPERSON

### Timberperson

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$46.99

Supplemental Benefit Rate per Hour: \$48.26

### Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Time and one half the regular hourly rate after 40 hours in any work week.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**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.

(Local #1536)

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**TUNNEL WORKER**

**Blasters, Mucking Machine Operators (Compressed Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$62.37

Supplemental Benefit Rate per Hour: \$52.39

**Tunnel Workers (Compressed Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$60.21

Supplemental Benefit Rate per Hour: \$50.65

**Top Nipper (Compressed Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$59.11

Supplemental Benefit Rate per Hour: \$49.74

**Outside Lock Tender, Outside Gauge Tender, Muck Lock Tender (Compressed Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 PREVAILING WAGE SCHEDULE

Wage Rate per Hour: \$58.04

Supplemental Benefit Rate per Hour: \$48.81

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

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$58.04

Supplemental Benefit Rate per Hour: \$48.81

**Changehouse Attendant: Powder Watchperson (Compressed Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$50.87

Supplemental Benefit Rate per Hour: \$46.11

**Blasters (Free Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$59.52

Supplemental Benefit Rate per Hour: \$50.03

**Tunnel Workers (Free Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$56.97

Supplemental Benefit Rate per Hour: \$47.89

**All Others (Free Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$52.63

Supplemental Benefit Rate per Hour: \$44.29

**Microtunneling (Free Air Rates)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$45.58

Supplemental Benefit Rate per Hour: \$38.31

**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).

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**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)

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**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 §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

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## **ASBESTOS HANDLER**

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

### **Asbestos Handler (First 1000 Hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 78% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$16.45

### **Asbestos Handler (Second 1000 Hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$16.45

### **Asbestos Handler (Third 1000 Hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 83% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$16.45

### **Asbestos Handler (Fourth 1000 Hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 89% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$16.45

(Local #78)

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## **BOILERMAKER**

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

### **Boilermaker (First Year)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$30.43  
Effective 1/1/2017 - Supplemental Benefit Rate Per Hour: \$30.84

### **Boilermaker (Second Year: 1st Six Months)**

Effective Period: 7/1/2017 - 6/30/2018

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$32.13  
Effective 1/1/2017 - Supplemental Benefit Rate Per Hour: \$32.57

**Boilermaker (Second Year: 2nd Six Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$33.82  
Effective 1/1/2017 - Supplemental Benefit Rate Per Hour: \$34.29

**Boilermaker (Third Year: 1st Six Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$35.53  
Effective 1/1/2017 - Supplemental Benefit Rate Per Hour: \$36.03

**Boilermaker (Third Year: 2nd Six Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 85% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$37.23  
Effective 1/1/2017 - Supplemental Benefit Rate Per Hour: \$37.76

**Boilermaker (Fourth Year: 1st Six Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 90% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$38.93  
Effective 1/1/2017 - Supplemental Benefit Rate Per Hour: \$39.51

**Boilermaker (Fourth Year: 2nd Six Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 95% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$40.63  
Effective 1/1/2017 - Supplemental Benefit Rate Per Hour: \$41.22

(Local #5)

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**BRICKLAYER**

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

**Bricklayer (First 750 Hours)**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$18.80

**Bricklayer (Second 750 Hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 60% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$18.80

**Bricklayer (Third 750 Hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$18.80

**Bricklayer (Fourth 750 Hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$18.80

**Bricklayer (Fifth 750 Hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 90% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$18.80

**Bricklayer (Sixth 750 Hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 95% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$18.80

(Bricklayer District Council)

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**CARPENTER**

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

**Carpenter (First Year)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 40% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour For Building Apprentice: \$31.34

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate Per Hour For Heavy Apprentice: \$32.52

**Carpenter (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Benefit Rate Per Hour For Building Apprentice: \$31.34

Supplemental Benefit Rate Per Hour For Heavy Apprentice: \$32.52

**Carpenter (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Benefit Rate Per Hour For Building Apprentice: \$31.34

Supplemental Benefit Rate Per Hour For Heavy Apprentice: \$32.52

**Carpenter (Fourth Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Benefit Rate Per Hour For Building Apprentice: \$31.34

Supplemental Benefit Rate Per Hour For Heavy Apprentice: \$32.52

(Carpenters District Council)

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**CARPENTER - HIGH RISE CONCRETE FORMS**  
(Ratio of Apprentice to Journeyman: 1 to 1, 2 to 5)

**Carpenter - High Rise (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$16.86

Supplemental Benefit Rate per Hour: \$15.55

**Carpenter - High Rise (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$23.16

Supplemental Benefit Rate per Hour: \$15.55

**Carpenter - High Rise (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$29.61



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: \$15.55

**Carpenter - High Rise (Fourth Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$37.07

Supplemental Benefit Rate per Hour: \$15.55

(Carpenters District Council)

---

**CEMENT MASON**

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

**Cement Mason (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

**Cement Mason (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

**Cement Mason (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

(Local #780)

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**CEMENT AND CONCRETE WORKER**

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

**Cement & Concrete Worker (First 1333 hours)**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Benefit Rate Per Hour: \$16.25

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

**Cement & Concrete Worker (Second 1333 hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$21.08

**Cement & Concrete Worker (Last 1334 hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$21.90

**Cement & Concrete Worker (Hired after 2/6/2016 - First 1334 hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: \$17.00  
Supplemental Benefit Rate Per Hour: \$10.75

**Cement & Concrete Worker (Hired after 2/6/2016 - Second 1334 hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: \$22.10  
Supplemental Benefit Rate Per Hour: \$15.13

**Cement & Concrete Worker (Hired after 2/6/2016 - Last 1334 hours)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: \$27.20  
Supplemental Benefit Rate Per Hour: \$15.63

(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: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: 50% of Journeyperson's rate

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

Effective Period: 7/1/2017 - 6/30/2018

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

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: 7/1/2017 - 6/30/2018  
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: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 90% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: 75% of Journeyperson's rate

(Local #197)

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**DOCKBUILDER/PILE DRIVER**  
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 6)

**Dockbuilder/Pile Driver (First Year)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 40% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$32.52

**Dockbuilder/Pile Driver (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$32.52

**Dockbuilder/Pile Driver (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$32.52

**Dockbuilder/Pile Driver (Fourth Year)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$32.52

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

(Carpenters District Council)

## **ELECTRICIAN**

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

### **Electrician (First Term: 0-6 Months)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: **\$14.00**

Supplemental Benefit Rate per Hour: **\$12.37**

Overtime Supplemental Rate Per Hour: **\$13.29**

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: **\$14.50**

Supplemental Benefit Rate per Hour: **\$12.63**

Overtime Supplemental Rate Per Hour: **\$13.58**

### **Electrician (First Term: 7-12 Months)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: **\$15.00**

Supplemental Benefit Rate per Hour: **\$12.88**

Overtime Supplemental Rate Per Hour: **\$13.87**

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: **\$15.50**

Supplemental Benefit Rate per Hour: **\$13.14**

Overtime Supplemental Rate Per Hour: **\$14.16**

### **Electrician (Second Term: 0-6 Months)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: **\$16.00**

Supplemental Benefit Rate per Hour: **\$13.39**

Overtime Supplemental Rate Per Hour: **\$14.44**

Effective Period: 5/10/2018 - 6/30/2018

Wage Rate per Hour: **\$16.50**

Supplemental Benefit Rate per Hour: **\$13.64**

Overtime Supplemental Rate Per Hour: **\$14.73**

### **Electrician (Second Term: 7-12 Months)**

Effective Period: 7/1/2017 - 5/9/2018

Wage Rate per Hour: **\$17.00**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: \$13.90  
Overtime Supplemental Rate Per Hour: \$15.02

Effective Period: 5/10/2018 - 6/30/2018  
Wage Rate per Hour: \$17.50  
Supplemental Benefit Rate per Hour: \$14.15  
Overtime Supplemental Rate Per Hour: \$15.31

**Electrician (Third Term: 0-6 Months)**

Effective Period: 7/1/2017 - 5/9/2018  
Wage Rate per Hour: \$18.00  
Supplemental Benefit Rate per Hour: \$14.41  
Overtime Supplemental Rate Per Hour: \$15.59

Effective Period: 5/10/2018 - 6/30/2018  
Wage Rate per Hour: \$18.50  
Supplemental Benefit Rate per Hour: \$14.66  
Overtime Supplemental Rate Per Hour: \$15.88

**Electrician (Third Term: 7-12 Months)**

Effective Period: 7/1/2017 - 5/9/2018  
Wage Rate per Hour: \$19.00  
Supplemental Benefit Rate per Hour: \$14.92  
Overtime Supplemental Rate Per Hour: \$16.17

Effective Period: 5/10/2018 - 6/30/2018  
Wage Rate per Hour: \$19.50  
Supplemental Benefit Rate per Hour: \$15.17  
Overtime Supplemental Rate Per Hour: \$16.45

**Electrician (Fourth Term: 0-6 Months)**

Effective Period: 7/1/2017 - 5/9/2018  
Wage Rate per Hour: \$20.00  
Supplemental Benefit Rate per Hour: \$15.43  
Overtime Supplemental Rate Per Hour: \$16.74

Effective Period: 5/10/2018 - 6/30/2018  
Wage Rate per Hour: \$20.50  
Supplemental Benefit Rate per Hour: \$15.68  
Overtime Supplemental Rate Per Hour: \$17.03

**Electrician (Fourth Term: 7-12 Months)**

Effective Period: 7/1/2017 - 5/9/2018  
Wage Rate per Hour: \$22.00  
Supplemental Benefit Rate per Hour: \$16.44  
Overtime Supplemental Rate Per Hour: \$17.89

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 5/10/2018 - 6/30/2018  
Wage Rate per Hour: \$22.50  
Supplemental Benefit Rate per Hour: \$16.70  
Overtime Supplemental Rate Per Hour: \$18.18

**Electrician (Fifth Term: 0-12 Months)**

Effective Period: 7/1/2017 - 5/9/2018  
Wage Rate per Hour: \$24.00  
Supplemental Benefit Rate per Hour: \$19.80  
Overtime Supplemental Rate Per Hour: \$21.30

Effective Period: 5/10/2018 - 6/30/2018  
Wage Rate per Hour: \$24.50  
Supplemental Benefit Rate per Hour: \$20.30  
Overtime Supplemental Rate Per Hour: \$21.84

**Electrician (Fifth Term: 13-18 Months)**

Effective Period: 7/1/2017 - 5/9/2018  
Wage Rate per Hour: \$28.50  
Supplemental Benefit Rate per Hour: \$22.10  
Overtime Supplemental Rate Per Hour: \$23.89

Effective Period: 5/10/2018 - 6/30/2018  
Wage Rate per Hour: \$29.00  
Supplemental Benefit Rate per Hour: \$22.65  
Overtime Supplemental Rate Per Hour: \$24.47

**Overtime Description**

Overtime Wage paid at time and one half the regular rate

(Local #3)

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**ELEVATOR CONSTRUCTOR**

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

**Elevator (Constructor) - First Year**

Effective Period: 7/1/2017 - 3/16/2018  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Rate Per Hour: \$29.88

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 3/17/2018 - 6/30/2018  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Rate Per Hour: \$31.35

**Elevator (Constructor) - Second Year**

Effective Period: 7/1/2017 - 3/16/2018  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Rate Per Hour: \$30.31

Effective Period: 3/17/2018 - 6/30/2018  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Rate Per Hour: \$31.80

**Elevator (Constructor) - Third Year**

Effective Period: 7/1/2017 - 3/16/2018  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Rate Per Hour: \$31.19

Effective Period: 3/17/2018 - 6/30/2018  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Rate Per Hour: \$32.70

**Elevator (Constructor) - Fourth Year**

Effective Period: 7/1/2017 - 3/16/2018  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Rate Per Hour: \$32.07

Effective Period: 3/17/2018 - 6/30/2018  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Rate Per Hour: \$33.60

(Local #1)

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**ELEVATOR REPAIR & MAINTENANCE**

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

**Elevator Service/Modernization Mechanic (First Year)**

Effective Period: 7/1/2017 - 3/16/2018  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Benefit Per Hour: \$29.80

Effective Period: 3/17/2018 - 6/30/2018

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Benefit Per Hour: \$31.28

**Elevator Service/Modernization Mechanic (Second Year)**

Effective Period: 7/1/2017 - 3/16/2018  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Benefit Per Hour: \$30.23

Effective Period: 3/17/2018 - 6/30/2018  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Benefit Per Hour: \$31.72

**Elevator Service/Modernization Mechanic (Third Year)**

Effective Period: 7/1/2017 - 3/16/2018  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Benefit Per Hour: \$31.09

Effective Period: 3/17/2018 - 6/30/2018  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Benefit Per Hour: \$32.60

**Elevator Service/Modernization Mechanic (Fourth Year)**

Effective Period: 7/1/2017 - 3/16/2018  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Benefit Per Hour: \$31.95

Effective Period: 3/17/2018 - 6/30/2018  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Benefit Per Hour: \$33.49

(Local #1)

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**ENGINEER**

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

**Engineer - First Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$24.28  
Supplemental Benefit Rate per Hour: \$23.41

**Engineer - Second Year**



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$30.35  
Supplemental Benefit Rate per Hour: \$23.41

**Engineer - Third Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$33.38  
Supplemental Benefit Rate per Hour: \$23.41

**Engineer - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$36.41  
Supplemental Benefit Rate per Hour: \$23.41

(Local #15)

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**ENGINEER - OPERATING**

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

**Operating Engineer - First Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour 40% of Journeyperson's Rate  
Supplemental Benefit Per Hour: \$20.85

**Operating Engineer - Second Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 50% of Journeyperson's Rate  
Supplemental Benefit Per Hour: \$20.85

**Operating Engineer - Third Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 60% of Journeyperson's Rate  
Supplemental Benefit Per Hour: \$20.85

(Local #14)

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## **FLOOR COVERER**

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

### **Floor Coverer (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 40% of Journeyman's rate

Supplemental Rate Per Hour: \$31.14

### **Floor Coverer (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Rate Per Hour: \$31.14

### **Floor Coverer (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Rate Per Hour: \$31.14

### **Floor Coverer (Fourth Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Rate Per Hour: \$31.14

(Carpenters District Council)

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## **GLAZIER**

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

### **Glazier (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 40% of Journeyman's rate

Supplemental Rate Per Hour: \$14.14

Effective 1/9/2017 - Supplemental Rate Per Hour: \$14.24

### **Glazier (Second Year)**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Rate Per Hour: \$23.77  
Effective 1/9/2017 - Supplemental Rate Per Hour: \$24.08

**Glazier (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 60% of Journeyperson's rate  
Supplemental Rate Per Hour: \$26.73  
Effective 01/09/2017 - Supplemental Rate Per Hour: \$27.09

**Glazier (Fourth Year)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Rate Per Hour: \$32.14  
Effective 01/09/2017 - Supplemental Rate Per Hour: \$32.63

(Local #1281)

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**HEAT & FROST INSULATOR**  
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

**Heat & Frost Insulator (First Year)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage and Supplemental Rate Per Hour: 40% of Journeyperson's rate

**Heat & Frost Insulator (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

**Heat & Frost Insulator (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage and Supplemental Rate Per Hour: 70% of Journeyperson's rate

**Heat & Frost Insulator (Fourth Year)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage and Supplemental Rate Per Hour: 80% of Journeyperson's rate

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

(Local #12)

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**HOUSE WRECKER  
(TOTAL DEMOLITION)**

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

**House Wrecker - First Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$21.17**

Supplemental Benefit Rate per Hour: **\$18.54**

**House Wrecker - Second Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$22.32**

Supplemental Benefit Rate per Hour: **\$18.54**

**House Wrecker - Third Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$23.97**

Supplemental Benefit Rate per Hour: **\$18.54**

**House Wrecker - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$26.53**

Supplemental Benefit Rate per Hour: **\$18.54**

(Mason Tenders District Council)

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**IRON WORKER - ORNAMENTAL**

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

**Iron Worker (Ornamental) - 1st Ten Months**

Effective Period: 7/1/2017 - 6/30/2018

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Rate Per Hour: \$38.65

**Iron Worker (Ornamental) - 11 -16 Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Rate Per Hour: \$39.84

**Iron Worker (Ornamental) - 17 - 22 Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 60% of Journeyperson's rate  
Supplemental Rate Per Hour: \$41.03

**Iron Worker (Ornamental) - 23 - 28 Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Rate Per Hour: \$43.42

**Iron Worker (Ornamental) - 29 - 36 Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Rate Per Hour: \$45.80

(Local #580)

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**IRON WORKER - STRUCTURAL**

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

**Iron Worker (Structural) - 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$25.97  
Supplemental Benefit Rate per Hour: \$49.26

**Iron Worker (Structural) - 7- 18 Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$26.57  
Supplemental Benefit Rate per Hour: \$49.26

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

**Iron Worker (Structural) - 19 - 36 months**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$27.17

Supplemental Benefit Rate per Hour: \$49.26

(Local #40 and #361)

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**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: 7/1/2017 - 6/30/2018

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

Supplemental Rate Per Hour: \$40.63

**Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) - Second 1000 hours**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Rate Per Hour: \$40.63

**Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) - Third 1000 hours**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Rate Per Hour: \$40.63

**Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) - Fourth 1000 hours**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Rate Per Hour: \$40.63

(Local #731)

## **MARBLE MECHANICS**

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

### **Cutters & Setters - First 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

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

### **Cutters & Setters - Second 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

### **Cutters & Setters - Third 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

### **Cutters & Setters - Fourth 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

### **Cutters & Setters - Fifth 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

### **Cutters & Setters - Sixth 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

### **Polishers & Finishers - First 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

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

### **Polishers & Finishers - Second 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

**Polishers & Finishers - Third 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

**Polishers & Finishers - Fourth 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

(Local #7)

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**MASON TENDER**

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

**Mason Tender - First Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$21.39

Supplemental Benefit Rate per Hour: \$19.65

**Mason Tender - Second Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$22.54

Supplemental Benefit Rate per Hour: \$19.65

**Mason Tender - Third Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$24.29

Supplemental Benefit Rate per Hour: \$19.70

**Mason Tender - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$26.95

Supplemental Benefit Rate per Hour: \$19.70

(Local #79)

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## **METALLIC LATHER**

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

### **Metallic Lather (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$26.63

Supplemental Benefit Rate per Hour: \$10.71

### **Metallic Lather (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$30.63

Supplemental Benefit Rate per Hour: \$12.71

### **Metallic Lather (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$33.63

Supplemental Benefit Rate per Hour: \$16.67

### **Metallic Lather (Fourth Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$35.63

Supplemental Benefit Rate per Hour: \$17.67

(Local #46)

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## **MILLWRIGHT**

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

### **Millwright (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$28.33

Supplemental Benefit Rate per Hour: \$34.28

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

**Millwright (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$33.48**

Supplemental Benefit Rate per Hour: **\$37.88**

**Millwright (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$38.63**

Supplemental Benefit Rate per Hour: **\$42.13**

**Millwright (Fourth Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$48.93**

Supplemental Benefit Rate per Hour: **\$48.69**

(Local #740)

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**PAVER AND ROADBUILDER**

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

**Paver and Roadbuilder - First Year (Minimum 1000 hours)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$27.86**

Supplemental Benefit Rate per Hour: **\$19.25**

**Paver and Roadbuilder - Second Year (Minimum 1000 hours)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: **\$29.50**

Supplemental Benefit Rate per Hour: **\$19.25**

(Local #1010)

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## **PAINTER**

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

### **Painter - Brush & Roller - First Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$17.00

Supplemental Benefit Rate per Hour: \$13.42

### **Painter - Brush & Roller - Second Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$21.25

Supplemental Benefit Rate per Hour: \$17.43

### **Painter - Brush & Roller - Third Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$25.50

Supplemental Benefit Rate per Hour: \$20.50

### **Painter - Brush & Roller - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$34.00

Supplemental Benefit Rate per Hour: \$26.20

(District Council of Painters)

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## **PAINTER - METAL POLISHER**

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

### **Metal Polisher (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$11.75

Supplemental Benefit Rate per Hour: \$5.13

### **Metal Polisher (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Wage Rate per Hour: \$13.00

Supplemental Benefit Rate per Hour: \$5.13

**Metal Polisher (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$15.75

Supplemental Benefit Rate per Hour: \$5.13

(Local 8A-28)

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**PAINTER - STRUCTURAL STEEL**

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

**Painters - Structural Steel (First Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

**Painters - Structural Steel (Second Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

**Painters - Structural Steel (Third Year)**

Effective Period: 7/1/2017 - 6/30/2018

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

(Local #806)

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**PLASTERER**

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

**Plasterer - First Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 40% of Journeyman's rate

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Supplemental Rate Per Hour: \$13.59

**Plasterer - First Year: 2nd Six Months**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 45% of Journeyman's rate

Supplemental Rate Per Hour: \$14.07

**Plasterer - Second Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Rate Per Hour: \$16.04

**Plasterer - Second Year: 2nd Six Months**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Rate Per Hour: \$17.12

**Plasterer - Third Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate Per Hour: 70% of Journeyman's rate

Supplemental Rate Per Hour: \$19.29

**Plasterer - Third Year: 2nd Six Months**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Rate Per Hour: \$20.37

(Local #530)

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**PLASTERER - TENDER**

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

**Plasterer Tender - First Year**

Effective Period: 7/1/2017 - 6/30/2018

Wage Rate per Hour: \$21.39

Supplemental Benefit Rate per Hour: \$19.65

**Plasterer Tender - Second Year**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$22.54**  
Supplemental Benefit Rate per Hour: **\$19.65**

**Plasterer Tender - Third Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$24.29**  
Supplemental Benefit Rate per Hour: **\$19.70**

**Plasterer Tender - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$26.95**  
Supplemental Benefit Rate per Hour: **\$19.70**

(Local #79)

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**PLUMBER**

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

**Plumber - First Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$16.28**  
Supplemental Benefit Rate per Hour: **\$5.43**

**Plumber - First Year: 2nd Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$19.28**  
Supplemental Benefit Rate per Hour: **\$6.43**

**Plumber - Second Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: **\$26.35**  
Supplemental Benefit Rate per Hour: **\$16.47**

**Plumber - Third Year**

Effective Period: 7/1/2017 - 6/30/2018

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Wage Rate per Hour: \$28.45  
Supplemental Benefit Rate per Hour: \$16.47

**Plumber - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$31.30  
Supplemental Benefit Rate per Hour: \$16.47

**Plumber - Fifth Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$32.70  
Supplemental Benefit Rate per Hour: \$16.47

**Plumber - Fifth Year: 2nd Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$44.77  
Supplemental Benefit Rate per Hour: \$16.47

(Plumbers Local #1)

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**POINTER, WATERPROOFER, CAULKER, SANDBLASTER,  
STEAMBLASTER**  
(Exterior Building Renovation)  
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

**Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - First Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$25.89  
Supplemental Benefit Rate per Hour: \$13.64

**Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - Second Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$28.97  
Supplemental Benefit Rate per Hour: \$18.15

**Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - Third Year**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$34.12  
Supplemental Benefit Rate per Hour: \$20.90

**Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate per Hour: \$41.33  
Supplemental Benefit Rate per Hour: \$21.60

(Bricklayer District Council)

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**ROOFER**

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

**Roofer - First Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage and Supplemental Rate Per Hour: 35% of Journeyperson's Rate

**Roofer - Second Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage and Supplemental Rate Per Hour: 50% of Journeyperson's Rate

**Roofer - Third Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage and Supplemental Rate Per Hour: 60% of Journeyperson's Rate

**Roofer - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage and Supplemental Rate Per Hour: 75% of Journeyperson's Rate

(Local #8)

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**SHEET METAL WORKER**

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



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

**Sheet Metal Worker (0-6 Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 25% of Journeyperson's rate  
Supplemental Rate Per Hour: \$6.35

**Sheet Metal Worker (7-18 Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 35% of Journeyperson's rate  
Supplemental Rate Per Hour: \$17.12

**Sheet Metal Worker (19-30 Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 45% of Journeyperson's rate  
Supplemental Rate Per Hour: \$23.54

**Sheet Metal Worker (31-36 Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Rate Per Hour: \$27.70

**Sheet Metal Worker (37-42 Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 60% of Journeyperson's rate  
Supplemental Rate Per Hour: \$29.11

**Sheet Metal Worker (43-48 Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Rate Per Hour: \$33.96

**Sheet Metal Worker (49-54 Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Rate Per Hour: \$36.07

**Sheet Metal Worker (55-60 Months)**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Rate Per Hour: \$38.15

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

(Local #28)

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## **SIGN ERECTOR**

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

### **Sign Erector - First Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 35% of Journeyperson's rate  
Supplemental Rate Per Hour: \$13.95  
Effective 1/09/2017 - Supplemental Rate Per Hour: \$14.72

### **Sign Erector - First Year: 2nd Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 40% of Journeyperson's rate  
Supplemental Rate Per Hour: \$15.83  
Effective 1/09/2017 - Supplemental Rate Per Hour: \$16.71

### **Sign Erector - Second Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 45% of Journeyperson's rate  
Supplemental Rate Per Hour: \$17.72  
Effective 1/09/2017 - Supplemental Rate Per Hour: \$18.68

### **Sign Erector - Second Year: 2nd Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Rate Per Hour: \$19.60  
Effective 1/09/2017 - Supplemental Rate Per Hour: \$20.68

### **Sign Erector - Third Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Rate Per Hour: \$26.23  
Effective 1/09/2017 - Supplemental Rate Per Hour: \$27.72

### **Sign Erector - Third Year: 2nd Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 60% of Journeyperson's rate  
Supplemental Rate Per Hour: \$28.24  
Effective 1/09/2017 - Supplemental Rate Per Hour: \$30.57

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

**Sign Erector - Fourth Year: 1st Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Rate Per Hour: \$30.98  
Effective 1/09/2017 - Supplemental Rate Per Hour: \$33.31

**Sign Erector - Fourth Year: 2nd Six Months**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Rate Per Hour: \$33.06  
Effective 1/09/2017 - Supplemental Rate Per Hour: \$35.83

**Sign Erector - Fifth Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Rate Per Hour: \$35.15  
Effective 1/09/2017 - Supplemental Rate Per Hour: \$38.32

**Sign Erector - Sixth Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Rate Per Hour: \$37.22  
Effective 1/09/2017 - Supplemental Rate Per Hour: \$40.81

(Local #137)

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**STEAMFITTER**

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

**Steamfitter - First Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate and Supplemental Per Hour: 40% of Journeyperson's rate

**Steamfitter - Second Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate and Supplemental Rate Per Hour: 50% of Journeyperson's rate.

**Steamfitter - Third Year**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2017 - 6/30/2018

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

**Steamfitter - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018

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

**Steamfitter - Fifth Year**

Effective Period: 7/1/2017 - 6/30/2018

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

(Local #638)

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**STONE MASON - SETTER**

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

**Stone Mason - Setters - First 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

**Stone Mason - Setters - Second 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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: 7/1/2017 - 6/30/2018

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: 7/1/2017 - 6/30/2018

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

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

**Stone Mason - Setters - Fifth 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Wage Rate Per Hour: 90% of Journeyman's rate  
Supplemental Rate Per Hour: 50% of Journeyman's rate

**Stone Mason - Setters - Sixth 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 100% of Journeyman's rate  
Supplemental Rate Per Hour: 50% of Journeyman's rate

(Bricklayers District Council)

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**TAPER**

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

**Drywall Taper - First Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage and Supplemental Rate Per Hour: 40% of Journeyman's rate

**Drywall Taper - Second Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage and Supplemental Rate Per Hour: 60% of Journeyman's rate

**Drywall Taper - Third Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage and Supplemental Rate Per Hour: 80% of Journeyman's rate

(Local #1974)

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**TILE LAYER - SETTER**

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

**Tile Layer - Setter - First 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018  
Wage and Supplemental Rate Per Hour: 50% of Journeyman's rate

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

**Tile Layer - Setter - Second 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

**Tile Layer - Setter - Third 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

**Tile Layer - Setter - Fourth 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

**Tile Layer - Setter - Fifth 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

**Tile Layer - Setter - Sixth 750 Hours**

Effective Period: 7/1/2017 - 6/30/2018

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

(Local #7)

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**TIMBERPERSON**

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

**Timberperson - First Year**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Rate Per Hour: \$32.33

**Timberperson - Second Year**

Effective Period: 7/1/2017 - 6/30/2018

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

Supplemental Rate Per Hour: \$32.33

**Timberperson - Third Year**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 65% of Journey person's rate  
Supplemental Rate Per Hour: \$32.33

**Timberperson - Fourth Year**

Effective Period: 7/1/2017 - 6/30/2018  
Wage Rate Per Hour: 80% of Journey person's rate  
Supplemental Rate Per Hour: \$32.33

(Local #1536)

PRELIMINARY



Leonard A. Mancusi  
SENIOR ASSISTANT COMPTROLLER

THE CITY OF NEW YORK  
OFFICE OF THE COMPTROLLER  
1 CENTRE STREET ROOM 1120  
NEW YORK, N.Y. 10007-2341

TELEPHONE: (212) 669-3622  
FAX NUMBER: (212) 669-8495

ALAN G. HEVESI  
COMPTROLLER

MEMORANDUM

November 6, 2000

To Agency Chief Contracting Officers

From: Leonard A. Mancusi *LMancusi*

Re: Security at Construction Sites

Prior to the enactment of Administrative Code §6-109, security guards on construction sites were not subject to prevailing wages. Security guards under the New York State labor law are covered under §230 which provides that prevailing wages are to be paid for security guards in existing buildings. §6-109 of the Administrative Code which was enacted in 1996 closed this loophole by including all security guards working pursuant to a city contract as a prevailing wage trade.

Although some construction contract boilerplate language has been amended to include §6-109, sub-contractors performing security services have advised us that they were not aware of this provision and, since traditionally, security guards were not a covered trade on construction sites, and they were not advised by a prime contractor that they would have to pay prevailing wages, they have not been doing so.

To avoid the possibility of issuing stop payments against prime contractors for the failure of their security service sub-contractors to pay



*prevailing wages, we suggest that you write to all your existing security guard sub-contractors and their primes and in the future, upon approval of a security guard sub-contractor, advise the contractors of their obligation to pay prevailing wages under §6-109 of the Administrative Code.*

*As always, your cooperation is appreciated.*

**-LAM:er**  
**ACCO.SECURITY AT SITES**



Department of  
Design and  
Construction

INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN

VOLUME 2 OF 3

PROJECT ID: HWXS511

RECONSTRUCTION OF

WEST TREMONT STEP STREET

INCLUDING STREET LIGHTING, ROADWAY RECONSTRUCTION,  
SEWER, AND TRAFFIC WORK

Together With All Work Incidental Thereto

BOROUGH OF THE BRONX  
CITY OF NEW YORK

Laws Construction Corp.

Contractor.

Dated November 20, 20 17

APPROVED AS TO FORM  
CERTIFIED AS TO LEGAL AUTHORITY

[Signature]

Acting Corporation Counsel

[Signature]  
6/12/17

Dated June 12, 20 17



**Department of  
Design and  
Construction**

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

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

**VOLUME 3 OF 3**

**SCHEDULE A  
SPECIFICATIONS AND  
REVISIONS TO STANDARD  
SPECIFICATIONS**

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND  
REQUIRED FOR:

**PROJECT ID: HWXS511**

**RECONSTRUCTION OF**

**WEST TREMONT STEP STREET**

**INCLUDING STREET LIGHTING, ROADWAY RECONSTRUCTION,  
SEWER, AND TRAFFIC WORK**

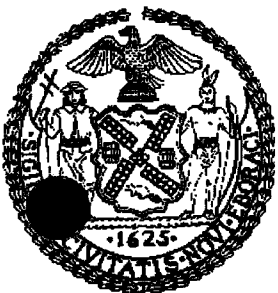
**Together With All Work Incidental Thereto**

**BOROUGH OF THE BRONX  
CITY OF NEW YORK**

**FOR THE DEPARTMENT OF TRANSPORTATION  
PREPARED BY**

**URS CORPORATION**

**APRIL 14, 2017**



17-103

## SPECIFICATIONS AND STANDARDS OF NEW YORK CITY

The following New York City Department of Transportation (NYCDOT) reference documents are available on-line at:

<http://www1.nyc.gov/site/ddc/resources/publications.page> or for purchase between 9:00 A.M. and 3:00 P.M. at 55 Water St., Ground Floor, NYC, N.Y. 10041. Contact: Ms Vivian Valdez, Tel. (212) 839-9434

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://www1.nyc.gov/site/ddc/resources/publications.page> 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. Nader Soliman, Tel. (718) 391-1179

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://www1.nyc.gov/site/ddc/resources/publications.page> 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, November 2010
2. Specifications for Trunk Main Work, July 2014
3. Standard Design and Guidelines for Green Infrastructure Practices, latest version, available only on-line at:  
[http://www.nyc.gov/html/dep/html/stormwater/green\\_infrastructure\\_standards.shtml](http://www.nyc.gov/html/dep/html/stormwater/green_infrastructure_standards.shtml)

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 of New York City 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. JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN Issued:  
August 1, 2005

**VOLUME 3 OF 3**  
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I - PAGES	NEW SECTIONS	I-1 to I-42
S - PAGES	SPECIAL PROVISIONS	S-1 to S-16
SW - PAGES	SEWER AND WATER MAIN SPECIFICATIONS	SW-1 to SW-4
HAZ - PAGES	SPECIFICATIONS FOR HANDLING, TRANSPORTATION AND DISPOSAL OF NON-HAZARDOUS AND POTENTIALLY HAZARDOUS CONTAMINATED MATERIALS	HAZ-1 to HAZ-264
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**SCHEDULE A****(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT  
(INCLUDING GENERAL CONDITIONS RELATED TO ARTICLE 22 – INSURANCE)****PART I. REQUIRED INFORMATION**

<p><b><u>INFORMATION FOR BIDDERS SECTION 26 BID SECURITY</u></b></p> <p>The <b>Contractor</b> shall obtain a bid security in the amount indicated to the right.</p>	<p>Required provided the TOTAL BID PRICE set forth on the Bid Form is \$1,000,000. or more.</p> <p>Certified Check: 2% of Bid Amount or Bond: 10% of Bid Amount</p>
<p><b><u>INFORMATION FOR BIDDERS SECTION 26 PERFORMANCE AND PAYMENT BONDS</u></b></p> <p>The <b>Contractor</b> shall obtain performance and payment bonds in the amount indicated to the right.</p>	<p>Required for contracts in the amount of \$1,000,000 or more.</p> <p>Performance Security and Payment Security shall each be in an amount equal to 100% of the Contract Price.</p>
<p><b><u>INFORMATION FOR BIDDERS DEPARTMENT OF DESIGN AND CONSTRUCTION SAFETY REQUIREMENTS</u></b></p> <p>The <b>Contractor</b> shall provide the safety personnel as indicated to the right.</p>	<ul style="list-style-type: none"> <li>■ Project Safety Representative</li> <li>■ Dedicated, full-time Project Safety Manager</li> </ul>
<p><b><u>CONTRACT ARTICLE 14 DATE FOR SUBSTANTIAL COMPLETION</u></b></p> <p>The <b>Contractor</b> shall substantially complete the <b>Work</b> in the number of calendar days indicated to the right.</p>	<p>See Page SA-4</p>
<p><b><u>CONTRACT ARTICLE 15 LIQUIDATED DAMAGES</u></b></p> <p>If the <b>Contractor</b> fails to substantially complete the <b>Work</b> within the time fixed for substantial completion plus authorized time extensions or if the <b>Contractor</b>, in the sole determination of the <b>Commissioner</b>, has abandoned the <b>Work</b>, the <b>Contractor</b> shall pay to the <b>City</b> the amount indicated to the right.</p>	<p>\$2,500. for each consecutive calendar day over substantial completion time</p>
<p><b><u>CONTRACT ARTICLE 17. SUB-CONTRACTOR</u></b></p> <p>The <b>Contractor</b> shall not make subcontracts totaling an amount more than the percentage of the total <b>Contract</b> price indicated to the right.</p>	<p>Not to exceed <u>49</u> % of the <b>Contract</b> price</p>

<p align="center"><b><u>CONTRACT ARTICLE 21.</u></b> <b><u>RETAINAGE</u></b></p> <p>The <b>Commissioner</b> shall deduct and retain until the substantial completion of the <b>Work</b> the percent value of the <b>Work</b> indicated to the right.</p>	<p><u>5 %</u> of the value of the <b>Work</b></p>
<p align="center"><b><u>CONTRACT ARTICLE 22.</u></b> <b><u>(Per Directions Below)</u></b></p>	<p>See pages SA-5 through SA-16</p>
<p align="center"><b><u>CONTRACT ARTICLE 24.</u></b> <b><u>DEPOSIT GUARANTEE</u></b></p> <p>As security for the faithful performance of its obligations, the <b>Contractor</b>, upon filing its requisition for payment on <b>Substantial Completion</b>, shall deposit with the <b>Commissioner</b> a sum equal to the percentage of the <b>Contract</b> price indicated to the right.</p>	<p>1% of <b>Contract</b> price</p>
<p align="center"><b><u>CONTRACT ARTICLE 24.</u></b> <b><u>PERIOD OF GUARANTEE</u></b></p> <p>Periods of maintenance and guarantee other than the period set forth in Article 24.1 are indicated to the right.</p>	<p>Eighteen (18) Months, excluding Trees</p> <p>Twenty-four (24) Months for Tree Planting</p>
<p align="center"><b><u>CONTRACT ARTICLE 74.</u></b> <b><u>STATEMENT OF WORK</u></b></p> <p>The <b>Contractor</b> shall furnish all labor and materials and perform all <b>Work</b> in strict accordance with the <b>Contract Drawings</b>, <b>Specifications</b>, and all <b>Addenda</b> thereto, as shown in the column to the right.</p>	<p><b>Addenda</b>, numbered:</p> <hr/>
<p align="center"><b><u>CONTRACT ARTICLE 75.</u></b> <b><u>COMPENSATION TO BE PAID TO CONTRACTOR</u></b></p> <p>The <b>City</b> shall pay and the <b>Contractor</b> shall accept in full consideration for the performance of the <b>Contract</b>, subject to additions and deductions as provided herein, the total sum <b>shown in the column to the right</b>, being the amount at which the <b>Contract</b> was awarded to the <b>Contractor</b> at a public letting thereof, based upon the <b>Contractor's</b> bid for the <b>Contract</b>.</p>	<p>Amount for which the <b>Contract</b> was Awarded:</p> <hr/> <p align="right">Dollars</p> <p>(\$ <hr/> )</p>
<p align="center"><b><u>CONTRACT ARTICLE 79.</u></b> <b><u>PARTICIPATION BY MINORITY-OWNED AND WOMEN-OWNED BUSINESS ENTERPRISES IN CITY PROCUREMENT</u></b></p>	<p>See M/WBE Utilization Plan in the Bid Booklet</p>



<p align="center"><b><u>STANDARD HIGHWAY SPECIFICATIONS</u></b>  <b><u>SECTION 6.40</u></b>  <b><u>LIQUIDATED DAMAGES FOR ENGINEER'S FIELD OFFICE</u></b></p> <p>If the Contractor fails to satisfactorily provide the field office and all equipment specified in <b>Section 6.40 - Engineer's Field Office</b>, 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 <b>Section 6.40.5</b>, is not corrected.</p>	<p>\$ <u>500.00</u> for each calendar day of deficiency</p>
<p align="center"><b><u>STANDARD HIGHWAY SPECIFICATIONS</u></b>  <b><u>SECTION 6.70</u></b>  <b><u>LIQUIDATED DAMAGES FOR MAINTENANCE AND PROTECTION OF TRAFFIC</u></b></p>	<p>\$ <u>250.00</u> for each instance of failure to comply with the Maintenance and Protection of Traffic requirements within three (3) hours after written notice from the Engineer.</p> <p>\$ <u>500.00</u> for each and every hour of failing to open the entire width of roadway to traffic the morning following a night/weekend work operation.</p>
<p align="center"><b><u>STANDARD HIGHWAY SPECIFICATIONS</u></b>  <b><u>SECTION 7.13</u></b>  <b><u>LIQUIDATED DAMAGES FOR MAINTENANCE OF SITE</u></b></p> <p>If the Contractor fails to comply, within three (3) consecutive hours after written notice from the Engineer, with the requirements of <b>Section 7.13 - Maintenance of Site</b>, the Contractor shall pay to the City of New York, until such notice has been complied with or rescinded, the sum specified above per calendar day, for each instance of such failure, as liquidated damages and not as a penalty, for such default.</p>	<p>\$ <u>500.00</u> for each calendar day, for each occurrence</p>

**Date for Substantial Completion (Reference: Article 14)**

The Contractor shall substantially complete the Work within the Final Contract Duration determined in accordance with the terms and conditions set forth herein.

The Base Contract Duration for this project is 545 consecutive calendar days ("ccds").

The Final Contract Duration shall be the Base Contract Duration when a check mark is indicated before the word "NO", below, and shall be the Base Contract Duration adjusted by the table set forth below when a check mark is indicated before the word "YES", below.

  ✓   YES                             NO

When the Final Contract Duration is indicated above to be adjusted by the table below, the table may increase the Base Contract Duration depending on the date of scheduled substantial completion to avoid a scheduled substantial completion of the Work during the winter months. The date of scheduled substantial completion shall be determined by adding the Base Contract Duration to the date specified to commence work in the written Notice to Proceed. The Final Contract Duration shall then be determined as follows:

- (a) Find the row that corresponds to the month of substantial completion based on the Base Contract Duration added to the date specified to commence work in the written Notice to Proceed.
- (b) Find the number of days to be added to the Base Contract Duration in the table below. Add that number of days to the Base Contract Duration to obtain the Final Contract Duration in consecutive calendar days.

<b>Month of Substantial Completion based on the Base Contract Duration</b>	<b>Number of Days of adjustment</b>
<b>January</b>	150
<b>February</b>	120
<b>March</b>	90
<b>April</b>	60
<b>May</b>	30
<b>June</b>	0
<b>July</b>	0
<b>August</b>	0
<b>September</b>	0
<b>October</b>	0
<b>November –December 15</b>	0
<b>December 16 – December 31</b>	180

In addition, should Item No. 9.30, "Storm Water Pollution Prevention," exist in the Contract and the required Storm Water Pollution Prevention Plan (SWPPP) does not conform to NYSDEC's recommended Standards, an additional 60 ccd shall be added to the above Final Contract Duration.

**(GENERAL CONDITIONS RELATING TO ARTICLE 22 – INSURANCE)****PART II. TYPES OF INSURANCE, MINIMUM LIMITS AND SPECIAL CONDITIONS**

**Note:** All certificate(s) of insurance submitted pursuant to Contract Article 22.3. 3 must be accompanied by a Certification by Broker consistent with Part III below and include the following information:

- For each insurance policy, the name and NAIC number of issuing company, number of policy, and effective dates;
- Policy limits consistent with the requirements listed below;
- Additional insureds or loss payees consistent with the requirements listed below; and
- The number assigned to the Contract by the City (in the "Description of Operations" field).

Insurance indicated by a blackened box (■) or by X in a □ to left will be required under this contract

Types of Insurance (per Article 22 in its entirety, including listed paragraph)	Minimum Limits and Special Conditions
<div>■ Commercial General Liability Art. 22.1.1</div>	<p>The minimum limits shall be \$ 3,000,000 per occurrence and \$ 6,000,000 per project aggregate applicable to this Contract.</p> <p>Additional Insureds:</p> <ol style="list-style-type: none"> <li>1. <u>City of New York</u>, including its officials and employees, with coverage at least as broad as ISO Form CG 20 10 and CG 20 37,</li> <li>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),</li> </ol>

<p> <input checked="" type="checkbox"/> Workers' Compensation      Art. 22.1.2  <input checked="" type="checkbox"/> Disability Benefits Insurance      Art. 22.1.2  <input checked="" type="checkbox"/> Employers' Liability      Art. 22.1.2  <input type="checkbox"/> Jones Act      Art. 22.1.3  <input type="checkbox"/> U.S. Longshoremen's and Harbor Workers Compensation Act      Art. 22.1.3 </p>	<p>Workers' Compensation, Employers' Liability, and Disability Benefits Insurance: Statutory per New York State law without regard to jurisdiction.</p> <p><b>Note:</b> The following forms are acceptable: (1) New York State Workers' Compensation Board Form No. C-105.2, (2) State Insurance Fund Form No. U-26.3, (3) New York State Workers' Compensation Board Form No. DB-120.1 and (4) Request for WC/DB Exemption Form No. CE-200. The City will not accept an ACORD form as proof of Workers' Compensation or Disability Insurance.</p> <p>Jones Act and U.S. Longshoremen's and Harbor Workers' Compensation Act: Statutory per U.S. Law.</p> <p><input type="checkbox"/> Additional Requirements:</p> <p>(1) Two (2) certificates of such insurance or authority for self-insurance shall be furnished to the Director, Risk Management, MTA Risk and Insurance Management Standards, Enforcement and Claims Unit, 2 Broadway, 21<sup>st</sup> Floor, New York, NY 10004</p> <p>(2) Two (2) certificates of such insurance (see pages SA-15 and SA-16) or authority for self-insurance shall be furnished to the MNRR, Chief Maintenance of Way Officer, Attention: James Hom, Specification Engineer, MTA Metro North Railroad, 420 Lexington Avenue, 12<sup>th</sup> Floor, New YORK 10017.</p>
<p><input type="checkbox"/> Builders' Risk      Art. 22.1.4</p>	<p><input type="checkbox"/> Required: 100% of total bid amount</p> <p><input type="checkbox"/> Required: 100 % of total bid amount for Item(s):</p> <p><b>Contractor</b> the Named Insured; the <b>City</b> both an Additional Insured and one of the loss payees as its interests may appear.</p> <p>If the <b>Work</b> does not involve construction of a new building or gut renovation work, the <b>Contractor</b> may provide an installation floater in lieu of Builders Risk insurance.</p> <p>Note: Builders Risk Insurance may terminate upon <b>Substantial Completion</b> of the <b>Work</b> in its entirety.</p>

<input checked="" type="checkbox"/> Commercial Auto Liability      Art. 22.1.5	<p>\$ <u>2,000,000</u> per accident combined single limit</p> <p>If vehicles are used for transporting hazardous materials, the <b>Contractor</b> shall provide pollution liability broadened coverage for covered vehicles (endorsement CA 99 48) as well as proof of MCS 90</p> <p>Additional Insureds:</p> <p>(1) <u>City of New York, including its officials and employees, and</u></p>
<input type="checkbox"/> Contractors Pollution Liability      Art. 22.1.6	<p>\$ <u>5,000,000</u> per occurrence</p> <p>\$ <u>5,000,000</u> aggregate</p> <p>Additional Insureds:</p> <p>1. City of New York, including its officials and employees, and</p> <p>2. _____</p> <p>3. _____</p>
<input type="checkbox"/> Marine Protection and Indemnity Art. 22.1.7(a)	<p>\$ _____ each occurrence</p> <p>\$ _____ aggregate</p> <p>Additional Insureds:</p> <p>1. City of New York, including its officials and employees, and</p> <p>2. _____</p> <p>3. _____</p>
<input type="checkbox"/> Hull and Machinery Insurance      Art. 22.1.7(b)	<p>\$ _____ per occurrence</p> <p>\$ _____ aggregate</p> <p>Additional Insureds:</p> <p>1. City of New York, including its officials and employees, and</p> <p>2. _____</p> <p>3. _____</p>

☐ Marine Pollution Liability  
22.1.7(c)

Art.

\$ 1,000,000 per occurrence

\$ 1,000,000 aggregate

Additional Insureds:

1. City of New York, including its officials and employees, and

2.

3.

[OTHER]  
22.1.8

Art.

☐ Railroad Protection Liability Policy

(ISO-RIMA or equivalent form) approved by Permitior 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 28 31 - Pollution Exclusion Amendment is required to be endorsed onto the policy when environmental-related work and/or exposures exist.
- Indicate the Name and address of the Contractor to perform the work, the Contract # and the name of the railroad property where the work is being performed and the Agency Permit.
- Evidence of Railroad Protective Liability Insurance, must be provided in the form of the 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. The Metro North Railroad (MNRR) Metropolitan Transportation Authority (MTA), its subsidiaries and affiliated companies, the City of New York and all other indemnified parties.

[OTHER]

Art. 22.1.8

■ Professional Liability

- A. The Contractor's Professional Engineer shall maintain and submit evidence of Professional Liability Insurance in the minimum amount of \$1,000,000 per claim. The policy or policies shall include an endorsement to cover the liability assumed by the Contractor under this Contract arising out of the negligent performance of professional services or caused by an error, omission or negligent act of the Contractor's Professional Engineer or anyone employed by the Contractor's Professional Engineer.
- B. Claims-made policies will be accepted for Professional Liability Insurance. All such policies shall have an extended reporting period option or automatic coverage of not less than two (2) years. If available as an option, the Contractor's Professional Engineer shall purchase extended reporting period coverage effective on cancellation or termination of such insurance unless a new policy is secured with a retroactive date, including at least the last policy year.

[OTHER]

Art. 22.1.8

■ Engineer's Field Office

**Section 6.40, Standard Highway Specifications**

Fire insurance, extended coverage and vandalism, malicious mischief and burglary, and theft insurance coverage in the amount of \$40,000

[OTHER]

Art. 22.1.8

☐ The Following Additional Insurance Must Be Provided:

**Umbrella/Excess Liability Insurance** - The Contractor shall provide Umbrella/Excess Liability Insurance in the minimum amount of \$10,000,000 per Occurrence and \$10,000,000 in Aggregate. The policy terms and condition should be at least as broad as the underlying policies. The underlying policies should comply with the insurance provision as outlined by the contract. Defense cost should be in addition to the limit of liability. The City of New York, including its officials and employees, should be included as additional insured as respects to the noted project.

**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.





**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**.

\_\_\_\_\_  
DDC Director, Insurance Risk Manager

\_\_\_\_\_  
30 – 30 Thomson Avenue, 4th Floor (IDCNY Building)

\_\_\_\_\_  
Long Island City, NY 11101

\_\_\_\_\_

(NO FURTHER TEXT ON THIS PAGE)

**REVISIONS TO STANDARD SPECIFICATIONS**

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**NOTICE**

The Specification Bulletin(s) ("SB(s)") contained in this Section (R-Pages) may consist of revisions to the following Standard Specifications:

- New York City Department of Transportation ("NYC DOT") Standard Highway Specifications, dated 8/1/2015;
- New York City Department of Environmental Protection ("NYC DEP") Standard Sewer and Water Main Specifications, dated 7/1/2014; and
- NYC DEP Specifications for Trunk Main Work, dated 7/2014.

The SB(s) modify and supersede portions of the applicable Standard Specifications. The provisions contained in this Contract's I-Pages, S-Pages and SW-Pages may further modify the applicable Standard Specifications.

The following SB(s) are included as part of this contract:

- SB 16-001 – REVISIONS TO THE NYC DOT STANDARD HIGHWAY SPECIFICATIONS.
- SB 16-002 – REVISIONS TO THE NYC DEP STANDARD SEWER AND WATER MAIN SPECIFICATIONS.
- SB 17-001 – UV CURED-IN-PLACE-PIPE (CIPP) LINING METHOD
- SB 17-002 – RODENT AND WATERBUG PEST CONTROL
- SB 17-003 – ENGINEERS FIELD OFFICE
- SB 17-004 – FIRE DEPARTMENT FACILITIES
- SB 17-005 – DIGITAL PHOTOGRAPHS
- SB 17-006 – RECORDS OF SUBSURFACE STRUCTURES
- SB 17-007 – MOBILIZATION
- SB 17-008 – QUALIFICATION CARDS
- SB 17-009 – SALVAGEABLE MATERIALS

**(NO TEXT ON THIS PAGE)**



# Department of Design and Construction

## SPECIFICATION BULLETIN

# SB

16-001

Title: **REVISIONS TO NYC DOT STANDARD HIGHWAY SPECIFICATIONS**

Prepared:

6/29/2016

Richard Jones, P.E. CWI

Date

Director, Specifications – Infrastructure Design

Approved:

6/29/2016

Mohsen Zargareh, P.E.

Date

Assistant Commissioner – Infrastructure Design

### APPLICABILITY:

- This Specification Bulletin (SB) is effective for projects advertised on or after 7/11/16.

### SUPERSEDEENCE:

- This SB supersedes the following SBs: **NONE**

## REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS VOLUME 1 OF 2, DATED 8/1/15:

All references contained below are to the New York City Department of Transportation Standard Highway Specifications, Dated August 1, 2015. Said Standard Highway Specifications are hereby revised as follows:

- a) Refer to Page 3, Subsection 1.06.3;  
Delete the third paragraph;  
Substitute the following new paragraph:  
“Any doubt as to the meaning of this contract or the specifications thereof, or any obscurity as to the wording of them, or any discrepancy between them, or any discrepancy between figures and drawings will be explained by the Engineer.”
- b) Refer to Page 5, Subsection 1.06.8;  
Delete the words “tentative” wherever it occurs in the last paragraph.
- c) Refer to Page 17, Subsection 1.06.23.(G), last paragraph;  
Delete the word “asbestos” wherever it occurs.
- d) Refer to Page 26, Subsection 1.06.29, line number four (4);  
Delete the words and punctuation mark “, and at the prices fixed herein” in its entirety.



# Department of Design and Construction

## SPECIFICATION BULLETIN

# SB

16-001

Title: REVISIONS TO NYC DOT STANDARD HIGHWAY SPECIFICATIONS

- e) Refer to Page 41 Subsection 1.06.48.(C), 2nd paragraph, 1st line;  
Delete from the first line starting from "have maximum grade of one (1) vertical on three (3) horizontal", in its entirety;  
Substitute the following:  
"have a maximum grade of one (1) vertical on twelve (12) horizontal, for pedestrian ramp and one (1) vertical on six (6) horizontal, for driveway ramp".
- f) Refer to Page 87, Subsection 2.18.3(A), 4th paragraph;  
Change "." to "," after "... and Appeals";  
Add the following words: "and the health standards of OSHA of the U.S. Department of Labor."
- g) Refer to Page 104, Subsection 3.01.3.(C).1.(c), 4<sup>th</sup> paragraph;  
Delete the words "to a maximum of 70%"
- h) Refer to Page 120, Subsection 3.05.5.(A), 2<sup>nd</sup> Table 3.05-V;  
Delete the sentence: "Concrete of Type IA, IIA and IIIA shall have an air entrainment of 4 to 7 percent when the coarse aggregate is 1 1/2" stone and 5 to 7 percent when the coarse aggregate is 3/4" stone, with 6.5 percent desired in either case."  
Substitute the following:  
"Concrete of classes shown in Table 3.05-II shall have an air entrainment of 4 to 7 percent for size 357 coarse aggregate and 5 to 7 percent for size 67 or 57 aggregate, with 6.5 percent desired in either case. If concrete is pumped, air entrainment shall be measured after the pump."
- i) Refer to Page 135, Subsection 3.05.9, 4<sup>th</sup> paragraph;  
Add the following words to the end of the 4<sup>th</sup> paragraph: "Dosing of accelerators and retarders shall be per the manufacturer's published recommendations. Addition of an accelerator or retarder per this subsection will not require a separate mix design, unless requested by the Engineer."
- j) Refer to Page 192, Subsection 4.06.12;  
Delete the Subsection 4.06.12, in its entirety and substitute the words "4.06.12. (NO TEXT)." The use of rubble aggregate will not be permitted.
- k) Refer to Page 282, Subsection 5.02.2.(C), 2<sup>nd</sup> paragraph;  
Add the following words: "6 in x 12 in" after "At least four (4)"



**Department of  
Design and  
Construction**

**SPECIFICATION  
BULLETIN**

**SB**

**16-001**

**Title: REVISIONS TO NYC DOT STANDARD HIGHWAY SPECIFICATIONS**

- I) Refer to Page 282, Subsection 5.02.2.(C), 2<sup>nd</sup> paragraph;  
Delete the sentence: "Curing boxes shall be furnished in good operating condition, capable of maintaining cylinders under water at a curing temperature of 72°F. ±5°F."

Substitute the following:

"Curing boxes meeting the requirements of ASTM C31 and C511 shall be furnished in good operating condition, and shall maintain cylinders under water at a curing temperature of 73.5°F ±3.5°F. Curing boxes with rusted or corroded interior surfaces shall not be used."

**REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION  
STANDARD HIGHWAY SPECIFICATIONS VOLUME 2 OF 2, DATED 8/1/15:**

*No Changes.*



# Department of Design and Construction

## SPECIFICATION BULLETIN

# SB

16-002

Title: **REVISIONS TO THE NYC DEP STANDARD SEWER AND WATER MAIN SPECIFICATIONS**

Prepared:

10/11/2016

Richard Jones, P.E. CWI

Date

Director, Specifications – Infrastructure Design

Approved:

10/11/2016

Mohsen Zargarelahi, P.E.

Date

Assistant Commissioner – Infrastructure Design

### APPLICABILITY:

- This Specification Bulletin (SB) is effective for projects advertised on or after 11/14/16.

### SUPERSEDEENCE:

- This SB supersedes the following SBs: **NONE**

### ATTACHMENTS:

- **ATTACHMENT 1:** Revised Section 40.05 – SHEETING AND BRACING  
Pages A1-1 through A1-7
- **ATTACHMENT 2:** Revised Section 70.91 – SHEETING  
Pages A2-1 through A2-3

### REVISIONS TO THE NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION STANDARD SEWER AND WATER MAIN SPECIFICATIONS, DATED 7/1/14:

All references contained below are to the New York City Department of Environmental Protection Standard Sewer and Water Main Specifications, Dated July 1, 2014. Said Standard Sewer and Water Main Specifications are hereby revised as follows:

- a) **Refer** to Page III-6, Subsection 30.03.1;  
**Add** the text “, C780 Annex 6” to line (2) after the words “C109”.
- b) **Refer** to Pages IV-12 through IV-18, Section 40.05 – SHEETING AND BRACING;  
**Delete** in its entirety the Section;  
**Substitute** the revised Section in Attachment 1 (7 pages).
- c) **Refer** to Page V-60, Subsection 50.72.5.(A);  
**Delete** in its entirety the Subsection;  
**Substitute** the revised Subsection:





# Department of Design and Construction

## SPECIFICATION BULLETIN

# SB

### 16-002

Title: **REVISIONS TO THE NYC DEP STANDARD SEWER AND WATER MAIN SPECIFICATIONS**

- "(A) Cement shall be either Type V cement meeting the requirements of ASTM C150 or blended cement containing 8% microsilica that meets the requirements of NYS Department of Transportation Standard Specification 701-03, Type IP (8)".
- d) **Refer** to Page V-65, Subsection 50.72.7.(N);  
**Delete** the second sentence "The test cubes shall be 4"x4"x4".
- e) **Refer** to Page V-66, Subsection 50.72.7.(N);  
**Delete** the text:  
Test cubes will be made and stored in accordance with ASTM C31 and tested in accordance with ASTM C39, except as otherwise modified by the Engineer. Each test will consist of three (3) cubes; one (1) to be tested at seven (7) days, the other two (2) at twenty-eight (28) days.  
**Substitute** the revised text:  
"Test cores will be made, cured, and tested in accordance with ASTM C42, except as otherwise modified by the Engineer. Test cores will be made from a shotcrete test board, where the shotcrete thickness matches the placed thickness. Each test will consist of three (3) cores; one (1) to be tested at seven (7) days, the other two (2) at twenty-eight (28) days."
- f) **Refer** to Pages V-65, V-66, and V-67, Subsections 50.72.7.(N), 50.72.9, and 50.72.10;  
**Delete** the text "Test Cube" wherever it appears;  
**Substitute** the text "Test Core".
- g) **Refer** to Page VII-25, Subsection 70.12.5.(B).(2);  
**Delete** the text "and C492";  
**Substitute** the replacement text "or C780 Annex 6"
- h) **Refer** to Page VII-29, Subsection 70.13.4;  
**Add** the text " or C780 Annex 6" after the words "C109".
- i) **Refer** to Pages VII-48 through VII-51, Section 70.91 – SHEETING;  
**Delete** in its entirety the Section;  
**Substitute** the revised Section in Attachment 2 (3 pages).

## **SECTION 40.05 SHEETING AND BRACING**

### **40.05.1 SHEETING AND BRACING**

(A) The sides of the trenches and excavations shall be supported by adequate sheeting and properly braced. All sheeting and bracing systems the Contractor elects to use or are ordered by the Engineer or the Department shall comply with these specifications and must receive the approvals stated herein. Timber sheeting and bracing shall be vertical sheeting with rangers and braces or horizontal sheeting supported by vertical steel soldier beams and the necessary bracing.

(B) Where the material to be excavated is of such character as to render it necessary, the sheeting shall be tongued and grooved and driven to such depths below the subgrade as may be directed.

(C) Where the nature of the material encountered or the safety of the adjacent structure render it necessary, the Contractor may resort to the use of steel sheet piling with prestressed bracing or the Contractor may underpin the structure or buildings.

(D) Other sheeting systems may be permitted upon approval of the Department of Design and Construction. (Trench Boxes will not be permitted for use in trenches and excavations that exceed twelve (12) feet in depth. (See Subsection 40.05.4(E).))

(E) In general, sheeting and bracing in trenches and excavations shall be designed and installed so that the sheeting shall not be braced or blocked against any part of the new structure, or manholes, or chambers. When conditions warrant, bracing against such structures may be permitted following the approval of drawings prepared and submitted by a Professional Engineer licensed in the State of New York, showing the assumed design loads and stresses, and details of such bracing.

(F) If, in the opinion of the Engineer, any of the approved temporary or permanent supporting structures are inadequate or unsuitable for the actual conditions in the field, the Engineer may direct the Contractor to strengthen the supporting structures at no additional cost to the City. The Contractor shall be responsible for the sufficiency of all temporary and permanent supporting structures whether or not directed by the Engineer to strengthen them.

(G) Unless otherwise specified in the plans or these specifications, the Contractor shall remove all sheeting and bracing throughout this project as per Subsection 40.05.7.

### **40.05.2 SHEETING LEFT IN PLACE**

When sheeting is specifically shown on the plans or specifically described in the specifications or specifically ordered in writing by the Engineer to be left in place, it refers to all sheeting and bracing in trench excavations for water main pipe and sewer conduit including manholes, valves and chambers. Excavations for catch basins, basin connections, house services and other excavations not considered part of the trench excavation for water main pipe and sewer conduit shall have their sheeting and bracing removed entirely.

When sheeting is to be left in place, all elements such as rangers and braces, of the sheeting used, must be left in place, except for such temporary braces that require removal in order to make way for the structure. Where it is necessary to remove such temporary braces, the sheeting shall be rebraced in a manner approved by the Engineer; however, in no case shall the sheeting be braced against the side of the structure unless approved in writing by the Engineer. Where lagging and soldier beams are used, the soldier beams and all the rangers and braces shall also be left in place. Where steel sheeting is used, the rangers and braces shall also be left in place.

When sheeting is to be left in place, the Contractor shall cut sheeting at the elevations ordered in writing by the Engineer; however, in general such cutoffs shall not be less than four (4) feet below the final

grade. Timber sheeting shall be cut off by sawing. Steel sheeting or soldier beams shall be cut off by burning. Breaking off of sheeting will not be permitted. The Contractor shall remove from the trench and away from the site of work, to the Contractor's own place of disposal, all cut sheeting and soldier beams together with all rangers, lagging and braces above the ordered elevation of cut. Where the removal of rangers and braces above the ordered elevation of cut is determined by the Engineer to render the sheeting system unstable, rangers and braces shall be placed prior to cutting at a level below the ordered elevation of cut and left in place.

**(A) FOR SHEETING OF WATER MAIN TRENCHES AND EXCAVATIONS**

Additional payment will be made for sheeting and bracing that is specifically shown on the plans or specifically described in the specifications or ordered in writing by the Engineer, to be left in place in water main trenches and excavations. Payment will be made in accordance with **Section 70.91**.

**(B) FOR SHEETING OF SEWER TRENCHES AND EXCAVATIONS**

No separate or additional payment will be made for sheeting and bracing that is specifically shown on the plans or specifically described in the specifications to be left in place in sewer trenches and excavations, regardless of the type used nor for the removal from the trench and excavation and the disposal away from the job site of the cut sheeting, bracing and rangers. The cost thereof shall be included in the prices bid for all sewer contract items of work, except when separate payment for sheeting and bracing is provided, in this case the cost shall be included therein. When sheeting is specifically ordered by the Engineer, to be left in place in sewer trenches and excavations, the cost for all labor, materials, cutting, removal, disposal, insurance and work required to leave sheeting in place shall be determine in accordance with **Articles 25 and 26** of the Contract.

**40.05.3 MATERIALS**

(A) Timber sheeting and bracing shall be of new or acceptable used timber free from injurious defects.

(B) Steel soldier beams shall comply with the requirements of **Section 23.05 - Structural, Reinforcing And Miscellaneous Steel**, except that approved used material will be permitted. Steel sheet piling shall comply with the requirements of **Section 24.01 - Steel Sheeting**, except that approved used materials will be permitted. Timber and lumber for bracing, shoring, fencing, bridging, and decking shall conform to the requirements of **Section 23.06 - Timber And Lumber**. Steel used for sheeting systems or for any other purposes herein shall conform to the requirements of the ASTM A36 and all other applicable requirements of ASTM.

(C) Steel Plates for use as sheeting will be permitted provided that they are properly installed and supported. The use of steel bracing frames which partially support the steel plates will be permitted up to a depth of twelve (12) feet. The use of steel plates in conjunction with trench boxes will not be permitted (trench boxes can not be considered as steel bracing frames).

(D) Steel Sheeting shall conform to the requirements of **Section 24.01** and shall be installed with continuous interlock.

**40.05.4 CONSTRUCTION METHODS**

(A) GENERAL - Timber sheeting and bracing and other sheeting systems shall be of sufficient dimensions and strength, and steel sheeting shall be of sufficient type, size and weight, to support adequately the sides of the trenches and excavations and insure the safety of adjacent structures and shall be installed in accordance with the approved sheeting details. The Contractor shall be solely responsible for the adequacy and sufficiency of all sheeting and bracing used.

(B) SHEETING - Unless otherwise specified, timber sheeting and bracing shall be driven or placed ahead of the excavation in such a manner as to prevent the loss or slippage of ground in order to

safeguard adjacent surface and subsurface structures. The sheeting shall be driven to adequate depth below subgrade. As the work progresses, any voids back of the sheeting shall be filled and compacted in accordance with **Section 40.06** and as directed by the Engineer.

(C) Sheeting can be used as forms for concrete work. Whenever sheeting is used as formwork as specified or approved by the Engineer only timber sheeting will be permitted unless otherwise approved or specified in writing by the Engineer. When sheeting is used as formwork, an approved protection shall be placed between the sheeting, bracing or soldier beams and the concrete. In addition, when sheeting is used as formwork for any structure or portion thereof, the thickness of that structure or portion of such structure shall be increased be three (3) inches beyond the original neat line of such structure or portion thereof. In no case shall the sheeting, soldier beams or other bracing encroach upon the original neat line of the structure. In such instances when sheeting, soldier beams or other bracing is found to encroach upon the neat line of the structure, the Engineer shall direct the Contractor to remove such sheeting, soldier beams or other braces and redrive and/or replace the sheeting, soldier beams or other braces outside the neat line of the structure. All sheeting used as formwork shall be removed.

(D) All open cuts shall be excavated with vertical sides and properly supported with close sheeting and bracing in conformity with the requirements of **Section 40.03 - Earth Excavation** and with 23 NYCRR - "Protection of Persons Employed in Construction and Demolition Work" and 16 NYCRR Part 753 - "Protection of Underground Facilities" of the State of New York, Department of Labor, Board of Standards and Appeals.

(E) The Contractor is advised that trench boxes will be permitted for use as a sheeting system provided that the depth of trench does not exceed twelve (12) feet. The use of trench boxes to partially sheet trenches that are greater than twelve (12) feet in depth, will be strictly prohibited.

Should trench boxes meeting the above requirements be utilized, the trench will not have to be sheeted completely to subgrade. The trench box will be permitted to "hang up" to a maximum of two (2) feet above subgrade provided that the existing soil in the area of the subgrade can "stand up" on its own without sheeting. Should running ground be encountered or should the soil in the subgrade area begin to slough off, the Contractor will be required to extend the trench box to subgrade. The Engineer shall always maintain the right to order the Contractor to lower the trench box to subgrade as required.

No deductions will be made from any payment for not sheeting the bottom two (2) feet of trench if approved by the Engineer and no additional payment will be made should the Contractor be directed to sheet completely to subgrade.

All sheeting and bracing drawings submitted for approval which indicate trench boxes must be designed for the full depth of trench (to subgrade) and shall show the trench box extending to subgrade.

(F) **SLOPED SIDES OF TRENCHES OR EXCAVATIONS** - Where the Contractor requests permission not to sheet a trench or excavation, and offers to slope the sides of such trench or excavation in accordance with OSHA Regulations in lieu of such sheeting, the Contractor's request shall be reviewed by the Engineer.

If the Engineer deems such sloping to be acceptable the Engineer shall so notify the Contractor in writing.

Pavement excavation and restoration requirements shall be governed by the width of the trench measured at the bottom of the pavement foundation. Pavement excavation and restoration in excess of those required in connection with standard trench excavation, as specified, shall not be paid for.

In those cases where the Contractor does not request permission to side slope, but the Engineer determines that side sloping is in the best interests of the City, the Engineer shall order the Contractor to proceed using such side sloping. In these cases, the additional pavement excavation and restoration will be paid for at the appropriate bid unit price.

In both of the above cases it shall be presumed that side sloping a trench or excavation is done to obtain a lower cost for the work to be performed. The City shall, therefore, take an appropriate credit to cover the difference in overall costs resulting from the use of side sloping instead of timber sheeting.

#### (G) SHEETING METHODS

The following methods of sheeting trenches are acceptable:

- (a) Vertical Wood Sheeting
- (b) Steel Soldier Beams with Horizontal Wood Lagging
- (c) Interlocking Steel Sheeting
- (d) Trench Boxes for trench depths up to twelve (12) feet
- (e) Steel Soldier Beams with Steel Plates continually supported
- (f) Steel Frames with Steel Plates for trench depths up to twelve (12) feet
- (g) Krings and Icon Type Sheeting Frames and Plates

#### 40.05.5 SHOP DRAWINGS

The Contractor will be required to submit Shop Drawings detailing the sheeting system whenever the depth of cut exceeds five (5) feet.

(A) Before commencing any excavating operation the Contractor shall have approved drawings from the Department of Design and Construction for all types of sheeting and bracing systems, cofferdams, shoring, underpinning, bridging, decking and all other temporary or permanent supporting structures required.

(B) The Contractor shall submit for approval five (5) copies of sheeting and bracing drawings, and other structures (i.e. decking, bridging) drawings that the Contractor proposes to use for the work.

(C) The Contractor shall have these drawings prepared by a Licensed Professional Engineer, currently registered in the State of New York. Such drawings shall be submitted together with design calculations, references, tables and charts. Both drawings and design calculations shall bear the imprint of the Licensed Professional Engineer's seal and signature.

(D) In designing the sheeting stated above, the Contractor's Engineer shall take note of the standard minimum load diagram requirements for Watertight and Non-Watertight sheeting structures. (See Sewer Design Standards.)

(E) The following notes shall be required on all sheeting detail submissions:

- (1) If the actual surcharge is in excess of three hundred thirty (330) pounds per square foot the Contractor shall adequately reinforce the sheeting and bracing as required at no additional cost to the City.
- (2) Maximum pilot cut shall be five (5) feet.

The sheeting and bracing drawings shall also include but not be limited to the following: the density of the soil, the internal angle of friction of the soil, the stress grade and type of lumber, the allowable steel stresses and the sequence of construction operation where required.

(F) Shop drawings of sheeting, bracing and other structures used by the Contractor shall be signed by and carry the seal of a Professional Engineer licensed in the State of New York. These drawings shall be submitted together with proper design computations bearing the same seal and signature. Shop drawings shall be on sheets twenty-seven (27) inches by forty (40) inches with a one-half (1/2) inch marginal space on three (3) sides and a two (2) inch marginal space for binding on the left side.

Shop drawings shall be numbered consecutively and shall accurately and distinctly present the following:

- (1) All working and erection dimensions.
- (2) Arrangement and sectional views.
- (3) Necessary details, including complete information for making connections between work under this contract and work under other contracts.
- (4) Kinds of materials.

(G) Each shop drawing shall be dated and contain:

- (1) The name of this project and this contract number.
- (2) The description name of classified contract item number or numbers under which it is or they are required.
- (3) The locations or points at which the sheeting is to be installed in the work.

(H) All sheeting submissions shall reflect the means and methods chosen by the Contractor and approved by the Engineer. Whenever steel sheeting systems (including trench boxes, frames and plates, etc.) are submitted which would render the crossing of Utilities (i.e. water mains and sewers) impossible the Contractor shall also submit, for approval, a system which can be utilized to permit such crossings (i.e. wood sheeting).

(I) The submission of multiple sheeting systems shall be kept to a minimum. Whenever the Contractor submits multiple systems they must be accompanied with a Location Plan shop drawing to indicate the exact location where these various systems are to be installed. Since the approval of multiple systems will delay the sheeting approval process the Contractor is requested to submit a schedule indicating the time frame that these systems are required. In addition the Contractor will be required to install these multiple systems at the locations indicated on the submitted Location Plan. Should the Contractor request to change the sheeting system at any particular location the Contractor will be required to resubmit the sheeting drawing, for approval, even though the revised sheeting system may have been approved at another location within the project area. The Contractor is reminded that the approval time for any given sheeting system may require up to four (4) weeks.

#### **40.05.6 DESIGN CRITERIA**

The following criteria shall be used in calculating the required sheeting, bracing and/or decking systems.

(A) All compression members (struts) shall be designed with a factor of safety of two (2.0). The factor of safety of two (2.0) shall be a value above and beyond the allowable value for compressive stresses for steel as designated in the "AISC Manual of Steel Construction", and for wood as designated in the "National Design Specification for Stress-Grade Lumber and its Fastening". All other allowable stresses (not including compression members) may be increased by thirty-three and one-third (33-1/3) percent where sheeting and bracing is deemed a temporary structure.

(B) A factor of safety shall be used to determine the minimum embedment for sheeting as follows:

Vertical Timber - 15%  
Soldier Beams - 20%  
Steel Sheeting - 30%

(C) Embedment shall be calculated in accordance with the procedures and standard minimum load diagrams specified herein. The maximum allowable embedment for vertical timber sheeting shall not exceed three feet six inches (3'-6"). The minimum embedment shall be two (2) feet.

(D) The Contractor is advised that the maximum allowable bending stress ( $F_b$ ) for all timber members shall not exceed one thousand seven hundred fifty (1,750) pounds per square inch. If the Contractor

elects to use a bending stress higher than  $F_b = 1,750$ -psi, written certification of bending stress test results shall be submitted to the Engineer prior to use of such material in construction.

(E) Where it is anticipated that heavier crane or equipment loads will fall within the influence line of the trench, design loads shall be increased accordingly.

(F) The Contractor shall compute and include in the Contractor's submission of drawings and calculations the following:

- (1) Maximum bending stress
- (2) Maximum horizontal shear in wale
- (3) Compression perpendicular to grain
- (4) Maximum vertical shear stress

(G) DECKING

- (1) Unless otherwise specified in the contract documents or approved in writing by the Engineer, the minimum live load on decking shall be AASHTO HS20-44 or Contractor's equipment or heaviest truck loading (i.e. concrete trucks) whichever is greater plus an impact factor of thirty-three (33) percent.
- (2) Unless otherwise approved, timber mats shall extend a minimum of three (3) feet from sheeting line on either side of trench.
- (3) Unless otherwise approved, a minimum one thousand (1,000) pounds per square foot surcharge load shall be used for sheeting below decking.

(H) Maximum trench widths shown on sheeting details shall not exceed those allowed by the standards or specifications.

(I) The Contractor shall provide an individual cross-sectional sheeting (trench) detail for each size water main pipe and sewer conduit to be constructed unless permission to do otherwise is granted.

(J) Where the water table lies above the subgrade of trench and a well point or deep well dewatering system is not used, the Contractor shall include the effect of hydrostatic loading in calculations for both watertight and non-watertight sheeting.

(K) Sheeting details shall accurately depict actual field operations. The Contractor shall be restricted to a maximum five (5) feet deep pilot cut and all details must reflect this. Additional braces and wales may be required to install sheeting due to the five (5) feet maximum pilot cut restriction. The Contractor shall not assume that additional pilot cut depths will be allowed.

#### 40.05.7 REMOVAL OF SHEETING

All sheeting design and requirements shall be in strict conformance with this section and all appropriate Addenda to the specifications.

Unless otherwise specified in the plans or these specifications, the Contractor shall remove all sheeting and bracing throughout this project.

(A) The sheeting shall be removed in lifts during the backfilling operation in order to permit proper placement and compaction of material against the structure and the earth bank. This work shall be accomplished in conjunction with the removal of wales and braces. In no case shall the lifts for sheeting exceed the specified or otherwise approved depth of compaction layer.

(B) The Contractor shall submit to the Engineer, for approval, the Contractor's method for installation and removal of sheeting and the method for backfilling the trench. The submission shall also specify if there are any location(s) where sheeting cannot be removed and detail the reasons why the sheeting cannot be removed. The submission shall be signed by and carry the seal of a New York State Licensed Professional Engineer. These methods must be strictly adhered to.

(C) The Contractor is advised that the Contractor will be responsible for, and shall solely at the Contractor's own expense, repair, replace and/or relocate all City owned utilities that are damaged and/or disturbed due to the Contractor's removal of sheeting operation.

(D) If the Contractor is required to leave the sheeting system in place in order to protect City owned utility crossings and structures, payment will be made in accordance with **Subsection 40.05.2(A)** and **Subsection 40.05.2(B)**.

(E) This section shall not be construed to relieve the Contractor of the Contractor's obligation under the contract to maintain, protect and support (temporarily and permanently) all City owned utilities within the influence lines of the excavated trenches. The Contractor in accordance with the standards of the agencies having jurisdiction thereof shall perform such maintenance, protection and support.

(F) The cost of maintenance, protection and support (temporarily and permanently) of City owned utilities shall be included in the prices bid for all items for which there are bid prices.

(G) If a soldier beam and lagging sheeting system is utilized then all parts of the system (i.e. soldier beams, bracing, wales and lagging) must be removed.

(H) There shall be no additional payment made for repairing, replacing and/or relocating City owned utilities that may be damaged and disturbed due to the Contractor's removal of sheeting operation, or for work performed by the Contractor as directed in **Subsection 40.05.7(E)** above.

#### **40.05.8 COST INCLUDED**

There shall be no separate payment for the sheeting and bracing of trenches and excavation of water mains larger than 20-inches in diameter and appurtenances thereto including valve chambers, regulator chambers, etc.; and for the sheeting and bracing of trenches and excavation of all sewer conduits and appurtenances thereto including manholes, chambers, catch basins, etc. The cost of all labor, material, plant, equipment and insurance necessary or required to furnish and install all timber and steel sheeting together with all necessary rangers, bracing, lagging, soldier beams, etc., excavation for the placing of sheeting, backfill and compaction behind sheeting to prevent loss of ground, cut off of sheeting as specified, together with all work incidental thereto, all in accordance with the plans and specifications and as directed by the Engineer, shall be deemed included in the prices bid for the respective contract items.

#### **40.05.9 SEPARATE PAYMENT**

Separate payment will be made for the sheeting of water mains 20-inches and smaller in diameter. Payment will be made in accordance with **Section 70.91**.



## **SECTION 70.91 SHEETING**

### **70.91.1 DESCRIPTION**

This section describes the use of Sheeting in water main trenches and excavations only.

### **70.91.2 MATERIALS**

All sheeting materials shall comply with **Subsection 40.05.3**.

### **70.91.3 CONSTRUCTION METHODS**

To prevent injury to workmen or to avoid damaging existing water pipes, structures, and pavements and their foundations through caving or sliding of the banks of a trench or other excavation, protection shall be provided for all excavation work except where a determination is made by the Contractor, the Engineer or the Engineer's inspector at the work site that the nature of the excavation does not require protection.

Excavation protection, when required, shall be provided in accordance with the requirements of:

- (1) U.S. Occupational Safety and Health Administration (OSHA) Construction Safety and Health Regulations, Part No. 1926, Subpart P;
- (2) 23 NYCRR, Subpart 23-4 – Excavation Operations;
- (3) 16 NYCRR, Part 753 – Protection of Underground Facilities;
- (4) Special requirements detailed below.

NOTE: Whenever an interpretation difference exists as to selecting the applicable requirements, that of the most stringent one shall govern.

#### **(A) SPECIAL REQUIREMENTS**

Unless specifically ordered otherwise by the Engineer or the Engineer's inspector at the work site, the following Special Requirements shall be adhered to:

##### **(a) Trenches For Water Main Pipe 12-Inch In Diameter And Less**

In general, such trenches shall not be sheeted since, with the laying depths used, the trench bottoms will be less than five (5) feet below the ground surface. However, removal of existing pipe, or connections to existing pipe may, in some instances result in trench depths of five (5) feet or greater. In such cases, at a minimum, sheeting will be required. If sheeting is required, it shall be of sufficient length so that all ingress and egress is within the sheeted area, and shall extend at least 2 feet beyond all work locations and access points. If workmen are required to transit between sheeted areas, they must exit the trench.

If, in the opinion of the Engineer or the Engineer's inspector at the work site, sheeting is required, for whatever reason, in any trench or other excavation, the Contractor shall install it.

##### **(b) Trenches For Water Main Pipe 16-Inch and 20-Inch In Diameter**

All such trenches shall be sheeted, regardless of the depth of the trench.

(c) Trenches For Water Main Pipe Larger Than 20-Inch In Diameter; And Excavations For Chambers And Manholes

All such trenches shall be sheeted, regardless of the depth of the trench.

(d) Detailed Requirements As To Type And Size Of Sheeting

Unless specifically noted otherwise on the contract drawings or in these specifications, the sheeting required in paragraphs (a), (b), and (c) above, shall be furnished and installed in full compliance with the requirements of Section 1926.652 of the OSHA Regulations.

The size and spacing of sheeting, stringers, and cross bracing required for various soil conditions shall meet the latest OSHA Regulation requirements.

**(B) SUBSTITUTION FOR TIMBER SHEETING**

Any substitution for timber sheeting and bracing such as a self-supporting movable shield of timber or metal, etc., must be designed by and stamped with the seal of a Professional Engineer, licensed to practice in the State of New York, and must be approved by the Engineer in writing prior to its being used on the job. Submittal of proposed substitutions shall be made by the Contractor at least four (4) weeks prior to their scheduled use to allow for proper review and approval of it by the Engineer.

**(C) SHEETING LEFT IN PLACE**

Where the sheeting is ordered to be left in place, the full amount of the lumber so left in place will be paid for at fifty percent (50%) of the market value thereof, without any allowance for the cost of delivery or placing in the work. Sheeting left in place shall be cut off in accordance with **Subsection 40.05.2**.

When sheeting is ordered to be left in place, the cost of all work required for the cutting, removal and disposal of the cut sheeting shall be deemed included in the fifty percent (50%) compensation paid above.

**70.91.4 MEASUREMENT**

The quantity of sheeting incorporated into the work, complete, as shown, specified or required shall be computed as twice the depth of trench times the length of the sheeted trench. The depth of trench or excavation to be sheeted shall be from the ground surface to the bottom of the pipe. In those cases where a special foundation, such as a broken stone bed or a concrete cradle or mat is required, the depth of trench or excavation to be sheeted shall be from the ground surface to the bottom of such special foundation.

**70.91.5 PRICE TO COVER**

Payment for sheeting of trenches for water main pipe 12-inch in diameter and less shall be made per square foot under bid Item No. 70.91SW12 - FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 12-INCH IN DIAMETER AND LESS contained in the bid schedule.

Payment for sheeting of trenches for water main pipe 16-inch and 20-inch in diameter shall be made per square foot under bid Item No. 70.91SW20 - FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 20-INCH IN DIAMETER contained in the bid schedule. Where there is no bid item for such sheeting, because the quantities of such pipe to be installed are very small, or the work involves connecting smaller size pipe to 16-inch and 20-inch mains or larger, payment for such sheeting will be made at the unit price bid for Item No. 70.91SW12 - FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 12-INCH IN DIAMETER AND LESS.

The Contractor's attention is directed to the fact that the Contractor's bid price for sheeting covers the cost of extra earth excavation and other extra costs involved in laying the pipe, such as but not limited to, lesser pipe footage being installed per day, etc.

All of the above provisions are intended to apply to those instances where sheeting is required in a trench in order to lay pipe. In such instances a wider trench is required (to accommodate the sheeting) than when pipe is laid in unsheeted trenches.

When sheeting is provided in portions of a trench (to protect men inserting taps, etc.) that was originally excavated for laying a water main, and when such trench was not sheeted at the time the water main was laid, payment shall be made only for the amount of sheeting actually placed. In all such cases the payment lines for pavement excavation, pavement restoration, and satisfactory backfill shall be those specified for unsheeted trenches.

Where the OSHA Regulations do not require sheeting, but where the Contractor, for the Contractor's own convenience, installs a more limited type of trench support (stay bracing, etc.) such limited type of trench support will not be paid for. The cost of such limited trench support shall be deemed included in the various unit prices bid.

All sheeting that is to be paid for must meet all requirements of the OSHA Regulations.

#### **70.91.6 NO SEPARATE PAYMENT**

No separate payment will be made for the sheeting of water main trenches for water mains larger than 20-inches in diameter, the costs thereof shall be deemed included in the prices bid for laying these mains. No payment shall be made for sheeting at chambers and manholes, but payment thereof will be deemed to be included in the various items bid for constructing the chambers and manholes.

*Payment for Furnishing And Placing Sheeting And Bracing In Trench For Water Main Pipe will be made under the Item Number as calculated below:*

The Item Numbers for Furnishing And Placing Sheeting And Bracing In Trench For Water Main Pipe have nine characters. (The decimal point is considered a character, the third character.)

- (1) The first five characters shall define Furnishing And Placing Sheeting And Bracing In Trench For Water Main Pipe:

70.91

- (2) The sixth and seventh characters shall define Furnishing And Placing Sheeting And Bracing In Trench For Water Main Pipe:

SW - Furnishing And Placing Sheeting And Bracing In Trench  
For Water Main Pipe

- (3) The eighth and ninth characters shall define the Size of Water Main Pipe That Trench Sheeting will be provided for:

12 - 12-Inch In Diameter And Less  
20 16-Inch and 20-Inch In Diameter

- (4) The Item Numbers together with Description and Pay Unit as provided in the Bid Schedule are provided below:

Item No.	Description	Pay Unit
70.91SW12	FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 12-INCH IN DIAMETER AND LESS	S.F.
70.91SW20	FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 16-INCH AND 20-INCH IN DIAMETER	S.F.



# Department of Design and Construction

## SPECIFICATION BULLETIN

# SB

17-001

Title: **UV CURED-IN-PLACE-PIPE (CIPP) LINING METHOD**

Prepared:

1/12/2017

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Date

Director, Specifications – Infrastructure Design

Approved:

1/12/2017

Mohsen Zargareh, P.E.

Date

Assistant Commissioner – Infrastructure Design

### APPLICABILITY:

- This Specification Bulletin (SB) is effective for projects advertised on or after 2/20/17.

### SUPERSEDEANCE:

- This SB supersedes the following SBs: **NONE**

### ATTACHMENTS:

- ATTACHMENT 1:** Revised Section 50.71 - RECONSTRUCTION OF EXISTING SEWERS USING D.E.P. APPROVED CURED-IN-PLACE-PIPE (CIPP) LINING METHOD  
*Pages A1-1 through A1-9*

### REVISIONS TO THE NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION STANDARD SEWER AND WATER MAIN SPECIFICATIONS, DATED 7/1/14:

All references contained below are to the New York City Department of Environmental Protection Standard Sewer and Water Main Specifications, Dated July 1, 2014. Said Standard Sewer and Water Main Specifications are hereby revised as follows:

- Refer** to Pages V-52 through V-59, Section 50.71 – RECONSTRUCTION OF EXISTING SEWERS USING D.E.P. APPROVED CURED-IN-PLACE-PIPE (CIPP) LINING METHOD;  
**Delete** in its entirety the Section;  
**Substitute** the revised Section in Attachment 1 (9 pages).

## **CURED-IN-PLACE-PIPE (CIPP) LINING METHOD**

### **50.71.1 INTENT**

It is the intent of this section to provide for the reconstruction of existing sewers by the installation of a resin-impregnated flexible tube that is inflated within the existing conduit to form a hard, impermeable, corrosion resistant pipe within a pipe. When cured, the cured-in-place-pipe (CIPP) will be formed to the original conduit.

### **50.71.2 REQUIREMENTS**

#### **(A) DESCRIPTION OF WORK**

Unless otherwise specified in the contract, the Contractor shall use a Department of Environmental Protection (DEP) approved cured-in-place-pipe lining method on all existing sewers shown, specified, or ordered to be reconstructed under this contract by use of an approved lining method. All such work shall comply with the terms of this specification and with the manufacturer's standards set forth for the lining method(s) selected by the Contractor.

Under this method the Contractor shall reconstruct existing sewers by the insertion of either a flexible polyester felt or glass fiber lining tube that has been saturated with either a thermosetting or photosetting resin. The liner shall be inserted into the existing sewer either by direct inversion (ASTM F1216) using a head of water or air, or by pulling the tube into place by winching and then inflating it by inversion of a calibration hose (ASTM F1743). The thermosetting resin shall then be cured by either circulating hot water through the tube or by circulating hot air (a mixture of steam and air), or by circulating steam to cure the resin into a hard impermeable pipe. The photo-initiated resin shall be exposed to an ultraviolet light source to cure the resin into a hard impermeable pipe.

The Contractor shall make all investigations of the existing sewers to be reconstructed and shall determine and select the most effective approved lining method(s) appropriate for installation in the existing sewers to be reconstructed. The Contractor shall be responsible for the successful completion of all work required herein; failure of the Contractor's selected lining method(s) to be satisfactorily installed in the existing sewers shall not relieve the Contractor of the Contractor's responsibility to provide satisfactorily reconstructed sewers.

Any cost associated with the removal of the unsatisfactorily installed liner and the subsequent, satisfactory reinstallation of an approved liner shall be borne solely by the Contractor, and the Contractor shall not make any claim against the City for this additional required work.

Once installed, the liner shall extend from manhole to manhole in a continuous tight fitting watertight pipe-within-a-pipe, and be chemically resistant to sewage gases and materials. During the warranty period any defects that might affect the integrity or strength of the liner shall be immediately repaired or replaced by the Contractor, at the Contractor's expense, pursuant to the manufacturer's recommendations, and to the satisfaction of the Engineer.

#### **(B) REFERENCE SPECIFICATIONS AND STANDARDS**

The American Society for Testing and Materials Standard Specifications ASTM C581, D638, D790, D2990, D5813, F1216, F1743, and F2019, and the manufacturer's standards are hereby made a part of this specification.

#### **(C) LINER SIZE AND LENGTH**

The liner shall be fabricated to a size that when installed will neatly fit the internal circumference of the sewer to be lined. The liner thickness shall be designed to adequately resist all external pressures and conditions (e.g. deflection, ring bending, buckling and minimum stiffness). The length of the liner shall be

that deemed necessary to effectively span the distance and carry out the insertion and seal of the liner at the inlet and outlet manholes. The Contractor shall verify the lengths in the field before cutting the liner to length. Prior to the start of work the Contractor will be required to submit design calculations for wall thickness to the Engineer. When UV-cured liners are used, the Contractor must also submit the manufacturer's product specific data regarding the glass fiber tube, the resin and initiator cocktail system and the necessary manufacturer installation reference material detailing the type of light source and the speed in which it will be advanced to insure proper curing.

Allowance for circumferential and longitudinal stretching of the liner during installation shall be made as per the manufacturer's standards for the approved method of lining chosen. Under no circumstances shall the finished wall thickness of liner be less than six (6) millimeters in thickness.

(D) **DESIGN PARAMETERS** - The following design parameters shall be used in the design of pipe liners in addition to the manufacturer's standards:

(1) Ovality of Existing Pipe	2% Minimum
(2) Existing Pipe Condition	Fully Deteriorated
(3) Modulus of Soil Reaction	700-psi Minimum
(4) Factor of Safety Against Buckling	2 Minimum
(5) Allowable Deflection	5% Maximum
(6) Ratio of Pipe to Soil Strength	10% Minimum
(7) Live Load	AASHTO HS20-44 Loading under Roadways AASHTO E-80 Loading under Railroads
(8) Soil Unit Weight	120-pcf Minimum (If no Boring Data is available in vicinity.)
(9) Creep Reduction Factor	50% Maximum

(E) **LINER MATERIAL** - The Contractor shall furnish, prior to use of the lining materials, satisfactory written guarantee of the Contractor's compliance with the liner manufacturer's standards for all materials (polyester felt tubing, including the polyurethane covered felt and the thermosetting resin or glass fiber tubing soaked in photosetting resin) and techniques being used in the method.

Prior to the start of work the Contractor will be required to submit to the Engineer the types of resins and the resultant cure schedules for each length and size of sewer to be lined. The finished liner shall incorporate thermosetting materials that will withstand the corrosive effects of the normal existing effluents.

(F) **SAFETY** - The Contractor shall carry out the Contractor's operations in strict accordance with all OSHA and manufacturer's safety requirements. Emphasis shall be placed upon safety requirements for entering confined spaces and working with hot water, steam, or resins that may cause fumes.

The Contractor shall erect such signs and other devices as are necessary for the safety of the work site and shall secure the site and conform all work to the safety requirements of all pertinent regulatory agencies.

(G) **AIR QUALITY** - The Contractor is advised that all liner installation work shall be carried out in full compliance with all City, State, and Federal laws, rules, and regulations regarding Air Quality and Safety. The contractor shall take all necessary precautions to minimize the release of styrene or other VOC emissions and mitigate odors generated during set and the CIPP lining process. The Contractor shall also take all necessary precautions to prevent such odors from entering structures, businesses or other types of establishments, through service connections or other plumbing fixtures.

(H) **FLOW BYPASSING** - Prior to the start of work the Contractor will be required to submit a fluming/bypass-pumping detail in accordance with **Subsection 10.13 - (3) Existing Flow**. The Contractor shall provide for the diversion of flow of existing sewers at existing upstream manholes (if available) and pump the flow into an existing downstream manhole. The pumps and bypass lines shall

be of adequate capacity and size to handle the flow. The proposed bypassing system shall be submitted to the Engineer for approval and no work shall commence until such approval is granted.

(I) **TELEVISION INSPECTION PRIOR TO INSTALLATION** - All bidders are advised that a digital audio-visual inspection was made of the sewers to be reconstructed and that this recording (the "DEP recording") is available for review prior to bid opening. All prospective bidders are urged to view this recording in order to assess the suitability of the lining methods for use on this project. The City of New York does not guarantee the successful use of any particular method on this project and the Contractor shall utilize the Contractor's judgment as to the effective use of the method(s) the Contractor selects.

The Contractor will also be required to perform another television inspection and digital audio-visual recording of the sewer a maximum of seven (7) days prior to the setting up of the liner insertion equipment at the site. This inspection will be performed, utilizing a radial eye camera, to determine the latest condition of the sewer and to accurately identify the location of active service connections. Should the results of this television inspection show a condition different than that shown on the DEP recording, the Contractor shall immediately notify the Engineer.

For each section to be lined, the Contractor shall certify in writing that the DEP approved method the Contractor intends to use is suitable.

(J) **CLEANING** - The Contractor shall furnish all labor, materials and equipment and shall do all work necessary to remove and dispose of all debris, sediment, silt, refuse, timber, roots, and materials of all kinds which can be removed by conventional non-excavation type pipe cleaning equipment located in the existing sewers and manholes. The Contractor shall immediately notify the Engineer if such debris, etc., cannot be removed by conventional non-excavation type pipe cleaning equipment.

Protruding service connections shall be removed and paid for consistent with **Section 52.51**.

(K) **SERVICE CONNECTIONS** - The Contractor shall be required to determine which service connections are active and shall be responsible for controlling (or maintaining) the flow for each active service connection along the line of the sewer to be rehabilitated. Where necessary, the flow from an active service connection shall be bypassed to a manhole downstream of the proposed work by means of pumping from the trap located in the basement of the affected building. However, should such bypassing be judged unfeasible by the Engineer, the Contractor shall excavate to the service connection outside the building area (sidewalk or roadway as determined by the Engineer) and bypass the connection from this point. The pump and bypass line for each service connection shall be of adequate capacity and size to handle the flow.

Prior to the commencement of any work, the Contractor shall make all necessary investigations and prepare a plan for the controlling (or maintaining) of the flow and, where necessary, for the bypassing of active service connections. This plan shall be submitted to the Engineer for approval and no work shall commence until such approval is granted.

(L) **EQUIPMENT SPECIFICATION** - The Contractor shall provide suitable temperature and pressure gauges in accordance with the manufacturer's standards and specifications. High-pressure steam hoses and fittings have to be rated in accordance with the steam generator used. Thermocouples are to be marked for each fluid to be conveyed: RED-steam; BLUE-water; GREEN-air. The pulling winch shall be equipped with a tension gauge (Type-Martin Decker or Approved Equal) - smooth running and variable speed. The cutting device shall be a Gulectron type or approved equal remote monitored device when used inside the lined pipe.

The Contractor shall prepare and inspect all necessary tools and any spare parts that are required for equipment that suffer frequent breakdowns, and shall ensure that said tools and spare parts are available at the site. Supporting equipment, such as pumps and generators, shall be provided at the site in the event there is a fluid surge and pumping is required on an emergency basis. The Contractor shall also prepare and make operable all necessary communication equipment for the Contractor's field crew.

(M) **INSTALLATION OF LINER** - Prior to the installation of liner, the Contractor shall fully comply with Subsections 50.71.2(C) through 50.71.2(L), inclusively, and with any additional requirements set forth in the specific provisions applicable to the respective lining methods. The Contractor shall not proceed with the installation of liner until the Engineer, in writing, certifies such compliance and directs the Contractor to proceed with the lining installation. The approved liner shall be installed pursuant to the specific provisions set forth for the selected lining method. If any problem occurs during the installation operation the Contractor shall investigate with a television camera from the remote manhole.

(N) **PRELIMINARY TELEVISION INSPECTION OF INSTALLED LINER** - After the liner is sufficiently cool (below one hundred degrees Fahrenheit (100°F)) and before opening the service connections, a preliminary television inspection and digital audio-visual recording of the newly installed liner shall be performed to determine if the liner is properly installed.

(O) **SERVICE CONNECTIONS** - After the liner has been installed, the Contractor shall re-open all existing active service connections and those inactive connections ordered by the Engineer. These service connections shall be re-opened and paid for consistent with Section 52.61.

(P) **FINAL TELEVISION INSPECTION AFTER INSTALLATION** - A final television inspection and digital audio-visual recording of the newly lined sewer including the restored service connections shall be performed immediately after work is completed. Should the results of this final inspection reveal any defects, as determined by the Engineer, the Contractor will be required to repair or replace these defects as ordered by the Engineer at the sole expense of the Contractor.

Payment for this final television inspection will be made under Item No. 53.11DR - TELEVISION INSPECTION AND DIGITAL AUDIO-VISUAL RECORDING OF SEWERS.

(Q) **WORK SCHEDULE** - The Contractor shall be permitted to occupy the lane immediately above the sewer location and the parking lane immediately adjacent to the site of work unless otherwise specified. No further roadway or traffic restrictions shall be permitted.

### **50.71.3 INSTALLATION**

(1) **PREPARING AND INSERTING THE LINER** - The Contractor shall designate a location where the uncured resin in the original containers and the un-impregnated liner will be impregnated prior to installation. The Contractor shall allow the Engineer and/or the Engineer's representative to inspect the materials and chemical impregnation "wet out" procedure. A resin and catalyst system compatible with the requirement of this method shall be used. The quantities of the liquid thermosetting materials inserted into the lining tube shall be as per manufacturer's standards so as to fully saturate the liner material and provide the lining thickness specified. The contractor shall protect, store and handle materials during transportation and delivery, while stored on-site and during installation following Manufacturer's recommendations. Liners impregnated with thermo-initiated resins shall be stored within the proper temperature range and liners impregnated with photo-initiated resins shall not be exposed to UV-light sources, to insure no premature curing occurs.

Prior to installation of liner, the downstream sewer manhole adjacent to the sewer section to be lined shall be plugged.

The chemical impregnated liner material shall be inserted into the sewer line being reconstructed through the existing manhole by either the direct inversion method or by the pull-in-place method, as recommended by the manufacturer. The head used to extend the liner tube shall be sufficient enough to fully extend the tube both circumferentially and longitudinally. The head used will fall within the manufacturer's guidelines to insure that a proper finished thickness is achieved and that the liner fit snug to the existing pipe wall producing dimples at service connections and flared ends at the entrance and exit manholes.



Winch cable shall be equipped with a tension gauge to measure tension during pull through.

Inflation of liners and heat source method used shall be accomplished in accordance with manufacturer's standards and specifications.

Curing temperatures and pressures shall be monitored so as not to overstress the liner and cause damage or failure of the liner prior to cure.

The use of a lubricant is recommended and such lubricant shall be compatible with liner and resin.

The Contractor will be required to monitor and remove styrene to acceptable levels during the inflation and curing processes. An activated carbon filtration system shall be employed to remove styrene from both the process air flow and condensed steam, prior to release into the air or an adjacent or downstream sanitary or combined sewer manhole.

(2) **CURING OF LINER** - After inflation or inversion is completed, the Contractor shall supply a suitable heat source. The equipment shall be capable of delivering steam or hot water to the far end of the liner to uniformly raise the temperature in the entire liner above the temperature required to initiate and effect curing of the resin system. The temperature shall be determined by the resin/catalyst system employed. The heat source shall be fitted with suitable monitors to gauge the temperature and pressure of the incoming and outgoing heat exchanger circulating heating medium. Thermocouples shall be placed between the liner and the invert at each manhole so as to determine and record the temperature of the liner and time of exotherm. Initial cure shall be deemed to be completed when inspection of the exposed portions of the liner show it to be hard and sound; and when temperature reading(s) at the interface of the liner with the host pipe indicate sufficient heating has occurred. The cure period shall be of a duration recommended by the resin manufacturer; modified for the site specific conditions at the time curing is affected. During this cure time, the temperature inside the liner will be continuously maintained in the range required.

Once the cure is complete, the Contractor shall cool the hardened liner to a temperature below one hundred degrees Fahrenheit (100°F) before relieving the internal pressure. Cool down shall be accomplished as recommended by the manufacturer. Care shall be taken in the release of the internal pressure so that a vacuum will not develop that could damage the newly installed liner.

For UV-light CIPP systems, the intensity and duration of exposure to the photo-initiator's required UV-light wavelength shall be as per the manufacturer's recommendations for the proposed size and thickness of tube, to insure that the liner has been cured completely. The UV-light source shall be fitted with multiple temperature sensors to insure that reaction temperatures stay within the Manufacturer's acceptable range and do not blister the interior liner. All lamps shall be monitored to insure that they are on and functioning properly. In the event that a lamp fails or the reaction temperatures fall below the Manufacturer's acceptable range during CIPP installation, the Contractor shall reduce the speed of the light source (increasing the exposure duration) by the Manufacturer's specified amount. The Manufacturer's recommended cooling phase shall be observed after the last lamp of the light source has been turned off. The finished lining shall be continuous over the entire length and be free from visual defects such as foreign inclusions, dry spots, pinholes and delamination. The lining shall be impervious and free of any leakage from the pipe to the surrounding ground or from the ground to the inside of the lined pipe.

If due to broken or misaligned pipe at the access manhole, the lining fails to make a tight seal, the Contractor shall apply a seal of a resin mixture compatible with the liner.

After the curing has been completed, any residual water and condensation that adheres to the inner wall of the liner shall be removed. This residual water shall be collected and pumped from the channel of the downstream manhole and circulated through a separate carbon filtration unit before discharge into a downstream sanitary or combined sewer manhole. In the case of lining a storm sewer section, the collected filtered residual water and process water shall not be discharged into the downstream manhole or stream, but discharged into a nearby sanitary manhole.

#### 50.71.4 MEASUREMENT

The quantity to be measured for payment shall be the length of reconstructed sewer, accepted by the Engineer, measured horizontally along the centerline of the sewer from inside face of manhole to inside face of manhole.

#### 50.71.5 PRICE TO COVER

The contract price for "RECONSTRUCTION OF EXISTING SEWERS, USING D.E.P. APPROVED CIPP LINING METHOD" shall be the unit price bid per linear foot for each size sewer reconstructed by a cured-in-place-pipe DEP approved lining method and shall cover the cost of all labor, materials, plant, equipment, samples, tests and insurance required or necessary to reconstruct the sewers of the sizes shown including the cleaning of the existing sewers using conventional non-excavation type pipe cleaning equipment; television inspection prior to installation; diversion of flow of existing sewers; controlling (or maintaining) the flow for all active service connections; necessary bypassing and pumping of the existing active service connections; repair of active service connections; all necessary excavation, backfilling and compaction; complete installation of the liner; preliminary television inspection of installed liner; temporary and permanent restoration of all disturbed sidewalk and pavement areas (unless items for temporary and permanent restoration are otherwise provided in the Bid Schedule); cleaning up; and furnishing and installing all other items necessary to complete this work and do all work incidental thereto, all in accordance with the plans and specifications and as directed by the Engineer.

#### 50.71.6 SEPARATE PAYMENT

Payment for this final television inspection will be made under Item No. 53.11DR - TELEVISION INSPECTION AND DIGITAL AUDIO-VISUAL RECORDING OF SEWERS.

*Payment for Reconstruction Of Existing Sewers Using D.E.P. Approved Cured-In-Place-Pipe (CIPP) Lining Method will be made under the Item Number as calculated below:*

The Item Numbers for Reconstruction Of Existing Sewers Using D.E.P. Approved Cured-In-Place-Pipe (CIPP) Lining Method have eleven characters. (The decimal point is considered a character, the third character.)

- (1) The first five characters shall define Reconstruction Of Existing Sewers Using D.E.P. Approved Cured-In-Place-Pipe (CIPP) Lining Method:

50.71

- (2) The sixth character shall define the Type of Sewer Effluent:

S - Sanitary Sewer  
M - Storm Sewer  
C - Combined Sewer  
I - Interceptor Sewer

- (3) The seventh and eighth characters shall define either the Diameter of the Sewer for Existing Circular Sewers or the Width of the Sewer for Existing Horizontal Elliptical Sewers, Vertical Elliptical Sewers and Egg-Shaped Sewers. (The seventh and eighth characters representing the unit of inches for either the Diameter of the Sewer for Existing Circular Sewers or the Width of the Sewer for Existing Horizontal Elliptical Sewers, Vertical Elliptical Sewers and Egg-Shaped Sewers.) See examples below:

10 - 10"  
30 - 30"

- (4) The ninth character shall define the Shape of the Existing Sewer:

D - Circular (Diameter)

H - Horizontal Elliptical  
V - Vertical Elliptical  
E - Egg-Shaped  
R - Rectangular

(5) The tenth and eleventh characters shall define either Circular or the Height of the Sewer for Existing Horizontal Elliptical Sewers, Vertical Elliptical Sewers and Egg-Shaped Sewers. (The tenth and eleventh characters representing either Circular or the unit of inches for the Height of the Sewer for Existing Horizontal Elliptical Sewers, Vertical Elliptical Sewers and Egg-Shaped Sewers.) See examples below:

00 - Circular  
19 - 19"  
32 - 32"

(6) Examples of Item Numbers together with Description and Pay Unit as provided in the Bid Schedule are provided below:

Item No.	Description	Pay Unit
50.71S10D00	RECONSTRUCTION OF EXISTING 10" DIAMETER CIRCULAR SANITARY SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71S12D00	RECONSTRUCTION OF EXISTING 12" DIAMETER CIRCULAR SANITARY SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71S18D00	RECONSTRUCTION OF EXISTING 18" DIAMETER CIRCULAR SANITARY SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71S24D00	RECONSTRUCTION OF EXISTING 24" DIAMETER CIRCULAR SANITARY SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71S23H14	RECONSTRUCTION OF EXISTING 23"W X 14"H HORIZONTAL ELLIPTICAL SANITARY SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71S30H19	RECONSTRUCTION OF EXISTING 30"W X 19"H HORIZONTAL ELLIPTICAL SANITARY SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71S14V23	RECONSTRUCTION OF EXISTING 14"W X 23"H VERTICAL ELLIPTICAL SANITARY SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71S19V30	RECONSTRUCTION OF EXISTING 19"W X 30"H VERTICAL ELLIPTICAL SANITARY SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71S20E29	RECONSTRUCTION OF EXISTING 20"W X 29"H EGG-SHAPED SANITARY SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71S24E42	RECONSTRUCTION OF EXISTING 24"W X 42"H EGG-SHAPED SANITARY SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71S25E37	RECONSTRUCTION OF EXISTING 25"W X 37"H EGG-SHAPED SANITARY SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71S29E40	RECONSTRUCTION OF EXISTING 29"W X 40"H EGG-SHAPED SANITARY SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71M15D00	RECONSTRUCTION OF EXISTING 15" DIAMETER CIRCULAR STORM SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71M18D00	RECONSTRUCTION OF EXISTING 18" DIAMETER CIRCULAR STORM SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71M30D00	RECONSTRUCTION OF EXISTING 30" DIAMETER CIRCULAR STORM SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71M42D00	RECONSTRUCTION OF EXISTING 42" DIAMETER CIRCULAR STORM SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71M38H24	RECONSTRUCTION OF EXISTING 38"W X 24"H HORIZONTAL ELLIPTICAL STORM SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.

50.71M53H34	RECONSTRUCTION OF EXISTING 53"W X 34"H HORIZONTAL ELLIPTICAL STORM SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71M24V38	RECONSTRUCTION OF EXISTING 24"W X 38"H VERTICAL ELLIPTICAL STORM SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71M32V48	RECONSTRUCTION OF EXISTING 32"W X 48"H VERTICAL ELLIPTICAL STORM SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71M34V53	RECONSTRUCTION OF EXISTING 34"W X 53"H VERTICAL ELLIPTICAL STORM SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71M30E45	RECONSTRUCTION OF EXISTING 30"W X 45"H EGG-SHAPED STORM SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71M33E48	RECONSTRUCTION OF EXISTING 33"W X 48"H EGG-SHAPED STORM SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71M35E52	RECONSTRUCTION OF EXISTING 35"W X 52"H EGG-SHAPED STORM SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71M40E53	RECONSTRUCTION OF EXISTING 40"W X 53"H EGG-SHAPED STORM SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71M24R36	RECONSTRUCTION OF EXISTING 24"W X 36"H RECTANGULAR STORM SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71M32R48	RECONSTRUCTION OF EXISTING 32"W X 48"H RECTANGULAR STORM SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71C16D00	RECONSTRUCTION OF EXISTING 16" DIAMETER CIRCULAR COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71C24D00	RECONSTRUCTION OF EXISTING 24" DIAMETER CIRCULAR COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71C36D00	RECONSTRUCTION OF EXISTING 36" DIAMETER CIRCULAR COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71C48D00	RECONSTRUCTION OF EXISTING 48" DIAMETER CIRCULAR COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71C45H29	RECONSTRUCTION OF EXISTING 45"W X 29"H HORIZONTAL ELLIPTICAL COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71C60H38	RECONSTRUCTION OF EXISTING 60"W X 38"H HORIZONTAL ELLIPTICAL COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71C29V45	RECONSTRUCTION OF EXISTING 29"W X 45"H VERTICAL ELLIPTICAL COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71C34V53	RECONSTRUCTION OF EXISTING 34"W X 53"H VERTICAL ELLIPTICAL COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71C38V60	RECONSTRUCTION OF EXISTING 38"W X 60"H VERTICAL ELLIPTICAL COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71C32E44	RECONSTRUCTION OF EXISTING 32"W X 44"H EGG-SHAPED COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71C34E46	RECONSTRUCTION OF EXISTING 34"W X 46"H EGG-SHAPED COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71C38E50	RECONSTRUCTION OF EXISTING 38"W X 50"H EGG-SHAPED COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71C41E60	RECONSTRUCTION OF EXISTING 41"W X 60"H EGG-SHAPED COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71C42E56	RECONSTRUCTION OF EXISTING 42"W X 56"H EGG-SHAPED COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71C30R42	RECONSTRUCTION OF EXISTING 30"W X 42"H RECTANGULAR COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71C36R48	RECONSTRUCTION OF EXISTING 36"W X 48"H RECTANGULAR COMBINED SEWER, USING D.E.P. APPROVED CIPP LINING METHOD	L.F.
50.71I36D00	RECONSTRUCTION OF EXISTING 36" DIAMETER CIRCULAR	L.F.

50.71148D00

INTERCEPTOR SEWER, USING D.E.P. APPROVED CIPP LINING  
METHOD

L.F.

50.71136R48

RECONSTRUCTION OF EXISTING 48" DIAMETER CIRCULAR  
INTERCEPTOR SEWER, USING D.E.P. APPROVED CIPP LINING  
METHOD

L.F.

RECONSTRUCTION OF EXISTING 36"W X 48"H RECTANGULAR  
INTERCEPTOR SEWER, USING D.E.P. APPROVED CIPP LINING  
METHOD



# Department of Design and Construction

## SPECIFICATION BULLETIN

# SB

17-002

Title: **RODENT AND WATERBUG PEST CONTROL**

Prepared:

1/12/2017

Richard Jones, P.E., CWT

Date

Director, Specifications – Infrastructure Design

Approved:

1/12/2017

Mohsen Zargarelahi, P.E.

Date

Assistant Commissioner – Infrastructure Design

### APPLICABILITY:

- This Specification Bulletin (SB) is effective for projects advertised on or after 2/20/17.

### SUPERSEDEENCE:

- This SB supersedes the following SBs: **NONE**

### ATTACHMENTS:

- **ATTACHMENT 1:** Revised Section 7.88 – Rodent and Waterbug Pest Control  
*Pages A1-1 through A1-6*

### REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS VOLUME 1 OF 2, DATED 8/1/15:

*No Changes.*

### REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS VOLUME 2 OF 2, DATED 8/1/15:

All references contained below are to the New York City Department of Transportation Standard Highway Specifications, Dated August 1, 2015. Said Standard Highway Specifications are hereby revised as follows:

- a) **Refer** to Pages 515 through 520, Section 7.88 – Rodent and Waterbug Pest Control;  
**Delete** in its entirety the Section;  
**Substitute** the revised Section in Attachment 1 (6 pages).

## SECTION 7.88 - Rodent and Waterbug Pest Control

**7.88.1. DESCRIPTION.** The Contractor shall provide all labor, materials, plant and equipment, and incidentals required to survey and monitor rodent activity and control any infestation or outbreak of rodents and waterbugs (cockroaches) within the project limit.

New York City ("NYC") Local Law 37 of 2005 requires that the Contractor, or any subcontractor that the Contractor hires, shall comply with Chapter 12 of Title 17 of the NYC Administrative Code with respect to the application of pesticides to any property owned or leased by the City of New York..

**7.88.2. MATERIALS.** All materials shall be Registered by the New York State Department of Environmental Conservation ("NYSDEC") and comply with the NYC Health Code for the intended usage. Materials classified as Toxicity Category I, carcinogenic to humans by the US Environmental Protection Agency ("USEPA"), or classified as a developmental toxin by the State of California's Office of Environmental Health Hazard Assessment shall not be used. The Contractor shall verify that materials are:

- "NOT PROHIBITED" by the NYC Department of Health and Mental Hygiene ("NYC-DOHMH") using the NYC-DOHMH's Pesticide Product Search, available at:  
< <https://a816-healthpsi.nyc.gov/l137/ProductTestPesticide.aspx> >.
- On the NYSDEC's list of Currently Registered Pesticides, available at:  
< <http://pims.psur.cornell.edu/> >.

Rodenticide weatherproof (wax based) bait blocks shall be multiple dose anticoagulants such as Chlorophacinone, or single feed anticoagulants such as Brodifacoum (Weatherblok XT, Final All-Weather Blox), Bromadiolone (Contrac Blox), or an approved equivalent, registered by NYSDEC and not prohibited by NYC-DOHMH. Loose rodenticide meal or rodenticide pellet bait shall not be used.

Tamper proof bait station boxes shall be designed to exclude other mammals and shall be used with poisoned bait to attract rats. Information on "tamper proof bait station boxes" is available from the NYC-DOHMH Office of Pest Control Services (646-632-6600).

Live traps shall be of proper dimensions for trapping rats and mice, and shall not be used with poisoned bait.

Insecticide bait shall be a residual type registered by NYSDEC and not prohibited by NYC-DOHMH.

### (A) SUBMITTALS

Prior to commencement of construction activities the Contractor shall submit to the Engineer manufacturer's installation instructions for all materials required for rodent and waterbug pest control work and product data which shall include illustrations, catalog data, pesticide labels, product characteristics, typical use, performance and limitation criteria of all rodent and waterbug pest control materials required. All pesticides and rodenticide submittals shall be accompanied by a printout from the NYC-DOHMH Pesticide Product Search showing that the specific brand of pesticide and rodenticide is "NOT PROHIBITED."

**7.88.3. PERSONNEL.** The Contractor shall employ two independent licensed exterminators: one to engage in survey and monitoring work to establish the level of infestation of rodents and insects and provide recommendations for specific Integrated Pest Management ("IPM") actions, and one to execute the rodent and waterbug pest control work to deal with such infestations. All pest control personnel employed by each exterminator company shall be licensed by NYSDEC as a Commercial Pesticide Applicator, Commercial Pesticide Technician or Commercial Pesticide Apprentice and must be supervised by an exterminator licensed by NYSDEC as a Commercial Applicator in categories 7A ("Structural & Rodent Control") & 8 ("Public Health Pest Control"). It is recommended (but not required) that all personnel engaged in survey and monitoring work or rodent control work possess a certificate of

completion from the NYC-DOHMH's half-day or three-day "Rodent Academy." The Contractor shall submit the names and license credentials of the two exterminator companies to the Engineer for approval prior to the commencement of any work under this section.

**7.88.4. METHODS.** Application and dosage of all materials shall be done in strict compliance with the manufacturer's recommendations. All surveying, monitoring, baiting, and/or live trapping work shall be performed in the presence of the Engineer, without which no payment will be made under this Section.

**(A) GENERAL**

The Contractor's construction activity is expected to disturb any established rodent and/or waterbug population that may exist within the project limits, possibly causing their dispersion. The Contractor shall take all appropriate action to eliminate and/or control these populations within the construction corridor: the construction corridor shall be defined as being the full width of streets under the contract and intersecting streets up to the limits of construction, from property line to property line, excluding buildings and under sidewalk building vaults.

Under the Maintenance of Site requirements for the contract, any unsanitary conditions, such as uncollected garbage or debris, resulting from the Contractor's activities which will provide food and shelter to the resident rodent population shall be corrected by the Contractor immediately after notification of such condition by the Engineer. Non-compliance shall be subject to the application of the "Nonconformance" provisions of the Item for Maintenance of Site, and no payment will be made for any additional application of rodenticide or insecticide needed to control resultant infestations.

**(B) SURVEY AND MONITORING WORK**

(1) Prior to Construction - The Contractor's designated survey and monitoring exterminator shall execute a survey of the project area and estimate the level of rodent (Norway rat, House mouse) infestation and the waterbug population within the construction corridor. An appropriate sample of utility manholes (sewer, electrical, telephone, etc.) and catch basins should be opened and surveyed to the satisfaction of the Engineer. Contractor shall maintain all survey records in the manner described in 7.88.6., Records and Reports.

(2) During Construction - The Contractor shall monitor the rodent activity through trapping (snap, glue traps or live traps), fecal count methods, and inspection of the conditions of all installed baits every week during construction activity or as otherwise directed by the Engineer. Monitoring during construction shall cover Contractor's plant and temporary facilities. Contractor shall maintain all monitoring records in the manner described in Section 7.88.6. on "Records and Reports" of this specification.

**(C) RODENT CONTROL WORK**

(1) Wetlands, Woodlands and Areas Within Seventy-five (75') feet of a Stream. In wetlands, woodlands and areas adjacent to a stream, special precautions must be taken to protect water quality and to ensure the safety of other wildlife. To prevent poisoned bait from entering streams, no poisoned bait shall be used in areas within seventy-five (75') feet of either streambank. Live traps must be used in these seventy-five (75') feet buffer zone areas and within wetland and woodland areas.

(2) Outside Wetland Areas, Woodland Areas and Beyond Seventy-five (75') feet of a Stream. In areas outside the seventy-five foot zone of protection adjacent to streams, and areas outside wetlands and woodlands, tamper proof bait stations with poisoned bait shall be established during the period of construction and any consumed or decomposed bait shall be replenished as directed.



Rodent control shall be achieved in two stages as follows:

- Stage I. At least one month prior to initiation of the construction work, and periodically thereafter, live traps and/or rodenticide bait, as directed above, shall be placed at locations [e.g., burrows, utility manholes (sewer, electrical, phone, etc.), and catch basins] that are inaccessible to pets, human beings, children and other non-target species, particularly wildlife (e.g., birds) in the construction corridor. Locations of initial bait placement and quantities of bait shall be determined by the survey and monitoring exterminator's written report of his survey and monitoring results, or as otherwise directed by the Engineer.
- Stage II. During Construction - Infested sites as determined by the survey and monitoring exterminator's monitoring report shall be baited and/or rebaited, and live traps shall be collected and replaced, the rates and quantities of which shall be determined by the written monitoring reports submitted weekly or as otherwise directed by the Engineer in consultation with the City's Office of Pest Control.

Bait may be placed in dry manholes without a tamper-proof bait station box, if the manhole configuration does not permit the use of a bait station box. If a sanitary sewer manhole has a concrete invert platform of sufficient size, a bait box shall be used. Bait placed in a manhole outside of a tamper-proof box shall be strung on a stainless-steel wire, and secured to the manhole structure. No separate payment shall be made for the wire or securing the wire to the manhole, and shall be deemed included in the bid price for Baiting of Rodent Base Stations. Rodent control personnel entering manholes shall comply with the confined space requirements required by the Occupational Safety and Health Administration ("OSHA") 29 CFR 1929 - Subpart AA - Confined Spaces in Construction.

The use of tamper proof bait station boxes shall be used with rodenticide in all other cases.

The baiting exterminator shall be responsible for collecting and disposing of all trapped and poisoned rodents found in live traps and tamper proof bait stations. Non-target species captured in live traps shall be released by the baiting exterminator within twenty-four (24) hours after notification by the Engineer. The baiting exterminator shall also be responsible for posting and maintaining signs announcing the baiting of each particular location. The signs shall be placed at least twenty-four (24) hours prior to the application of any pesticide or rodenticide, and shall meet the requirements of Local Law 37 of 2005. NYC-DOHMH provides a sample template sign for pesticide notification purposes in compliance with the law at:

< <http://www1.nyc.gov/assets/doh/downloads/pdf/pesticide/notification-sign.pdf> >.

The Contractor, under his maintenance of site operations, shall be responsible for the immediate collection and disposal of any visible rodent remains found on streets or sidewalk within the project limits. Any visible remains shall be placed into double plastic bags. No more than five (5) carcasses shall be placed into each bag. Each bag shall be a minimum of three (3) mils thick, black plastic. The bag shall have a note taped on with the contents (e.g., "dead rat"), and disposed as required by the NYC Department of Sanitation. No additional payment will be made for this work.

It is anticipated that public complaints will be addressed to the Engineer's Field Office. The Contractor, where directed by the Engineer, shall take appropriate Integrated Pest Management ("IPM") actions, such as baiting, trapping, proofing, etc., to remedy the source of a complaint within the next six (6) hours of normal working time, which is defined herein, for the purposes of this section, as 7 A.M. to 6 P.M. on Mondays through Saturdays.

(D) WATERBUG CONTROL

Waterbugs shall include American Cockroaches, Oriental Cockroaches, Smoky Brown Cockroaches, Madeira Cockroaches, and other similar species.

Infested sites (e.g., sewers) shall be baited at least two (2) times per month with insecticides, or as directed by the Engineer in consultation with the exterminator monitoring the work and the NYC-DOHMH Office of Pest Control Services.

**7.88.5. EDUCATION & TRAINING.** The Contractor shall post notices in all Construction Bulletin Boards advising workers, employees, and residents to call the Engineer's Field Office to report rodent and waterbug infestations. The Contractor shall provide and distribute literature pertaining to IPM techniques of rodent control to affected businesses and superintendents of nearby residential buildings to ensure their participation in maintaining their establishments free of unsanitary conditions, harborage removal and rodent proofing.

Prior to application of any chemicals, the Contractor shall furnish copies or sample labels for each pesticide, antidote information and Material Data Safety Sheets ("MSDS") for each chemical used.

**7.88.6. RECORDS AND REPORTS.**

**(A) GENERAL**

The Contractor shall be responsible for assigning within the construction corridor an identifying number to each manhole, catch basin, and other location where bait and/or live trap placement and/or waterbug control work is proposed by the survey and monitoring exterminator. The Contractor shall then provide that list of locations and corresponding reference numbers along with a drawing showing the locations, as a reference for the exterminator(s) performing the work, to indicate locations of bait placement and waterbug control work and rodent and waterbug activity (droppings, bait consumed, dead rodents, etc.)

**(B) SURVEY AND MONITORING WORK**

(1) Prior to Construction - Contractor shall submit to the Engineer, for approval, a written survey report including proposed IPM procedures, including specific materials, quantities, locations, methods and time schedule for the implementation of the exterminating work. The written report shall also include a survey with a drawing (provided by the Contractor) marked with locations indicating all signs of rodent (Norway rat, House mouse) infestation and waterbug activity discovered during the execution of the survey indicating that rodent and waterbug pest control work is necessary. The report will be developed with input from the NYC-DOHMH Rat Information Portal at: < [http://maps.nyc.gov/doitt/nycitymap/template/?applicationName=DOH\\_RIP](http://maps.nyc.gov/doitt/nycitymap/template/?applicationName=DOH_RIP) >.

(2) During Construction - Based on monitoring results, Contractor shall submit to the Engineer a weekly written monitoring report identifying all locations and conditions of installed bait and/or other rodent control work. The monitoring report shall also include any other recommended IPM techniques, such as baiting, trapping, proofing, etc., proposed for rodent and waterbug pest control.

The survey and monitoring exterminator shall keep a record of all rodent and waterbug infestation surveys s/he has conducted. The Contractor shall be required to submit a copy of all survey and monitoring reports to the Engineer each week, prior to payment.

**(C) RODENT AND WATERBUG CONTROL WORK**

The baiting exterminator shall maintain records using the NYC Pesticide Use Reporting System ("NYCPURS"). These records will be kept by the Engineer. A weekly report from NYCPURS shall be prepared, signed and certified by the approved licensed exterminator, and such reports shall be submitted to the Engineer each week, prior to payment.

**7.88.7. NONCONFORMANCE.** If the Contractor fails to perform as directed to control the rodent and/or waterbug population at any location within the project limits for a period of more than one week, the Engineer will correct the adverse conditions by any means he deems appropriate, including but not limited to, the use of "outside services" and shall deduct the cost of the corrective work from any monies due to the Contractor. The deducted cost of this work shall be in addition to the non-payment for rodent and waterbug pest control.

**7.88.8. MEASUREMENT.**

**(A) RODENT INFESTATION SURVEY AND MONITORING**

The quantity to be measured for payment under Item No. 7.88 AA, RODENT INFESTATION SURVEY AND MONITORING, shall be a Lump Sum measurement.

**(B) RODENT BAIT STATIONS**

The quantity to be measured for payment under Item No. 7.88 AB, RODENT BAIT STATIONS, shall be the number of tamper-proof rodent bait station boxes and/or live traps satisfactorily installed or reinstalled after inspection within the construction corridor, as approved by the Engineer. However, the initial baiting, and subsequent rebaiting as may be required, of any bait station will be paid for under Item No. 7.88 AC.

**(C) BAITING OF RODENT BAIT STATIONS**

The quantity to be measured for payment under Item No. 7.88 AC, BAITING OF RODENT BAIT STATIONS, shall be the number of tamper-proof rodent bait station boxes, utility manholes, catch basins, or other locations approved by the Engineer, satisfactorily baited or rebaited to replenish consumed or decomposed bait within the construction corridor, as approved by the Engineer.

**(D) WATERBUG BAIT APPLICATION**

The quantity to be measured for payment under Item No. 7.88 AD, WATERBUG BAIT APPLICATIONS, shall be the number of blocks satisfactorily treated with insecticide bait within the construction corridor, as approved by the Engineer. A block shall be defined as the area of street, measured between property lines, from intersection to intersection. Each rebaiting of any block shall be considered as a new block for measurement purposes.

**7.88.9. PRICES TO COVER.**

**(A) RODENT INFESTATION SURVEY AND MONITORING**

Payment will be made at the lump sum price bid for RODENT INFESTATION SURVEY AND MONITORING which shall include the cost of furnishing all the labor, materials, plant, equipment (traps, etc.), insurance, and other incidentals required, including but not limited to providing all required maintenance of traffic equipment, to perform a rodent infestation survey of the project area and then monitor the site each week for rodent activity, all in accordance with the specifications and the directions of the Engineer.

Ten (10%) percent of the lump sum price bid will be paid when the initial survey of the project area has been completed and the written survey report has been submitted to the satisfaction of the Engineer. The remainder will be paid in proportion to the percentage of contract completion.

**(B) RODENT BAIT STATIONS**

The Contract price bid for RODENT BAIT STATIONS shall be a unit price per each tamper proof bait station box and/ or live trap installed or reinstalled after inspection and shall cover the cost of furnishing

all labor, materials, plant, equipment (bait stations, etc.), insurance, and other incidentals, including but not limited to providing all required maintenance of traffic equipment, required to control the rodent population found within the project limits in accordance with the specifications and the directions of the Engineer.

In addition to the payment for Rodent Bait Stations installed or reinstalled under this Item No. 7.88 AB, the Contractor will also be paid for each baiting or rebaiting, when required, of each bait station, under Item No. 7.88 AC.

**(C) BAITING OF RODENT BAIT STATIONS**

The Contract price bid for BAITING OF RODENT BAIT STATIONS shall be a unit price per each bait station, utility manhole, catch basin or other location approved by the Engineer satisfactorily baited or rebaited, when required, and shall cover the cost of furnishing all labor, materials, plant, equipment (bait), insurance, NYCPURS recordkeeping, and other incidentals, in accordance with the specifications and directions of the Engineer. Installation or resetting of the bait station will be paid for under Item No. 7.88 AB.

**(D) WATERBUG BAIT APPLICATION**

The Contract price bid for WATERBUG BAIT APPLICATION shall be a unit price per block treated by the exterminator and shall include the cost of furnishing all the labor, materials, plant, equipment (bait, etc.), insurance, NYCPURS recordkeeping, and other incidentals, including but not limited to providing all required maintenance of traffic equipment, necessary to control the waterbug population found within the project limits for the duration of the contract in accordance with the specifications and the directions of the Engineer.

*Payment will be made under:*

Item No.	Item	Pay Unit
7.88 AA	RODENT INFESTATION SURVEY AND MONITORING	L.S.
7.88 AB	RODENT BAIT STATIONS	EACH
7.88 AC	BAITING OF RODENT BAIT STATIONS	EACH
7.88 AD	WATERBUG BAIT APPLICATION	BLOCK



# Department of Design and Construction

## SPECIFICATION BULLETIN

# SB

**17-003****Title: ENGINEER'S FIELD OFFICE**

Prepared:

1/12/2017

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Date

Director, Specifications – Infrastructure Design

Approved:

1/12/2017

Mohsen Zargarelahi, P.E.

Date

Assistant Commissioner – Infrastructure Design

**APPLICABILITY:**

- This Specification Bulletin (SB) is effective for projects advertised on or after 2/20/17.

**SUPERSEDEENCE:**

- This SB supersedes the following SBs: **NONE**

**ATTACHMENTS:**

- **ATTACHMENT 1:** Revised Section 6.40 – Engineer's Field Office  
Pages A1-1 through A1-7

**REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION  
STANDARD HIGHWAY SPECIFICATIONS VOLUME 1 OF 2, DATED 8/1/15:***No Changes.***REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION  
STANDARD HIGHWAY SPECIFICATIONS VOLUME 2 OF 2, DATED 8/1/15:**

All references contained below are to the New York City Department of Transportation Standard Highway Specifications, Dated August 1, 2015. Said Standard Highway Specifications are hereby revised as follows:

- a) **Refer** to Pages 372 through 379, Section 6.40 – Engineer's Field Office;  
**Delete** in its entirety the Section;  
**Substitute** the revised Section in Attachment 1 (7 pages).

## SECTION 6.40 - Engineer's Field Office

**6.40.1. DESCRIPTION.** The Contractor shall provide, furnish and maintain a fully equipped field office (Type A, B, C, CU, D or DU, as specified) for the exclusive use of and occupancy by the Department's engineering personnel and/or Supervising Consultant (herein after called "City personnel"), and by the engineering personnel of private utilities when specified. The field office shall be at a location approved by the Engineer and shall be a commercial building, store front, or with the approval of both Office of Construction Mitigation and Coordination (OCMC) and the Community Board it may be a mobile trailer(s). If a trailer is used it shall be subject to approval by the Engineer, and all necessary permits shall be obtained by the Contractor. The Contractor may have facilities in an adjoining area separated by a lockable door, provided such facilities are in a location approved by the Engineer. The field office shall be within ½ mile of the job site. Field offices located further than ½ mile from the job site shall require approval by the Director or Assistant Commissioner for Construction. The field office structure and occupancy thereof shall conform to the requirements of all laws, rules, regulations and orders applicable to it.

The field office and all equipment, except as otherwise specified, may be new materials or may be used materials in good condition and satisfactory to the Engineer.

### **6.40.2. MATERIALS.**

(A) **GENERAL CONSTRUCTION.** The Engineer's Field Office shall be in an approved and weatherproof building. It shall have a minimum ceiling height of seven (7') feet and be partitioned to provide the number of rooms required for the type of office specified. Floor space for Field Office Types C, CU, D, and DU shall be subdivided into work areas based on a floor plan provided by the City to the Contractor upon notification of space availability.

(B) **GENERAL FACILITIES.** The field office shall contain or have the following facilities incorporated:

(a) Lighting - Electric light, non-glare type luminaries to provide a minimum illumination level of 100 ft.-candles at desk height level.

(b) Heating and Cooling - Adequate equipment to maintain an ambient air temperature of 70° F. ±5°.

(c) Electrical Energy Outlets

(d) Toilet - A separate enclosed room, properly ventilated per code and complying with applicable sanitary codes shall contain a lavatory with a sink that provides running hot and cold water, flush-type toilet, mirror, electric hand dryer, and paper towel dispenser.

(e) Potable Water - Potable water supplied from an existing system or five (5) gallon capacity water cooler of a type to be approved by the Engineer shall be provided for use by City personnel. Replacement bottles of water shall be provided by the Contractor, when required.

(f) Signs - Store front locations shall have a window graphic sign in black and white lettering with the following inscription. Other locations shall have a wood or metal sign affixed on the outside wall of the building with the following inscription painted in black block lettering on a white background. Paints shall be approved exterior enamels.

<b>CITY OF NEW YORK</b>	<b>2-1/2"</b>
<b>DEPARTMENT OF DESIGN AND CONSTRUCTION</b>	<b>3-1/2"</b>
<b>INFRASTRUCTURE</b>	<b>2-1/2"</b>
<b>RESIDENT ENGINEER'S FIELD OFFICE</b>	<b>2-1/2"</b>

(g) Electric Refrigerator - Five (5) cubic feet minimum capacity for use by City personnel.

(h) Microwave, Toaster Oven, and Coffee Maker - Basic reheating kitchen equipment or approved appliances for use by City personnel.

(i) Windows and Doors - All windows and doors shall be weatherproof and each equipped with adequate locking devices. Each window shall be equipped with vertical blinds. Exterior doors shall be provided with two (2) separate "high security" dead bolt type cylinder locks, keyed alike, and three (3) keys shall be furnished for each lock.

- (j) Partitions - Partitions for work space enclosures shall be either permanent walls or of the modular type similar to Herman Miller's standard fabric covered line.
- (k) Kitchen Sink - Mechanism to provide non-drinking, hot and cold, running water.
- (C) OFFICE EQUIPMENT.
- (a) Pencil Sharpener - One standard pencil sharpener for use by City personnel.
- (b) Telephone Answering Machine - The telephone answering machine to be provided shall be an electronic digital voice machine with emergency call forwarding capability. It shall be operable twenty four (24) hours per day and, when unattended, shall transmit to the caller the following message:  
 "You have reached the Field Office of the New York City Dept. of Design and Construction. No one is here now. We check our incoming messages frequently. We will get back to you as soon as possible. Please leave your name, message and phone number where you may be reached. In case of emergency, call the New York City Hotline at 311. Again, the emergency number is 311."
- (c) Computer Equipment - Computers shall be provided for all contracts regardless of construction duration.
- Computers furnished by the Contractor for use by City Personnel, for the duration of the contract, shall be in accordance with Table I - ADDITIONAL SPECIFIC REQUIREMENTS, contained herein, and shall meet the following minimum requirements:

- (1) Personal Computer(s) - Workstation Configuration.
- |     |                               |  |
|-----|-------------------------------|--|
| (a) | <u>Make and Model:</u>        | Dell; HP; Gateway; Acer; or, an approved equivalent. (Note: an approved equivalent requires written approval of the Assistant Commissioner of ITS.)  |
| (b) | <u>Processor:</u>             | i5 ( 4MB Cache, 3.0GHz) or faster computer – Dual Processor.   |
| (c) | <u>System Ram:</u>            | Minimum of 16GB (Gigabytes) Dual Channel DDR3 SDRAM at 1333MHz – 2 DIMMSs  |
| (d) | <u>Hard Disk Drive(s):</u>    | 500 GB (Gigabytes) Serial ATA (7200RPM) w/DataBurst Cache, or larger.  |
| (e) | <u>CD-RW:</u>                 | Internal CD-RW, 48x Speed or faster.   |
| (f) | <u>16X DVD+/-RW</u>           | DVD Burner (with double layer write capability) 16x Speed or faster.   |
| (g) | <u>I/O Ports:</u>             | Must have at least one (1) Serial Port, one (1) Parallel Port and three (3) USB Ports.   |
| (h) | <u>Video Display Card:</u>    | HD Graphics (VGA, HDMI) with a minimum of 64 MB of RAM.  |
| (i) | <u>Monitor:</u>               | 22" W, 23.0 Inch VIS, Widescreen, VGA/DVI LCD Monitor.   |
| (j) | <u>Available Exp. Slots:</u>  | System as configured above shall have at least two (2) full size PCI Slots available.  |
| (k) | <u>Network Interface:</u>     | Integrated 10/100/1000 Ethernet card.  |
| (l) | <u>Other Peripherals:</u>     | Optical scroll Mouse, 101 Key Keyboard, Mouse Pad and all necessary cables.  |
| (m) | <u>Software Requirements:</u> | Microsoft Windows 10 Professional, 32 or 64 bit; Microsoft Office Professional 365 ; Microsoft Project 365 ; Basic Adobe Acrobat Package ; Anti-Virus software package with 2 year updates |

subscription; and, either Auto Cad LT or Microsoft Visio Standard Edition, as directed by the Engineer.

- (2) All field offices requiring computers shall be provided with the following:
- (a) One (1) broad-band internet service account. Wideband Internet connectivity at a minimum throughput of 15 Mbps download and 5 Mbps upload is required at each field office location with 1-5 staffers. For larger field offices see table below for minimum required upload speeds. Telephone service should be bundled together with Internet connectivity. Because of throughput requirements Verizon FIOS is the preferred connectivity provider where available.

Office Personnel #	Upload Speeds (Minimum)
1 - 5	10 Mbps
6 - 10	20 Mbps
11 - 15	25 Mbps
16 - 20	50 Mbps

This account will be active for the life of the project. The e-mail name for the account shall be the DDC Field Office/project Id (- preferably Gmail or Outlook - e.g. HWK666@gmail.com).

- (b) All necessary Cabling.
- (c) Storage Boxes for and Blank CDs/DVDs.
- (d) UPS/Surge Suppressor combo.
- (e) 10 USB Thumb (or Flash) Drive - 16GB each
- (3) All computers required for use in the Engineer's Field Office shall be delivered, installed, and setup in the Field Office by the Contractor.
- (4) All Computer Hardware shall come with a three (3) year warranty for on-site repair or replacement. Additionally, and notwithstanding any terms of the warranty to the contrary, the Contractor is responsible for rectifying all computer problems or equipment failures within one (1) business day.
- (5) An adequate supply of blank CDs/DVDs, and paper and toner cartridges for the printer shall be provided by the Contractor, and shall be replenished by the Contractor as required by the Engineer.
- (6) It is the Contractor's responsibility to ensure that electrical service and phone connections are also available at all times; that is, the Field Office Computer(s) is to be powered and turned on twenty-four (24) hours each day.

Broadband connectivity is preferred at each field office location. Please take into consideration that an extra phone line dedicated to the modem must be ordered as part of the contract unless Internet broadband connectivity, via Cable or FIOS, is available at the planned field office location. Any questions regarding this policy should be directed to the Assistant Commissioner of Information Technology Services at 718-391-1761.

- (d) Data Books - A copy of The AED Green Book, latest edition, published by Machinery Information Division of K-III Directory Corporation, 1735 Technology Drive, Suite 410, San Jose, California 95110-1313, shall be provided for all contracts that have a total Consecutive Calendar Days for General Construction duration as set forth in Schedule A of greater than 365 CCD's. Contracts of lesser duration shall not require any data books.

(D) Field Testing Equipment.

- (a) 2 - Air Entrainment Meters - Pressure Type, with carrying case for use by City personnel. Each meter shall be capable of producing an accurate test result in approximately five (5) minutes and shall comply with ASTM Designation C 231.



- (b) **2 - Slump Test Sets** - Slump cone and test sets conforming to the requirements of ASTM Designation C 143, complete with rod and scoop for use by City personnel.
- (c) **Thermometers:** For use by City personnel.
  - (1) 1 - Minimum-maximum thermometer.
  - (2) 3 - Asphalt thermometers of stainless steel construction with an accuracy of 0.5% of the full scale, able to measure temperatures from 50 to 500 degrees F. in 5 degree increments.
  - (3) 3 - Surface Thermometers able to measure temperatures of flat surfaces similar to Sargent-Welsh Model S81441-D, or an approved equivalent.
- (d) **Nonsparking Pinch Bar** - For use in opening manholes.
- (e) **Gas Meters** - For use in detecting the presence of explosive gases and vapors for use by City personnel.
- (f) **Straight Edge** - One 10 foot long straight edge for use by City personnel in detecting pavement surface tolerance.
- (g) **48" Smart Level** - For use in determining pedestrian ramp and sidewalk slopes.
- (h) **Chlorine Test Kits** - For testing residual chlorine levels following water main flushing.
- (i) **Green Florescent Power Trace-Dye** - For testing sewer connections.
- (j) **One Million Candlepower Rechargeable Flashlight.**
- (k) **Distance Measuring Wheel** - For measuring long distances.

**6.40.3. SPECIFIC REQUIREMENTS FOR ENGINEER'S FIELD OFFICE (TYPE A, B, C, CU, D, OR DU).** In addition to the general requirements, each type of Field Office shall have the minimum floor area indicated in Table 6.40-I calculated based on usable area only, excluding any loss factors. Loss factors are defined as those areas such as lobby, sidewalk window ledge, elevator shafts and stairways. The Contractor shall provide and maintain furnishings for each type of Field Office in the quantity specified in Table 6.40-I. The furnishings shall be new or used equipment satisfactory to the Engineer:

- (a) Each Type shall have a minimum of one outside door and four windows.
- (b) Type C shall be partitioned to provide three (3) rooms.
- (c) Type CU shall be partitioned to provide four (4) rooms, one of which shall be at least 150 s.f. in area (for use by private utilities).
- (d) Type D shall be partitioned to provide four (4) rooms.
- (e) Type DU shall be partitioned to provide five (5) rooms, one of which shall be at least 150 s.f. in area (for use by private utilities).

**TABLE 6.40-I  
ADDITIONAL SPECIFIC REQUIREMENTS**

SPECIFIC REQUIREMENTS	FIELD OFFICE TYPE					
	A	B	C	CU	D	DU
Minimum useable floor space (Square Feet)	400	800	1200	1200	1,800	1,800
Office desks, at least 4'-8" x 2'-8", with drawers, locks, and keys.	2	2	4	8*	8	12*
Swivel chairs, with arms, for the above.	2	2	4	8*	8	12*
Office folding chairs, metal, with padded seats and backs.	2	3	6	14**	8	16**
Steel supply cabinets (approximate size 72" high by 36" wide by 18" deep), with four adjustable shelves, tumbler lock and 3 keys.	1	1	1	1	1	1
Fire resistant cabinet, 4-drawer, legal size with lock and three (3) keys, meeting the requirements for "Filing devices, Insulated (36 E 9)" Class D Label, of the Underwriters' Laboratories, Inc. Specifications.	1	1	1	3***	4	6***
Individual lockers (17" wide x 18" deep x 72" high) with flat key locks and two (2) keys each.	1	1	4	4	4	4
Calculating machines, tape type with digital display registering at least ten (10) digits.	1	1	2	2	3	3

Waste paper baskets (metal, approximately 12" square by 16" high).	1	2	2	6*	4	8*
Fire extinguishers, non-toxic, dry chemical type meeting Underwriters Laboratories, Inc., approval for Class A, Class B and Class C fires with a minimum rating of 2A:10B:10C.	1	1	2	3****	4	5****
First Aid Kit kept properly stocked with appropriate first aid supplies at all times.	1	1	1	1	2	2
Drafting tables (3'-0" x 5'-0") with storage drawers and stool.	1	2	2	3****	4	5****
Photocopying Machine – Stand-alone, heavy duty, electric, dry-process color photocopying type with color scan and send capability via e-mail, a minimum production rate of 70 pages per minute and an adequate supply of copy paper, toner, etc. The machine shall be capable of duplex copying paper sizes of 8-1/2 x 11 inches, 8-1/2 x 14 inches and 11 x 17 inches, and have separate trays for each paper size. It shall have a document feeder, collator, stapler, and the capability to reduce/enlarge copies between each paper size. The supply of each size copy paper, toner, etc. shall be replenished and the machines shall be maintained for the duration of the contract by the Contractor as required by the Engineer. Make and model can be Minolta, Canon, IBM, Epson, or an approved equivalent, and shall be networked to the office computers for printing capability.	1	1	1	1	1	1
Standalone networked color laser printer. (Not required if photocopying machine prints in color)	XX	XX	XX	XX	XX	XX
Vertical filing plan racks for six sets of 22"x36" plans each rack.	1	1	2	3****	4	5****
Telephone lines for calls, where one shall be dedicated for the Fax Machine, one for each computer fax/modem and the others for telephone instruments.	4	6	6	7‡	8	9‡
Telephone instruments.	2	2	3	5‡	4	6‡
Telephone answering machine.	1	1	1	1	1	1
Fax Machine - With an adequate supply of copy paper, toner, etc. The supply of copy paper, toner, etc. shall be replenished and the machines shall be maintained for the duration of the contract by the Contractor as required by the Engineer.	1	1	1	1	1	1
Personal Computer - Workstation Configuration	1	3	3	3	4	4
Bottled water with refrigerator unit-hot/cold water. (For private utilities room.)				1		1
Heavy duty commercial grade diamond cut shredder with automatic start. The shredder shall be able to receive 8-1/2 inch wide paper and shred a minimum of 15 sheets simultaneously along with CDs and staples.	1	1	1	1	1	1
Projector – 1080p LCD with a min. of 2200 ANSI Lumens, 1920 x 1080, 16:9, 40,000:1 contrast ratio, HDMI, VGA, USB, and a 10 feet diagonal, 16:9 Projection Screen.	-	-	1	1	1	1

- ‡ Provide one (1) telephone line and two (2) telephone instruments for the exclusive use by private utilities personnel. The line shall interconnect the two telephone instruments by push button control.
- \* Provide four (4) each of Office Desks, Swivel Chairs and Waste Paper Baskets in private utilities room.
- \*\* Provide eight (8) Folding Chairs in private utilities room.
- \*\*\* Provide two (2) Fire Resistant 4- Drawer Legal Size Cabinets in private utilities room.
- \*\*\*\* Provide one (1) each of Fire Extinguisher, Drafting Table and Vertical File Rack in private utilities room.

**6.40.4. CONSTRUCTION METHODS.** The building shall be fully equipped and made available for use and occupancy by the Department's personnel and/or Supervision Consultant not less than thirty (30) days prior to the start of any contract work.

The building interior (including access foyers, stairwells, etc.) shall be maintained in good, clean, and sanitary working condition by the Contractor for the duration of the contract. The Contractor shall provide and pay all costs for electrical service, telephone service for calls within New York City limits, hot and cold water, heat and fuel, and daily janitor service. Staples, such as paper towels, hand soap, toilet paper, and similar supplies, shall always be available.

Where necessary, the site for a mobile trailer(s) shall be graded and shoulder stone placed and maintained as directed by the Engineer to provide a parking area for City personnel and, if necessary, an approach road shall be provided. Plumbing work shall include all water supply, drainage and piping required for the operation of a complete installation. Temporary water service shall be provided from an existing main and extended into the trailer and all fixtures requiring water supply shall be properly connected up. All necessary soil, waste, vent and drainage piping shall be provided and connected to the existing sewer or as otherwise directed.

The office, incorporated facilities, equipment, and personal property of the Department's employees shall be protected by the Contractor against loss or damage from fire, theft, or other causes, at all hours of the day and night. The Contractor shall provide fire insurance, extended coverage and vandalism, malicious mischief and burglary, and theft insurance coverage in the amount of forty thousand dollars (\$40,000.00) for office equipment of the City of New York in the Engineer's field office and for property of City personnel that is used in the contract work and stored in the office. All insurance coverage shall be written by a company approved by the Commissioner and payable in case of loss to the City of New York. The office shall be maintained by the Contractor in first class condition until final acceptance of the work. At the direction of the Engineer, any equipment on the above lists may be deleted. He may direct that other equipment of equivalent value be supplied by the Contractor or an appropriate credit be taken for the value of equipment not provided.

When directed by the Engineer, the Contractor shall disconnect all services and remove and dispose of all temporary installations from the site, including fencing, surfacing and utilities, the area shall then be cleaned, loamed and seeded if required and left in a neat and acceptable condition. On and after the date of the Engineer's Final Acceptance, the temporary structure and all installed equipment shall become the property of the Contractor, and shall be disposed of, by him, away from the site of the work. Engineer's Final Acceptance shall be when the Contractor has completed all punch list work and Official Completion Date has been set.

**6.40.5. NONCONFORMANCE.** No payment will be made under Engineer's Field Office for each calendar day during which there are deficiencies in compliance with the requirements of any subsection of this specification. The first calendar day shall commence twenty-four (24) hours after notice to the Contractor of such a deficiency. This non-payment shall be deducted from the Contractor's next estimate as a charge to the Contractor on the item. The amount of such calendar day non-payment will be determined by dividing the unit price bid per month by 30.

In addition, the Contractor may be subject to liquidated damages in accordance with Schedule A.

**6.40.6. MEASUREMENT.** The quantity to be measured for payment under this item shall be the number of months that the Field Office is available for occupancy by the Field Engineers during the period of the contract. Payment will begin the first month that the office is fully equipped, serviced as specified, and made available for occupancy. The Field Office is to be continuously made available and Monthly payments will continue for the duration of the contract through a period not to exceed 6 months past the substantial completion date. When directed in writing by the Commissioner, the Field Office will be provided and paid for a period of time beyond 6 months past the substantial completion date. Payment for each month's occupancy after the date of substantial completion acceptance will be made as part of the final estimate. Monthly payments may be terminated on a specified date prior to acceptance of the contract by written notification by the Engineer that such office will no longer be required on the contract.

**6.40.7. PRICE TO COVER.** The unit price bid per month for the item Engineer's Field Office shall include the cost of furnishing all labor, materials, equipment, ground rental, fire and theft insurance, and utility charges necessary to complete the work of providing or constructing the field office; making all necessary electrical, water, sewer, and other connections required to make the above facilities operative; payment of all rental costs; furnishing and paying for heating fuel, as required; all electrical energy;

private telephone services; staples, as specified; and all necessary incidentals to complete the work - all in accordance with the specifications and the directions of the Engineer.

*Payment will be made under:*

Item No.	Item	Pay Unit
6.40 A	ENGINEER'S FIELD OFFICE (Type A)	MONTH
6.40 B	ENGINEER'S FIELD OFFICE (Type B)	MONTH
6.40 C	ENGINEER'S FIELD OFFICE (Type C)	MONTH
6.40 CU	ENGINEER'S FIELD OFFICE (Joint Use) (Type CU)	MONTH
6.40 D	ENGINEER'S FIELD OFFICE (Type D)	MONTH
6.40 DU	ENGINEER'S FIELD OFFICE (Joint Use) (Type DU)	MONTH



# Department of Design and Construction

## SPECIFICATION BULLETIN

**SB**  
17-004

Title: **FIRE DEPARTMENT FACILITIES**

Prepared:

1/12/2017

Richard Jones, P.E. CWI

Date

Director, Specifications – Infrastructure Design

Approved:

1/12/2017

Mohsen Zargarelahi, P.E.

Date

Assistant Commissioner – Infrastructure Design

### APPLICABILITY:

- This Specification Bulletin (SB) is effective for projects advertised on or after 2/20/17.

### SUPERSEDEENCE:

- This SB supersedes the following SBs: **NONE**

### ATTACHMENTS:

**NONE**


### REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS VOLUME 1 OF 2, DATED 8/1/15:

*No Changes.*

### REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS VOLUME 2 OF 2, DATED 8/1/15:

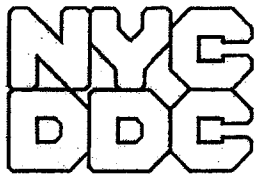
All references contained below are to the New York City Department of Transportation Standard Highway Specifications, Dated August 1, 2015. Said Standard Highway Specifications are hereby revised as follows:

- a) **Refer** to Page 332, Section 6.23 – Fire Department Facilities, Subsection 6.23.4.(A), 3<sup>rd</sup> paragraph;  
**Delete** the words "Bureau of Fire Communications";  
**Substitute** the words "Bureau of Facilities Management".
- b) **Refer** to Page 332, Section 6.23 – Fire Department Facilities, Subsection 6.23.4.(A), 9<sup>th</sup> paragraph;  
**Delete** the words "Bureau of Fire Communications";  
**Substitute** the words "Bureau of Facilities Management".

	<b>Department of Design and Construction</b>	<b>SPECIFICATION BULLETIN</b>	<b>SB</b>  <b>17-004</b>
<b>Title: FIRE DEPARTMENT FACILITIES</b>			

- c) **Refer** to Page 332, Section 6.23 – Fire Department Facilities, Subsection 6.23.4.(A), 9<sup>th</sup> paragraph;  
**Delete** the words “(718) 624-4194”;  
**Substitute** the words “(718) 281-3846”.
  
- d) **Refer** to Page 333, Section 6.23 – Fire Department Facilities, Subsection 6.23.4.(E), 1<sup>st</sup> paragraph;  
**Delete** the words “Bureau of Fire Communications”;  
**Substitute** the words “Bureau of Facilities Management”.
  
- e) **Refer** to Page 339, Section 6.23 – Fire Department Facilities, Subsection 6.23.6, 1<sup>st</sup> paragraph;  
**Delete** the words “Bureau of Communications”;  
**Substitute** the words “Bureau of Facilities Management”.
  
- f) **Refer** to Page 343, Section 6.23 – Fire Department Facilities, Subsection 6.23.6.(I);  
**Delete** the words “steel bar reinforcement and”.
  
- g) **Refer** to Page 440, Section 6.70 – Maintenance and Protection of Traffic, Subsection 6.70.9.(D);  
**Delete** the words “Bureau of Fire Communications”;  
**Substitute** the words “Bureau of Facilities Management”.

**(NO FURTHER TEXT)**



# Department of Design and Construction

## SPECIFICATION BULLETIN

# SB

17-005

Title: **DIGITAL PHOTOGRAPHS**

Prepared:

1/12/2017

Richard Jones, P.E. CWI

Date

Director, Specifications – Infrastructure Design

Approved:

1/12/2017

Mohsen Zargarelahi, P.E.

Date

Assistant Commissioner – Infrastructure Design

### APPLICABILITY:

- This Specification Bulletin (SB) is effective for projects advertised on or after 2/20/17.

### SUPERSEDEENCE:

- This SB supersedes the following SBs: **NONE**

### ATTACHMENTS:

- **ATTACHMENT 1:** Revised Section 6.43 – PHOTOGRAPHS  
*Pages A1-1 through A1-4*

### REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS VOLUME 1 OF 2, DATED 8/1/15:


All references contained below are to the New York City Department of Transportation Standard Highway Specifications, Dated August 1, 2015. Said Standard Highway Specifications are hereby revised as follows:

- a) **Refer** to Page 37, Section 1.06.45 – Progress Photographs;  
**Delete** in its entirety the Section;  
**Substitute** the following: “NO TEXT.”

### REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS VOLUME 2 OF 2, DATED 8/1/15:

All references contained below are to the New York City Department of Transportation Standard Highway Specifications, Dated August 1, 2015. Said Standard Highway Specifications are hereby revised as follows:

- b) **Refer** to Page 385, Section 6.43 - Photographs;  
**Delete** in its entirety the Section;  
**Substitute** the revised Section in Attachment 1 (4 pages).

	<b>Department of Design and Construction</b>	<b>SPECIFICATION BULLETIN</b>	<b>SB</b>  <b>17-005</b>
<b>Title: DIGITAL PHOTOGRAPHS</b>			

**REVISIONS TO THE NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION STANDARD SEWER AND WATER MAIN SPECIFICATIONS, DATED 7/1/14:**

All references contained below are to the New York City Department of Environmental Protection Standard Sewer and Water Main Specifications, Dated July 1, 2014. Said Standard Sewer and Water Main Specifications are hereby revised as follows:

- a) **Refer** to Page I-16, Section 10.32 – PHOTOGRAPHS;  
**Delete** in its entirety the Section;  
**Substitute** the revised Section:

**"The Contractor shall be required to provide "PHOTOGRAPHS" in accordance with New York City Department of Transportation (NYCDOT) Standard Highway Specifications Section 6.43 – Photographs."**



## SECTION 6.43 – Photographs

**6.43.1. INTENT.** This section describes the work of providing a photographic record of contract work.

**6.43.2. DESCRIPTION.** The work shall consist of the furnishing of all required photographic equipment and materials; the taking of digital photographs; making prints from digital files; and submitting prints and digital files to the Engineer.

**6.43.3. MATERIALS.**

### (A) PRINTS

Prints shall be 7-1/2" x 9-1/2" image area on 8" x 10" single-weight, gloss paper, and shall be in color. Prints shall be inserted in standard weight Archival Quality clear poly sheet protectors and submitted in a hard cover three (3) ring binder. The following information shall be imprinted, or indelibly printed, on a white border measuring no more than one and one half (1-1/2") inch at the bottom of the front of each photograph:

- (a) Contract Number and Job Location
- (b) Photograph Number
- (c) View and Description - (Indicating a general description of what the photograph represents)
- (d) Photograph Type: Preconstruction Photograph or Construction Progress Photograph
- (e) Date - (The date the photograph was taken.)
- (f) Address – street address where photograph was taken
- (g) Borough
- (h) Street Segment ID
- (i) Name of Photographer
- (j) Department Witness

The Contractor shall furnish to the Commissioner one (1) set for each view taken, each set consisting of two (2) 8" x 10" prints and one (1) digital file.

All prints and digital files shall become the property of the Commissioner. All completed prints and digital files shall be delivered to the Engineer within two (2) weeks after the photographs have been taken. Approved binders for the clear poly sheet protectors containing all materials shall be furnished by the Contractor and delivered to the designated construction office at the time of the initial submission of prints and DVDs at such other times as may be required thereafter.

### (B) DIGITAL FILES

Digital files shall be captured as 7.2 megapixel files or greater, with a minimum pixel array of 2,400 pixels by 3,000 pixels. The camera used to capture the digital files shall be a Digital SLR (Single Lens Reflex) camera or approved equal; "point and shoot" cameras or cameraphones are not acceptable. Digital cameras shall produce images using true optical resolution; "digital zoom" is not acceptable. Images shall not be resized or interpolated. The file format for digital files shall be Joint Photographic Experts Group format ("JPG"). The digital files shall not be modified or processed in any way to alter the JPG file's metadata, including the photograph's original capture date.

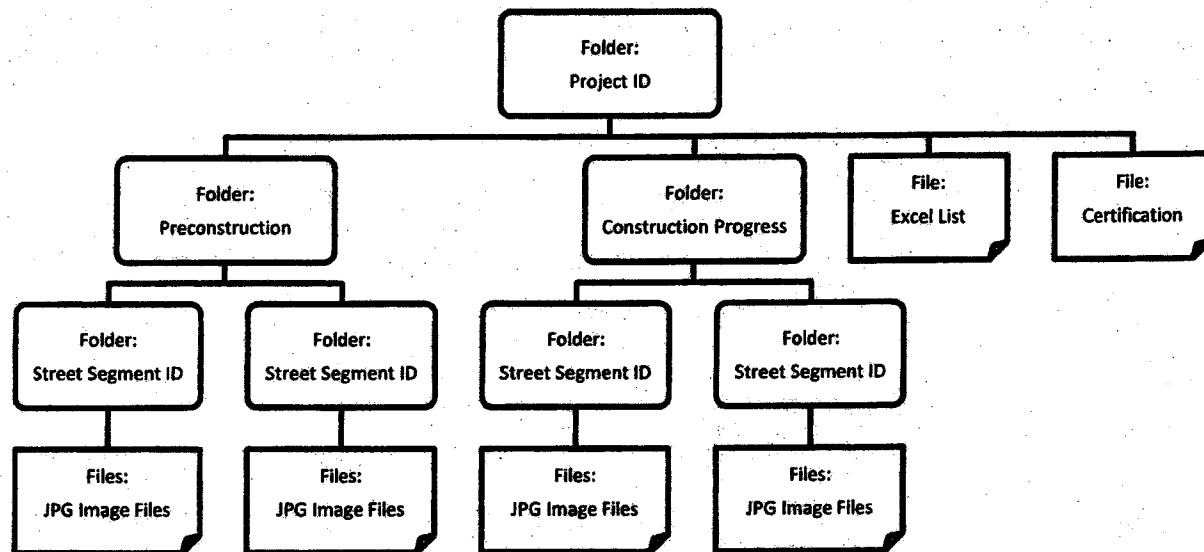
Digital files shall be submitted on Digital Versatile Disk ("DVD"). DVDs shall be inserted in standard weight Archival Quality clear poly sheet protectors, and submitted in a hard cover three (3) ring binder. The information imprinted on each print shall be provided on an Excel file included on the DVD. The DVD shall be labeled with the Project ID and the geographical area and streets depicted in the photographs. Labeling using adhesive labels is not acceptable.

Digital files shall have file names in the following format: a^b^c^d^e^f.JPG, where "a" through "f" are as follows:

- (a) Contract Number
- (b) Photograph Number
- (c) Date, in YYYY-MM-DD format (The date the photograph was taken.)
- (d) Address – street address where photograph was taken
- (e) Borough
- (f) Street Segment ID

A sample file name would be "HBX123^0021^2016-04-19^123 Main St^Queens^55555.JPG"

The files on the DVD shall be organized in folders by Photograph Type and Street Segment ID as follows:



#### (C) CERTIFICATION

The Photographer shall provide a signed certification that the files on the DVD are unaltered and are an accurate representation of the subject photographed. The original certification, in a clear poly sheet protector, shall be submitted with the prints and digital files, and a scanned copy shall be included on the DVD.

**6.43.4. METHODS.** The Contractor shall employ and pay for the services of a competent Professional Photographer who, at the direction of the Commissioner or his authorized representative, shall take Preconstruction Photographs and Construction Progress Photographs and such other photographs which may be required during the period of the contract.

The Photographer shall be available for taking the required photographs within forty-eight (48) hours after receiving notification from the Commissioner or his authorized representative.

Photographs shall be taken under the supervision and direction of the Engineer. The Engineer reserves the right to reject any and all views that are not reasonably clear and definitive. No separate or additional payment will be made for any additional photographs that are required as a result of the rejection of views.

**6.43.5. PRECONSTRUCTION PHOTOGRAPHS.** Preconstruction Photographs shall show the conditions existing on the work site prior to the commencement of the contract work. The Preconstruction Photographs will generally represent views of:

- The original surface conditions of streets, curbs and walks, and buildings;
- Evidence of damage, disrepair, or emergency situations;
- All encumbrances and/or encroachments which may be affected by the construction of the proposed work.

When there is no pay item listed in the Bid Schedule, the number of Preconstruction Photographs shall be as follows:

- (A) Highway Street Reconstruction projects: 150 sets per million dollars of street reconstruction work;
- (B) Highway Resurfacing projects: 4 sets per 250 linear feet of roadway for resurfacing work;
- (C) Sewer and Water Main projects: 2 sets (1 set each side of street) per 25 linear foot of sewer and water main.

When there is an item listed in the Bid Schedule, the quantity to be measured for payment shall be the number of sets, each set consisting of a digital file and the two (2) prints made from the digital file, of Preconstruction Photographs including photographs showing the original condition of all encumbrances and/or encroachments which may be affected by construction of the proposed work, and which are delivered as directed by the Engineer.

**6.43.6. CONSTRUCTION PROGRESS PHOTOGRAPHS.** Construction Progress Photographs shall show the conditions existing during the progress of, and at the completion of the contract work. The photographs will generally represent views of the work under construction and completed work. Construction Progress Photographs shall be taken monthly and upon completion of the work.

The approximate number of Construction Progress Photographs is as follows:

- (A) Highway reconstruction and resurfacing projects: Minimum 2 sets per 250 linear feet of roadway under construction or completed in the last month.
- (B) Pedestrian ramps on all projects: Minimum of 1 set for every pedestrian ramp under construction or completed in the last month, in addition to other progress photographs.
- (C) Sewer and Water Main projects: Minimum of 4 sets for every 100 feet of sewer or water main under construction.

No separate payment will be made for Construction Progress Photographs. The cost of taking and providing sets of Construction Progress Photographs shall be included in the prices bid for all other items of work.

**6.43.8. PRICE TO COVER (PRECONSTRUCTION PHOTOGRAPHS ONLY).** When there is an item listed in the Bid Schedule, the contract price bid per set shall cover the cost of furnishing all labor, materials, plant, equipment, insurance, and necessary incidentals required, including the cost of the photographer, and the cost of furnishing the required prints, digital files, DVDs, and ring binders, and completing the work in accordance with the specifications and the directions of the Engineer.

When there is no item listed in the Bid Schedule, no separate payment will be made. The cost of furnishing all labor, materials, plant, equipment, insurance, and necessary incidentals required, including the cost of the photographer, and the cost of furnishing the required prints, digital files, DVDs, and ring

binders, and completing the work in accordance with the specifications and the directions of the Engineer shall be included in the prices bid for all other items of work.

*Payment will be made under:*

Item No.:	Item	Pay Unit
6.43 D	DIGITAL PHOTOGRAPHS	SETS



# Department of Design and Construction

## SPECIFICATION BULLETIN

# SB

17-006

Title: **RECORDS OF SUBSURFACE STRUCTURES**

Prepared:

Richard Jones, P.E. CWI

Director, Specifications – Infrastructure Design

1/12/2017

Date

Approved:

Mohsen Zargarelahi, P.E.

Assistant Commissioner – Infrastructure Design

1/12/2017

Date

### APPLICABILITY:

- This Specification Bulletin (SB) is effective for projects advertised on or after 2/20/17.

### SUPERSEDEENCE:

- This SB supersedes the following SBs: **NONE**

### ATTACHMENTS:

**NONE**

### REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS VOLUME 1 OF 2, DATED 8/1/15:


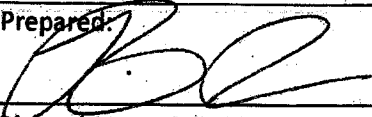
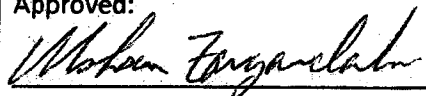
All references contained below are to the New York City Department of Transportation Standard Highway Specifications, Dated August 1, 2015. Said Standard Highway Specifications are hereby revised as follows:

- a) **Refer** to Page 9, Section 1.06.18 – Records of Subsurface Structures, Etc.;

**Delete** the first two paragraphs;

**Add** the following paragraph to the beginning of the Section:

“The Contractor stipulates that it has the obligation to examine and review any and all available documents and other sources of information concerning the condition of the sub-soil materials, subsurface conditions and existing subsurface structures of bridges, pipes, tunnels, conduits, sewers, foundations, bulkhead walls and other subsurface structures and stipulates that it has made such investigation and research as it deems necessary. To the extent the Contractor incurs delays or damages based on sub-soil materials, subsurface conditions and existing subsurface structures that were known or reasonably could have been known to the Contractor through such available documents or other sources of information, the Contractor will make no claim for such delays or damages.”

	<b>Department of Design and Construction</b>	<b>SPECIFICATION BULLETIN</b>	<b>SB</b>  17-007
<b>Title: MOBILIZATION</b>			
Prepared:  3/24/2017		Approved:  3/24/2017	
Richard Jones, P.E. CWI Director, Specifications – Infrastructure Design		Mohsen Zargarelahi, P.E. Assistant Commissioner – Infrastructure Design	

**APPLICABILITY:**

- This Specification Bulletin (SB) is effective for projects advertised on or after 4/17/2017.

**SUPERSEDEENCE:**

- This SB supersedes the following SBs: **NONE**

**ATTACHMENTS:**

**NONE**

**REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION  
STANDARD HIGHWAY SPECIFICATIONS VOLUME 1 OF 2, DATED 8/1/15:**

*No Changes.*

**REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION  
STANDARD HIGHWAY SPECIFICATIONS VOLUME 2 OF 2, DATED 8/1/15:**

All references contained below are to the New York City Department of Transportation Standard Highway Specifications, Dated August 1, 2015. Said Standard Highway Specifications are hereby revised as follows:

- Refer** to Pages 371 through 372, Section 6.39 – Mobilization, Subsection 6.39.4. PRICE TO COVER;  
**Delete** in its entirety the Subsection;  
**Substitute** the revised Subsection:



# Department of Design and Construction

## SPECIFICATION BULLETIN

# SB

17-007

Title: **MOBILIZATION**

**6.39.4. PRICE TO COVER.** Payment will be made by lump sum. The amount bid shall include the furnishing and maintaining of any plant, services or other facilities noted under "Description" to the extent and at the time the Contractor deems them necessary for his operations, consistent with the requirements of this section and the contract. The amount bid for this lump sum item shall be payable to the Contractor whenever he shall have completed 5% of the work, provided the final contract price, which includes this item, is at least 50% of the original price bid for the contract. For the purposes of this item, 5% percentage of the work shall be considered completed when the total of payments earned, not including the amount bid for this item, shall exceed 5% of the total amount of the Contractor's bid for the contract.

However, should the contract be terminated or it's term expire prior to completion of at least 50% percent of the original price bid for the contract then the Contractor will be paid a proportionate amount of this item based on the ratio of actual payments verified and approved by the Engineer and paid to the Contractor to the original price bid for the contract, plus any approved and registered change orders. Where the Contractor has already received the original total payment for this item after completion of 5% of the work and the contract has been terminated or expired prior to completion of at least 50% of the original price bid for the contract, then any monies owed the City due to the above specified reduction in payment will be withheld from monies owed the Contractor.

The amount bid for Mobilization shall not exceed four percent (4%) of the total contract price, excluding the price bid for Mobilization, and in no case will payment under this item exceed the original price bid for this item.

*Payment will be made under:*

Item No.	Item	Pay Unit
6.39 A	MOBILIZATION	L.S.

**(NO FURTHER TEXT THIS PAGE)**



# Department of Design and Construction

## SPECIFICATION BULLETIN

# SB

17-008

Title: **QUALIFICATION CARDS**

Prepared:

3/24/2017

Richard Jones, P.E. CWI  
Director, Specifications – Infrastructure Design

Approved:

3/24/2017

Mohsen Zargarelahi, P.E.  
Assistant Commissioner – Infrastructure Design

### APPLICABILITY:

- This Specification Bulletin (SB) is effective for projects advertised on or after 4/17/2017.

### SUPERSEDEENCE:

- This SB supersedes the following SBs: **NONE**

### ATTACHMENTS:

**NONE**

### REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS VOLUME 1 OF 2, DATED 8/1/15:

- a) **Refer** to Page 150, Section 4.02 – Asphaltic Concrete Wearing Course, Subsection 4.02.4.(B) CERTIFICATION OF LABORATORY AND TECHNICIANS;  
**Delete** in its entirety the Subsection;  
**Substitute** the revised Subsection:

The testing laboratory used by the Contractor for testing core samples must be independent of those used at the plant and job site during placement of asphalt. Only laboratories approved by the Director of DDC QACS shall be used. Technicians used for plant and field work shall possess current QACS Qualification Cards. Technicians must have in their possession the current QACS issued Qualification Card (no copies), and present their current QACS Qualification Cards if so requested by authorized DDC staff. Expired QACS Qualification Cards will be kept by the DDC staff for return to the QACS Bureau. Technicians shall have one of the qualifications listed below in order to apply for a QACS Qualification Card:

Field Technician	Plant Technician
NICET Asphalt Level II	NICET Asphalt Level II
Alfred State HMA Density Testing Inspector	Alfred State QC/QA Technician
NETTCP HMA Paving Inspector	NETTCP HMA Plant Technician





# Department of Design and Construction

## SPECIFICATION BULLETIN

# SB

17-008

Title: **QUALIFICATION CARDS**

Exceptions granted to any of the above requirements must be in writing by the Director of QACS.

- b) Refer to Page 154, Section 4.02 – Asphaltic Concrete Wearing Course, Subsection 4.02.4.(G) TEST STRIP OPERATIONS;

Delete in its entirety the second paragraph;

Substitute the revised paragraph:

Size of each test strip shall be no greater than: a length of one city block, 250 feet, an area of 1,000 square yards, and 125 tons of each course of asphaltic concrete. Test strip areas shall become part of the completed pavement if, in fact, they meet the requirements of these specifications. The Contractor shall be required to furnish and use a properly calibrated nuclear asphalt testing device in the field to monitor the effectiveness of compaction by rolling during construction for each lift of asphaltic concrete placed. The technician operating the nuclear asphalt testing device shall possess a current QACS Asphalt Field Qualification Card. The amount of compaction shall be determined as a percentage of the theoretical maximum density of bituminous pavement mixture at the plant obtained in accordance with the requirements of ASTM Designation D 2041. Acceptable in place compaction shall range between 92% and 97% of the theoretical maximum density of bituminous pavement mixture. Field testing for compacted asphaltic concrete with the nuclear asphalt testing device shall be done by the Contractor in accordance with ASTM Designation D 2950, throughout his rolling operations. Number and locations of nuclear asphalt tests to be performed within each test strip area shall be of a sufficient number to obtain acceptable results, with a minimum of 12 randomly selected locations using statistically random number charts, except that none are to be within 18 inches of a longitudinal joints or edge of street hardware or within ten (10') feet of transverse joints; however, it is the Contractor's responsibility to take as many density readings as required to insure that the in place density after compaction falls within the specified range of 92% to 97% of the theoretical maximum density, obtained in accordance with ASTM Designation D 2041, of the asphaltic concrete placed. A copy of all density monitoring results, including date, time, station, offset, and theoretical maximum density of pavement mixture obtained in the plant in accordance with ASTM Designation D 2041, shall be given to the Engineer at the end of that day's operations.



# Department of Design and Construction

SPECIFICATION  
BULLETIN

**SB**

17-008

Title: **QUALIFICATION CARDS**

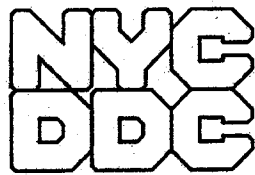
- d) **Refer** to Page 154, Section 4.02 – Asphaltic Concrete Wearing Course, Subsection 4.02.4.(Q) MONITORING FIELD DENSITY;

**Delete** in its entirety the first paragraph under Item 1);

**Substitute** the revised paragraph:

The Contractor shall be required to furnish and use a properly calibrated nuclear asphalt testing device in the field to monitor the effectiveness of compaction by rolling during construction for each lift of asphaltic concrete placed. The nuclear density gauge should consist of a radioactive source, scaler and other basic components housed in a single backscatter unit. The technician operating the nuclear asphalt testing device shall possess a current QACS Asphalt Field Qualification Card. Only gauge(s) calibrated during the construction of the test strip will be used during normal paving operation. If another nuclear gauge is to be used, a new test strip must be constructed to calibrate that gauge.

**(NO FURTHER TEXT THIS PAGE)**



# Department of Design and Construction

## SPECIFICATION BULLETIN

# SB

17-008

Title: **QUALIFICATION CARDS**

### REVISIONS TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS VOLUME 2 OF 2, DATED 8/1/15:

All references contained below are to the New York City Department of Transportation Standard Highway Specifications, Dated August 1, 2015. Said Standard Highway Specifications are hereby revised as follows:

- a) **Refer** to Page 487, Section 7.12 – Soil Density Testing, Subsection 7.12.2. APPROVAL OF TESTING LABORATORY AND QUALIFICATION OF THE TECHNICIANS;

**Delete** in its entirety the first paragraph;

**Substitute** the revised paragraph:

The testing laboratory used by the Contractor must be independent of the Contractor and any subsidiary. Only laboratories approved by the Director of DDC Quality Assurance and Construction Safety (QACS) Bureau shall be used for all work performed and technicians qualified by the DDC QACS Bureau shall be used for field work. Technicians used for field work shall possess QACS Qualification Cards. Technicians must carry the original QACS Qualifications on their person, and present their current QACS Qualification Cards if so requested by authorized DDC staff. Field technicians must present their current QACS Qualification Cards if so requested by authorized DDC staff. Expired QACS Qualification Cards will be kept by the DDC staff for return to the QACS Bureau. Technicians shall have one of the qualifications listed below in order to apply for a QACS Qualification Card:

- NICET Soils Level II;
- NETTCP Soils & Aggregate Inspector;

Exceptions granted to any of the above requirements must be in writing by the Director of QACS.

**(NO FURTHER TEXT THIS PAGE)**



# Department of Design and Construction

## SPECIFICATION BULLETIN

# SB

17-009

Title: **SALVAGEABLE MATERIALS**

Prepared:

3/24/2017

Richard Jones, P.E. CWI  
Director, Specifications – Infrastructure Design

Approved:

3/24/2017

Mohsen Zargarelahi, P.E.  
Assistant Commissioner – Infrastructure Design

### APPLICABILITY:

- This Specification Bulletin (SB) is effective for projects advertised on or after 4/17/2017.

### SUPERSEDEENCE:

- This SB supersedes the following SBs: **NONE**

### ATTACHMENTS:

**NONE**

### REVISIONS TO THE NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION STANDARD SEWER AND WATER MAIN SPECIFICATIONS, DATED 7/1/14:

All references contained below are to the New York City Department of Environmental Protection Standard Sewer and Water Main Specifications, Dated July 1, 2014. Said Standard Sewer and Water Main Specifications are hereby revised as follows:

- a) **Refer** to Pages I-15, Section 10.28 – SALVAGEABLE MATERIALS;

**Delete** in its entirety the Section;

**Substitute** the revised Section:

Except as specified below, no salvageable material shall be returned to the New York City Department of Environmental Protection regardless of condition. It shall become the property of the Contractor for removal and disposal, by the Contractor, away from the site. No salvage of materials shall be required on contracts with federal funding.

The Contractor shall salvage and deliver all Metropolitan Gate Valves (6" thru 20") removed during construction of the contract to the NYCDEP 3<sup>rd</sup> Ward Yard, 49-14 Fresh Meadow Lane, Flushing, NY 11365, Monday thru Friday, between the hours of 9:00AM and 2:00PM. The valves shall be free of all debris and have no attached piping.



# Department of Design and Construction

## SPECIFICATION BULLETIN

# SB

17-009

Title: **SALVAGEABLE MATERIALS**

The Contractor shall salvage and deliver all twenty-four (24) and twenty-seven (27) inch sewer manhole covers to the nearest NYCDEP Repair Yard as listed below between the hours of 9:00AM and 2:00PM. The delivered materials shall be free of all debris, including any attached piping.

### NYC DEP REPAIR YARDS

FACILITY	TYPE	LOCATION
Pike Street	Manhattan Repairs	30 Pike Street New York, NY 10002
Joline Avenue	Staten Island Repairs	182 Joline Avenue Staten Island, NY 10307
Zerega Avenue	Bronx Repairs / Bronx Water Maintenance (E-BX)	930 Zerega Avenue Bronx, NY 10473
Queens Repairs	Queens Repairs	106-36 180 Street Jamaica, NY 11433
Brooklyn Repairs	Brooklyn Repairs	9023 Avenue D Brooklyn, NY 11236

The Contractor shall obtain from the yard a "Return Requisition Slip" as proof of delivery and shall submit it to the Engineer. Failure to provide a "Return Requisition Slip" to the Engineer shall incur to the Contractor for each failure a deduction in an amount as determined by the Engineer. The cost of all labor, material and equipment required and necessary for the removal, cleaning, dismantling, loading, transporting, unloading, etc. of the salvaged materials to the NYCDEP yard shall be deemed included in the unit prices bid for all items of the contract. No separate or additional payment will be made for this work.

**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 SUB ARTICLES AS REFERRED TO HEREIN (I-PAGES) ARE TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION'S (NYCDOT'S) STANDARD HIGHWAY SPECIFICATIONS, DATED AUGUST 1, 2015, AS CURRENTLY AMENDMENTS BY THE R-PAGES.

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**SECTION 4.14 E**  
**Epoxy Coated Steel Reinforcement Bars**

**4.14E.1. DESCRIPTION.**

The Contractor shall furnish and install epoxy coated steel reinforcement bars for concrete at the locations shown on the plans and where directed by the Engineer. All work shall be done in accordance with the requirement of **Section 4.14** in the NYCDOT Standard Highway Specifications, with the following modifications and additions:

- (A) Steel reinforcement bars shall be epoxy coated and shall conform to the requirements of Article 709-04 - Epoxy Coated Bar Reinforcement, Grade 60, of the current NYSDOT Standard Specifications, Construction and Materials, Office of Engineering.
- (B) Chairs, tie wires, and other devices used to support, position, or fasten the reinforcement shall be made of or coated with a dielectric material. The specific hardware that the Contractor proposes to use shall be approved by the Engineer.
- (C) No field bending of bars shall be permitted. Reinforcement shall be carefully formed to the dimensions indicated on the Contract Drawings. Cold bends shall be made around a pin having a minimum diameter of four (4) or more times the least dimension of the reinforcing bars. Reinforcing bars shall not be bent or straightened in a manner that will injure the material. Bars with kinks or bends not shown on the plans shall not be used.
- (D) The Contractor shall be required to field repair damaged areas of the bar coating and to replace bars exhibiting severely damaged coatings. The material used for field repair shall be that supplied by the coating applicator. Field repair shall be required wherever the area of coating is broken, unless otherwise specified or directed. Field repair shall not be allowed on bars which have a total damage area greater than five (5) percent of the surface area of the reinforcing bar. The Engineer shall be the sole judge of the severity of the damaged areas for the purpose of repair or replacement. A reinforcing bar having a coating determined by the Engineer to be severely damaged and not field reparable shall not be incorporated in the work and it shall be removed from the work site. All such bars shall be replaced in kind by the Contractor at no additional cost to the City.
- (E) No concrete shall be deposited until the Engineer has inspected the placing of the reinforcing steel and has given permission to place the concrete. All concrete placed in violation of this provision will be rejected and removed at the Contractor's own expense.

*Payment will be made under:*

Item No.	Description	Pay Unit
4.14 E	EPOXY COATED STEEL REINFORCEMENT BARS	LBS.



## **SECTION 5.37**

### **Construction Report**

#### **5.37.1. INTENT.**

The intent of this Section is to prepare construction reports as prescribed herein and summarize the effects of construction activities on structures located within the influence line of work to be performed under this project to ensure that the Contractor's proposed construction methods do not create or aggravate any potentially dangerous conditions. In order to ascertain the effects of construction, the Contractor will be required to retain the services of a qualified firm with experience in structural engineering, soil mechanics, foundations, evaluation of the effect of construction on adjacent retaining walls to remain, buildings and/or structures, and the effect of vibrations upon structures.

#### **5.37.2. SPECIAL EXPERIENCE REQUIREMENTS.**

Within thirty (30) days of the award of this contract, the Contractor shall submit to the Commissioner qualifications of the firm it proposes to provide the engineering services described in this section. The proposed engineering firm must meet the following special experience requirements:

- A. Such firm must, within the last three (3) consecutive years, have successfully provided engineering services similar to the services described in this section on a minimum of two (2) comparable projects.
- B. Such firm must carry professional liability insurance as specified in Schedule A.

Compliance with such special experience requirements will be determined solely by the Commissioner. Once a firm is approved, no substitution will be permitted, unless the Commissioner has approved the qualifications of the proposed replacement in writing in advance. If the qualifications of the proposed firm are not acceptable, the Contractor shall submit the qualifications of another proposed firm within fifteen (15) days of notice to do so.

#### **5.37.3 SUBMISSIONS.**

All submissions shall be additionally submitted to Consolidated Edison for review, as part of the Joint Bid.

##### **A. Pre-Construction Reports:**

Upon approval and prior to construction the chosen firm (hereinafter referred to as the firm) shall submit six (6) copies of a report incorporating their findings and recommendations. The report shall be prepared by or under the immediate direction of a New York State Licensed Professional Engineer as evidenced by the imprint of his seal and signature on the document. The report shall include but not be limited to the following:

1. A detailed description of the Contractor's proposed method of construction including the demolition of wall; demolition of sidewalk, curb and roadway; excavation;
2. An inspection of the interior and exterior (including photographs and videotapes as required) of all buildings and/or structures that may be affected by the proposed method of construction.
3. The proposed number, locations, make and model of prisms that shall be installed on the adjacent buildings and that are to be monitored by the field survey as required under Section 9.71 WBB of these I-Pages.
4. A definition of the "radius of influence" that the proposed wall installation and other construction activity will impact on the surrounding soil.

5. A definition of the limits of horizontal and vertical movement of each building and/or structure within the support of excavation can tolerate without damage to the structural integrity of that building and/or structure.
6. A complete study of the vibrations that each building can tolerate along with the anticipated vibrations promulgated by the construction methods, taking into account the age and condition of the buildings.
7. A statement that the limits of movement and vibrations as defined in (d) and (e) above will not be exceeded as a result of the proposed method of construction.
8. A geological profile of the soils in the area. This profile shall be based upon the boring logs taken for this project. See Record of Borings drawing.

The report shall include all field notes, measurements and photographs and videotapes, as required, of the existing wall conditions which may be aggravated by the proposed construction of the wall and shall include a visual inspection of the interior and exterior of all buildings, water main and sewer within the adjacent area of the construction activity. A view of each exterior face of the building and/or structure is required. Additional interior photographs shall be taken to show any existing cosmetic or structural damage on buildings and / or structures. The Contractor shall install gages to monitor the cracks during the construction. The gages shall be able to determine crack opening or closing to the nearest one-sixteenth of an inch (1/16").

Applications for consents to enter buildings for the purpose of inspection shall state that the inspection is necessary to ensure the structural integrity of the building. One counterpart of each consent, duly signed and acknowledged by the owner or one of the owners, executors or administrators for himself and for his agents, lessee and any other persons who shall have a vested or contingent interest in the building, or notice of refusal if consent is not obtained shall be filed with the Engineer at least ten (10) days before the commencement of work which affect the buildings or structures.

The report shall also include recommendations or comments regarding any potentially dangerous and/or unsafe conditions uncovered along with all other additional information required pursuant to other sections of the Specifications.

All results of the building and/or structure examinations shall be incorporated into the Pre-Construction Report.

No work may begin until the Engineer has accepted the pre-construction report. This pertains to all contract work and no exceptions will be allowed unless otherwise stated in these specifications.

#### B. Reports During Construction:

The firm will be required to perform the monitoring during construction activity and submit reports to the Engineer as required on a weekly basis or as directed by the Engineer. These reports shall include sketches noting the location of all monitoring points. Should any of the criteria set forth in the Pre-Construction Report be exceeded, the Engineer shall be notified immediately. Monitoring shall include but not be limited to the following:

##### 1. Vibration Monitoring

Should the Contractor employ construction methods that will result in vibrations being imparted to the surrounding soil and/or buildings and/or structures, the Contractor shall monitor and record peak particle velocity. Locations of the monitoring points shall be placed in such a manner so as to ensure recordings that reveal any possibility of damage to existing buildings.

These points shall be monitored at all times when construction methods resulting in vibrations are employed. The maximum permissible peak particle velocity of one-half (1/2) inch per second be permitted. Should particle velocities be exceeded the Contractor

shall immediately cease his operations and resort to another method which will eliminate or minimize the effect of vibrations.

It shall be the Contractor's responsibility to restore any buildings and/or structures damaged as a result of his operations to its original or better condition.

The Contractor is advised that the parameter of one-half (1/2) inch per second shall be used as the maximum upper limit of particle velocity and it should be realized that particle velocities of less than one-half (1/2) inch per second could cause damage to buildings in the area.

The use of an upper limit of less than one-half (1/2) inch per second shall be mentioned in the Pre-Construction Report and Contractor shall be required to abide by any limits other than one-half (1/2) inch per second at no additional cost to the City.

The wall vibration monitoring shall be performed under Section 9.71 WBB of these I - Pages.

#### C. Post-Construction Reports:

Within 30 days of the completion of all work that necessitated monitoring, the chosen firm shall prepare a report detailing the results of the monitoring program. The report shall include a comparison of all assumptions and field-measured values. Should there be excessive discrepancies between the two, an explanation shall be presented within the report. This report shall include sketches of all monitoring points.

#### 5.37.4 RESPONSIBILITIES OF THE CONTRACTOR.

Prior to bidding, Contractor shall examine the site and available subsurface inspection information and formulate methods of construction that will not result in any damage to existing structures. Should the Contractor lack the expertise in evaluating the effects of his construction methods he should prepare his bid in consultation with an experienced firm or authority. In any event, the Contractor will be held liable for any damage to any existing structures due to his construction methods. In addition, should the results of a Pre-Construction Report indicate that damage will result from his proposed construction methods, the Contractor will be required to amend his means and methods in accordance with the Pre-Construction Report, at no additional cost to the City.

#### 5.37.5 PRICES TO COVER.

The unit price bid for the Construction Report shall be a Lump Sum Price and shall include the cost of all labor, materials, plant, equipment, insurance, and incidentals necessary or required to prepare the report including, but not limited to, photographs, video tapes, building examinations, construction monitoring, preparation of pre-construction reports, reports during construction and Post Construction Report and all other work incidental thereto; all in accordance with the specifications and the directions of the Engineer.

Payment for this work shall be made under the appropriate Bid Item and proportional to the work completed as follows:

Acceptance of Pre-Construction Report	30%
Completion of Field Monitoring	40%
Acceptance of Post-Construction Report	30%

No separate or additional payment will be made for compliance with the requirements of the Construction Report including, but not limited to, any modification to the Contractor's means and methods of construction.

*Payment will be made under:*

Item No.  
5.37

Item  
CONSTRUCTION REPORT

Pay Unit  
L.S.

**SECTION 6.18 A**  
**Steel Bar Picket Fence, 7'-0" High**

**6.18A.1. DESCRIPTION.**

Under this item, the Contractor shall furnish and erect picket fence of the type and size shown on the plans or directed by the Engineer.

The fence shall conform to the standards of NYC DOT Standard Highway Specifications, Section 6.18 – Picket Fence except that the height of the fence and other dimensional requirements shall be as described on the drawings, and as described herein.

**6.18A.2. MATERIALS.**

- A. Galvanization: as per section 6.18.4 of the NYC DOT Standard Highway Specifications.
- B. Powder Coating: as per section 6.18.4 of the NYC DOT Standard Highway Specifications. Color shall be black.
- C. Sealant: for caulking fillet at top of granite setting holes shall be "BASF MasterSeal NP2" two-part elastomeric polyurethane, or approved equivalent product as manufactured by Sika or Pecora or equivalent. Sealant color shall be selected by the Engineer in consultation with DDC's the Landscape Architect from full range of colors available.

**6.18A.3. SUBMITTALS.**

All submittals shall be as per NYC DOT Standard Highway Specifications, under Division 1 Contract Requirements, Section 1.06.31.

- A. Product Data: Provide product data for sealant, including description and material properties.
- B. Shop Drawings: The Contractor shall submit Shop Drawings in accordance with the requirements of the Section 1.06.13 of NYC DOT Standard Highway Specifications. Submit overall and detailed plans, sections, and elevations as necessary to accurately and fully describe the required elements for the fence and each related application condition of the Project work. Include necessary coordination and preparation of composite drawing information together with installation trades contractors of different components, including granite fabrications and concrete foundations. Establish and verify locations of expansion joints, which shall be coordinated with concrete shop drawings. Shop drawings to include complete details of fence construction, height, post spacing layout, dimensions and footing detail. Shop drawings shall be coordinated with those for abutting steel railings described in Section 6.18 Picket Fence.
- C. Sample Fabrication: The contractor shall fabricate a sample section of fence incorporating at minimum of one post, a typical bend in bar rails and picket infill from horizontal to sloped condition matching the slope of the stairway, extending a minimum of 12" in horizontal condition, and a minimum of 12" in sloped condition. The height of the sample may be reduced to 42", shortening the length of the middle section.

**6.18A.4. METHODS.**

Erection: as per 6.18.5 of the NYC DOT Standard Highway Specifications.

Holes to receive railings shall be previously shop-drilled in granite copings, paid under their respective granite coping items. Any additional depth required per drawings shall be formed in concrete using foam form inserts under concrete work item. The holes to receive railing posts shall be as shown on the drawings. Field-drilling shall not be acceptable. In setting the posts into previously shop-drilled granite copings, grout shall be poured to 3/8" below the surface of the holes. Where the top of the hole is sloped, the grout shall be poured to 3/8" below the lowest surface point.

After the grout has hardened, the remaining space shall be neatly caulked with a water-shedding fillet of the specified sealant.

**6.18A.5. MEASUREMENT.**

STEEL PICKET FENCE, 7'-0" HIGH: The quantity of Steel Picket Fence, 7'-0" High, to be paid for shall be the number of linear feet of fence furnished and erected complete, to the satisfaction of the Engineer. Measurement shall be made in place along the centerline of the top rail, from center to center of end posts, irrespective of slope.

**6.18A.6. PRICE TO COVER.**

The price bid of Steel Picket Fence, 7'-0" High, shall be a unit price per linear foot of Picket Fence and shall include the cost of all labor, material, equipment, insurance and incidentals required to furnish and erect fence of the type specified including, but not limited to, shop drawings and finishing as required, all in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

Drilling of holes in granite to receive railings shall be included in the cost of the respective granite items. Formwork in concrete to receive received railings shall be included in the cost of respective concrete items.

*Payment will be made under:*

Item No.	Item	Pay Unit
6.18 A70	Steel Bar Picket Fence, 7'-0" High	L.F.

**SECTION 6.18 A - PR**  
**Steel Railings and Handrails**

**6.18A-PR.1. DESCRIPTION.**

Under this item, the Contractor shall furnish and erect powder coated steel railings and handrails where shown on the plans or directed by the Engineer, in accordance with the plans, specifications and directions of the Engineer.

**6.18A-PR.2. MATERIALS.**

- A. **METAL:** All pipe rails shall be steel pipe in accordance with ASTM A53 schedule 40. All tubular steel supports shall be in accordance with ASTM A500. Bars, pickets, and cantilever supports shall be in accordance with ASTM A36. All metal railing and handrail fabrications shall be galvanized in accordance with ASTM A123. All materials as delivered shall be in condition for erection without field fitting or cutting.
- B. **WELDING:** Unless otherwise noted, all welded joints shall be continuous. Welding shall be done by competent mechanics and all welds shall be ground smooth. Except as modified by governing codes and by this Specification, comply with the applicable provisions and recommendations of the AWS "Structural Welding Code" including all supplements, addenda and special rulings applicable to building construction. All welding in the shop or field shall be subject to controlled inspection NYC Building Code.
- C. **SURFACE COATINGS:** All surfaces of the posts and rails shall be powder coated, after welding, with TGIC-Polyester 3 to 6 mils thick). Galvanizing of all components shall provide an acceptable substrate for applied powder coatings. No lacquer, urethane or other coatings which would prevent proper adhesion of powder coating shall be applied to the pipe.

The powder coating shall be applied to the galvanized surfaces in such a manner that the coating will not peel off. Insure surfaces to be coated are clean and dry and free of grease, dust, rust etc. All coated parts shall first receive phosphating and chromating treatments to improve the adhesion of the surface coating.

Color to be black unless otherwise indicated on the plans.

The entire pipe railing/handrail installation shall be coated with powder coating. All components shall be coated on all surfaces with the exception of internal expansion dowels.

**Powder Coating:** TGIC-Polyester Powder coating shall be applied to the galvanized steel in such a manner that the coating will not peel off. The TGIC-Polyester shall be applied at a film thickness of 3 to 6 mils by electrostatic spray process and bake finished per manufacturer's directions. The TGIC-Polyester shall be applied without voids, tears or cuts that reveal the substrate and shall thoroughly adhere to the metal without peeling when scratched with a pick device or knife blade point.

**D. TESTS:**

**Laboratory Test For TGIC - Powder Coating:** At the discretion of the Engineer, a sample of the TGIC - Polyester powder coated railing shall be laboratory tested for bonding of the powder coating to the metal. The test shall be the Cross Hatch test per ASTM D3359-09e2, method B. Failure to satisfactorily pass this test shall be a basis for rejection.

- E. **Touch-up & Repair:** For minor damage caused by installation or transportation and field welded metal powder coated surfaces, clean welds, bolted connections and abraded areas;

- 1. On damaged galvanized surfaces, apply organic zinc repair paint complying with ASTM A780. Galvanizing repair paint shall have 65 percent zinc by weight. Thickness of repair paint shall be not less than that required by ASTM A123.

2. On damaged powder coated surfaces, touch-up finish in conformance with manufacturer's recommendations. Provide touch-up such that repair is not visible from a distance of 6 (six) feet.
- F. NON-SHRINK GROUT: for anchoring railing supports, shall be two-part epoxy grout, compatible with caulking.
  - G. SEALANT: for caulking fillet at top of granite setting holes shall be "BASF MasterSeal NP2" two-part elastomeric polyurethane, or approved equivalent product as manufactured by Sika or Pecora or equivalent. Sealant color shall be selected by Landscape Architect from full range of colors available.

#### **6.18A-PR.3. SUBMITTALS.**

All submittals shall be as per NYC DOT Standard Highway Specifications, under Division 1 Contract Requirements, **Section 1.06.31**.

- A. Product Data: Provide product data for sealant, including description and material properties.
- B. Samples: For each diameter of pipe specified, submit one twelve (12") inch section of galvanized, powder coated pipe for approval, in the color specified. For sealant, provide samples in a range of colors available.
- C. Shop Drawings: The Contractor shall submit Shop Drawings in accordance with the requirements of the **Section 1.06.13** of NYC DOT Standard Highway Specifications. Submit overall and detailed plans, sections, and elevations as necessary to accurately and fully describe the required elements for each railing and handrail type furnished and each related application condition of the Project work. Include necessary coordination and preparation of composite drawing information together with installation trades contractors of different components, including granite fabrications and concrete foundations. Establish and verify locations of expansion joints, which shall be coordinated with concrete and granite shop drawings. Shop drawings to include complete details of railing construction, height, post spacing layout, infill layout, dimensions and footing coordination detail. All shop drawings for items under this section shall be submitted concurrently.
- D. Sample Fabrication: The contractor shall fabricate a sample section of combination steel railing and steel handrail incorporating at minimum of one post, a typical bend in rails and picket infill from horizontal to sloped condition, extending a minimum of 12" in horizontal condition, and a minimum of 12" in sloped condition. The fabrication shall be welded, galvanized, and finished in accordance with the drawings and specifications. The Contractor shall re-fabricate the sample as necessary to the satisfaction of the Engineer. The fabrication will form the minimum standard for railing and handrail fabrication.
- E. Railings and handrails shall be fabricated in strict accordance with the plans and shop drawings. All handrail, including extensions shall comply with Americans with Disabilities Act (ADA) provisions as described in ANSI A117.1-2009 (or most recent edition) and ADAA (most recent edition).
- F. Certification: Submit certification that the materials used comply with this specification.

#### **6.18A-PR.4. METHODS.**

Holes to receive railings shall be previously shop-drilled in granite copings, and any additional depth required per drawings shall be formed in concrete using foam form inserts under concrete work item. The holes to receive railing posts shall be 0.25" greater diameter than the posts. Field-drilling shall not be acceptable. Any granite units damaged in any way as a result of field drilling shall be replaced with whole new granite units, matching the required shapes and sizes, by the Contractor at his own cost and expense.



The railings shall be erected as detailed on drawings. Posts shall be plumb and railings shall be accurate to line and grade. After posts have been set in place and properly supported to hold them to line and grade, the annular space shall be filled to the depth shown on the plans with non-shrinking grout. The grout shall be poured to 3/8" below the surface of the holes. Where the top of the hole is sloped, the grout shall be poured to 3/8" below the lowest surface point. After the grout has hardened, the remaining space shall be neatly caulked with a water-shedding fillet of the specified sealant.

#### **6.18A-PR.5. MEASUREMENT.**

**STEEL PIPE HANDRAIL:** The quantity of steel handrails to be paid for under this item shall be the number lineal feet of handrails measured along the length of the top of the handrail, furnished and installed with cantilever supports, complete in accordance with the plans, specifications and directions of the Engineer.

**STEEL BAR PICKET RAILING:** The quantity of steel railings to be paid for under this item shall be the number lineal feet of railings measured along the length of the top railing, furnished and installed with support posts, irrespective of height or slope, complete in accordance with the plans, specifications and directions of the Engineer.

#### **6.18A-PR.6. PRICE TO COVER.**

The price bid shall be a unit price per LINEAR FOOT of STEEL PIPE HANDRAIL and STEEL BAR PICKET RAILING and shall include the cost of furnishing all labor, materials, equipment, insurance and incidental expenses necessary to complete the work, including powder coating and powder coating touch-up, all in accordance with the plans and specifications to the satisfaction of the Engineer.

Drilling of holes in granite to receive railings and handrails shall be included in the cost of the respective granite items. Formwork in concrete to receive railings shall be included in the cost of respective concrete items.

*Payment will be made under:*

Item No.	Item	Pay Unit
6.18 A - PR1	Steel Pipe Handrail	L.F.
6.18 A - PR	Steel Bar Picket Railing	L.F.

**SECTION 6.18 XPR**  
**Post Railing Removed**

**6.18XPR.1. INTENT.**

The intent of this Section is to remove post railing from the existing coping stones either adjacent to the stairs or on top of an existing retaining wall.

**6.18XPR.2. DESCRIPTION.**

Under this Section, the Contractor shall remove post railing as shown on the Contract Drawings, in accordance with the Specifications and directions of the Engineer.

**6.18XPR.3. METHODS.**

Post railings shall be cut from supports prior to removal of granite coping stone.

At locations of existing coping stones to remain, grind anchor bolts above base plates and carefully remove supports and base plates to avoid damage to granite. Grind remaining metal bolts to a minimum of 0.75" below surface of granite before patching. Remove grout, caulk, or adhesive residue with stiff steel brush.

All materials removed during the removal of the fence shall be disposed of away from the site by the Contractor.

**6.18XPR.4. MEASUREMENT.**

The quantity of Post Railing Removed to be measured for payment shall be the number of linear feet of post railing actually removed, to the satisfaction of the Engineer. Measurement shall be made in place along the centerline of the top rail, from center to center of end posts.

**6.18XPR.5. PRICE TO COVER.**

The price bid shall be a unit price per linear foot of Post Railing Removed and shall include the cost of all labor, material, equipment, and incidentals required to carefully remove existing Post Railing, in accordance with the Contract Drawings, the specifications and the directions of the Engineer. Removed post railing shall be disposed of away from the site, as directed.

*Payment will be made under:*

Item No.	Item	Pay Unit
6.18 XPR	Post Railing Removed	L.F.

**SECTION 6.27 A**  
**Demolition of Structures**

**6.27A.1. DESCRIPTION.**

This section describes the demolition of existing stone retaining walls, stone cheek walls landings, terraces etc.; the demolition of existing retaining walls; and the demolition of the existing retaining walls at the adjacent property.

**6.27A.2. MATERIALS AND METHODS.**

All work shall be done in accordance with the requirement of **Section 6.27** in the NYCDOT Standard Highway Specifications, with the following modifications:

**6.27A.3. MEASUREMENT.**

"DEMOLITION OF STRUCTURES", "DEMOLITION OF RETAINING WALLS" and "DEMOLITION OF MASONRY STRUCTURES": The quantity to be measured for payment shall be the number of CUBIC YARDS of material removed and disposed, measured in place, within the limits shown on the Contract Drawings and/or to the satisfaction of the Engineer.

**6.27A.4. PRICE TO COVER.**

"DEMOLITION OF STRUCTURES", "DEMOLITION OF RETAINING WALLS" and "DEMOLITION OF MASONRY STRUCTURES": The contract unit price bid per CUBIC YARD shall cover the cost of all labor, materials, plants, insurance, equipment, and all necessary incidentals required to execute the work in accordance with the Contract Drawings, the specifications, and direction of the Engineer.

In the event of deletion of parcels by the Engineer or if demolition of a parcel is performed by others, the bid will be adjusted in accordance with the approved breakdown required.

*Payment will be made under:*

Item No.	Item	Pay Unit
6.27 A	DEMOLITION OF STRUCTURES	C.Y.
6.27 AW	DEMOLITION OF RETAINING WALLS	C.Y.
6.27 M	DEMOLITION OF MASONRY STRUCTURES	C.Y.

**SECTION 6.34 A**  
**Temporary Chain Link Fence and Gate, 8'-0" High**

**6.34A.1. DESCRIPTION.**

Under this section, the Contractor shall furnish, erect, maintain, and remove, when directed, Temporary Chain Link Fence and Gate as shown on the Contract Drawings and directed by the Engineer.

**6.34A.2. MATERIALS AND METHODS.**

All materials and methods shall be as specified in **Section 6.34** of the NYCDOT Standard Highway Specifications, with the following modifications and additions:

Temporary Chain Link Fence to be furnished under Item 6.34 ADT, shall consist of chain link fence fabric, top and bottom tension wires or rails, gates and posts, and all necessary incidental in accordance with the Contract Drawings and the directions of the Engineer.

Any fence and gate not set plumb and true to line and grade shall be removed and replaced at the Contractor's expense. The Contractor shall maintain the fence with gates, during the life of the contract and shall repair/replace all members that are disturbed, damaged or destroyed. Gates shall be equipped with locks and 3 sets of keys which shall be given to the Engineer.

When directed by the Engineer, the Contractor shall remove and dispose of the temporary chain link fence and gates to the satisfaction of the Engineer.

**6.34A.3. MEASUREMENT AND PAYMENT.**

The quantities of TEMPORARY CHAIN LINK FENCE, 8'-0" HIGH, to be measured for payment shall be the number of LINEAR FEET of temporary chain link fence and gates satisfactorily installed, complete, measured in place, from center to center of end posts and removed as directed by the Engineer.

Payment will be made for TEMPORARY CHAIN LINK FENCE, 8'-0" HIGH only for the initial installation at any location. Whenever they are moved to a new location, as required by the Contract Drawings or as directed by the Engineer, payment will be made in the same manner as if it were an initial installation. Minor movement or rearrangement of the temporary chain link fence with gates within a work area will not be considered as a movement to a new location and will not entitle the Contractor to additional payment.

No payment will be made: for movements of temporary chain link fence and gates made for the Contractor's convenience; for movement of temporary chain link fence and gates at a given location at the end of a work period and subsequent replacement at the same location at the beginning of the next work period; for movement of temporary chain link fence and gates at a given location during a work period and subsequent replacement at the same location during the same work period; or for the interchanging of temporary chain link fence and gate between initial installations.

**6.34A.4. PRICE TO COVER.**

The price bid for TEMPORARY CHAIN LINK FENCE, 8'-0" HIGH, shall be a unit price per LINEAR FOOT and shall cover the cost of all labor, materials, plant, equipment, insurance, and necessary incidentals required to furnish, install, maintain, and remove temporary chain link fence with gates; all in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

*Payment will be made under:*

Item No.	Item
6.34 ADT	TEMPORARY CHAIN LINK FENCE, 8'-0" HIGH

Pay Unit  
L.F.

**SECTION 6.79 A**  
**Ductile Iron Pipe Connection**

**6.79A.1. INTENT.**

This section describes the construction of ductile iron pipe connections between basins, inlets, sewers or manholes, and dry wells.

**6.79A.2. DESCRIPTION.**

- A. Ductile iron pipe connections shall be constructed with internally locked "Push-on" joints not requiring thrust blocks or tie rods, and laid on a compacted layer of Broken Stone, or encased in concrete where specified.
- B. Pipes shall be of the nominal inside diameter shown or specified.
- C. Dimensions of concrete encasement shall be as shown on the Contract Drawings.

**6.79A.3. MATERIALS.**

- A. Ductile Iron Pipe shall be of the various sizes specified, shall be epoxy lined and in compliance with the requirements of the NYC Department of Environmental Protection, Standard Sewer and Water Main Specifications dated July 1, 2014, Section 21.06.
- B. Broken Stone shall be hard, roughly cubical in shape, un-weathered stone uniformly graded from 1/4" to 3/4" in diameter, and shall conform to commercial 1/4" to 3/4" stone.
- C. Joints: All joints for Ductile Iron Pipe shall be "Push-On" joint types, meeting the requirements of ANSI Specification A21.11, latest revision. The joints shall be internally locked, not requiring thrust blocks or tie rods, and shall be made in accordance with manufacturer's instructions for assembling the type of joint furnished. For each bell, there shall be furnished a rubber gasket.
  - 1. Products and Manufacturers:
    - i. Tyton Joint of U.S. Pipe and Foundry Company, Birmingham, AL, 35244, (267) 446-3939, [www.uspipe.com](http://www.uspipe.com).
    - ii. Fastite Joint of the American Cast Iron Company, Birmingham, AL, (205) 325-7701, [www.american-usa.com](http://www.american-usa.com).
    - iii. Other joint as may be approved as equal by the Engineer
- D. Concrete shall comply with the requirements of Section 3.05 of NYCDOT Highway Specifications.; Class B-32; Type IIA Portland cement; Type 1A sand, and Type 1, Grade B, or Type 2, Size No. 57 coarse aggregate.
- E. Mortar for joints shall comply with the requirements of Section 3.07 of NYCDOT Highway Specifications, Type 1, Mortar, except that the proportions shall be one (1) part of cement to one and one-half (1-1/2) parts of sand and that the ingredients may be mixed by hand.
- F. Site Drains shall be one of the following products:
  - 1. Heavy Duty Traffic Floor Drain, Model No. 2470-C-T-Y as manufactured by Jay R. Smith MGF. Co., Montgomery, Alabama;
  - 2. Area Drain with Heavy Duty Tractor Grate, Model No. F1480T, as manufactured by MIFAB, Inc., Chicago, Illinois;
  - 3. Heavy Duty Roadway and Deck Drain, Model No. R-4016-C, as manufactured by Neenah Foundry Co., Neenah, Wisconsin;
  - 4. Other site drain as may be approved as equal by the Engineer

**6.79A.4. METHODS.****A. Excavation**

1. Excavation for construction of pipe connections, on a nine (9) inch thick broken stone base, or encased in concrete where specified, shall be made to the widths and depths required in accordance with the Standard Sewers Specifications of the NYC Department of Environmental Protection. No pipe, broken stone, or concrete for pipe encasement shall be laid or placed until the subgrade of the trench has been tested and found correct.

**B. Bedding**

1. Unless otherwise directed, the Ductile Iron Pipe Connection shall be laid on a nine (9) inch thick compacted layer of Broken Stone. The nine (9) inch thick layer of Broken Stone shall be placed on the subgrade of the trench for its full width. The subgrade must be prepared to the proper grade so that the ductile iron pipe may be placed on the broken stone base accurately to line and grade in agreement with the Contract Drawings, specifications and as directed by the Engineer. Broken Stone shall also be placed around the pipe to a depth of one-half (1/2) the outer diameter of the pipe and for the full width of the trench. The rest of the trench shall be backfilled and compacted as specified and directed by the Engineer.

**C. Laying**

1. The pipe shall be laid with male ends toward the outlet. All pipes shall be laid true to line and grade, tightly fitted together and matched so that when laid in the work they will form a drain with a smooth and uniform invert. Unless a shorter length of pipe is required or otherwise permitted, not less than twenty-four (24) feet of piping shall be laid in one operation and the trench for each basin connection shall be fully excavated for its entire length before any pipes are laid therein.
2. During the progress of the work, the interior of the connections shall be cleared of all foreign matter and the exposed ends of pipe shall be provided with approved temporary covers fitted to the pipe so as to exclude such materials. Unconnected dead ends of pipe shall be closed with approved tile or precast concrete plugs or with hand tightening (wing nut type) expandable plugs as manufactured by O.R.H.A. Industries or Jones Manufacturing Co., or approved equal, so as to provide a watertight seal. The threads are to be greased prior to tightening to ensure a proper seal without stripping.

D. Joints: Install "Push-On" joints in accordance with manufacturer's instructions.

E. Wyes and Tees: Provide ductile iron pipe Wye or Tee connections as required by the field conditions and as directed by the Engineer.

F. Maintenance During Installation: Clear interior of installed piping and structures of dirt and other superfluous material as work progresses. Maintain swab or drag in piping and pull past each joint as it is completed. Place plug in ends of uncompleted pipe at end of each day or when work stops.

G. Testing: After installing drainage course on top of piping, test drain piping with water to ensure free flow before backfilling. Remove obstructions, replace damaged components, and repeat test until results are satisfactory and approved by the Engineer.

H. Damaged Pipe: Remove and replace damaged pipe, whether in or out of the trench, at no cost to the City.

**I. Field Cutting**

1. Ductile iron pipe shall be cut only by means of abrasive saws, hacksaws, wheel type cutters, milling type cutters or as approved by the Engineer. The use of "squeeze" type

pipe cutters and cutting torches will not be permitted. The use of diamond points and dog chisels will not be permitted.

2. Wherever pipe is field cut, the entire outside of the cut end shall be beveled about one-quarter (1/4) inch at an angle of approximately thirty (30) degrees all around the pipe, with a coarse file or a portable grinder.

**J. Fitting Into Reinforced Concrete Structures**

1. Pipe connections shall not enter reinforced concrete structures less than twelve (12) inches from the top or bottom of the structure.
2. The ends of pipes which enter the reinforced concrete structure shall be neatly cut to fit the inner face of the structure. When directed, such cutting shall be done before the pipes are built in.

**K. Backfilling**

1. Immediately after the Engineer has inspected and approved the pipe laid, the trench shall be backfilled.

**6.79A.5. MEASUREMENT.**

The quantity of Ductile Iron Pipe Connection to be measured for payment shall be the number of lineal feet of pipe of each size, furnished and incorporated in the work, complete, measured in place along its axis between the inner faces of the structures or pipe connected.

**6.79A.6. PRICE TO COVER.**

The contract price per linear foot for the indicated size of Ductile Iron Pipe Connection shall cover the cost of all labor, materials, equipment, insurance, and incidentals required to furnish and incorporate in the work, complete, in place, all ductile iron pipe required including, but not limited to, excavation of all materials of whatever nature encountered, including ledge rock (except where there is a separate contract price for Rock Excavation), furnishing and placing broken stone base, joint materials, special pipes where required, inlets, cleanouts, bulkheads, temporary cover, trimming, fitting and building the pipe into concrete or masonry, connections to sewers, sheeting, bracing, backfilling, and all other items necessary to complete this work and perform all work incidental thereto, in accordance with the Contract Drawings and specifications, and as directed by the Engineer.

*Payment will be made under:*

Item No.	Item	Pay Unit
6.79 AA	6" DUCTILE IRON PIPE CONNECTION	L.F.



**SECTION 7.50 CB2**  
**City Bench (Version 2)**

**7.50CB2.1. INTENT.**

This section describes the furnishing and installation of a City Bench (version 2.0). This specification includes the backed and backless bench types.

**7.50CB2.2. DESCRIPTION.**

Under these items, the Contractor shall furnish and install each bench in accordance with the Contract Drawings, the specifications and directions of the Engineer.

**7.50CB2.3. MATERIALS.****A. Bench shall be manufactured by:**

Landscape Forms, Inc., 431 Lawndale Avenue, Kalamazoo, Michigan 49048.  
 Toll Free: (800) 521-2546. Phone (269) 381-0396. Fax (269) 381-3455.  
 Website: www.landscapeforms.com.

**B. Bench Distributors:**

- |  |  |
|--|--|
| 1. Landscape Forms, Inc.,<br>431 Lawndale Avenue,<br>Kalamazoo, Michigan 49048.<br>Phone (269) 381-0396. | 3. AFD Contract Furniture Inc.,<br>810 7th Avenue,<br>New York NY, 10019<br>(212) 721-7100 |
| 2. Arenson Furniture Rental,<br>1115 Broadway,<br>New York, 10010<br>(212) 633-2400                      | 4. Empire Office Inc.,<br>105 Madison Ave. #15,<br>New York, NY 10016<br>(212) 607-5566    |
|  | 5. or other approved supplier.   |

**C. STYLE:****BACKED BENCH**

Chelsea Bench "QASF0886-005"

- Length: 89-1/4 inches
- Seat Height: 18 inches
- Seat Depth: 19 inches
- Seat Width: 22 inches
- Seat Radius: 79 inches
- Arm Height: 24-7/8 inches
- Back Radius: 70 inches
- Back Angle: 9-1/2 degrees
- Seat Included Angle: 98-1/2 degrees
- Height: 34 inches

**BACKLESS BENCH**

Chelsea Bench "QASF0886-006"

- Length: 89-1/4 inches
- Seat Height: 17-3/4 inches
- Seat Depth: 22-5/8 inches
- Seat Width: 22-5/8 inches
- Seat Radius: 79 inches
- Arm Height: 24-7/8 inches

**7.50CB2.4. METHODS.**

- A. DELIVERY, STORAGE, AND HANDLING.** Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer. All material shall be bundled and fully supported during shipping and storage to prevent creep.

Material manufacturer's directions for storage and use shall be adhered to. Material surfaces shall be protected during shipment so as to arrive mar and scratch free in the field.

Keep materials in manufacturer's original, unopened containers and packaging until installation. Any damage or excessively scratched will be rejected and replaced with new at no additional cost to the City. All material must be straight and true when placed in the construction. Store any and all tooling, fixtures, process drawings and project files until last project phase is complete. Deliver all tooling, fixtures and documentation to the Engineer upon completion of the work.

- B. **INSTALLATION.** Benches shall be uniquely fabricated and pre-assembled before being installed in their final location in the work. Benches shall be installed in their final position and properly secured in place, as indicated on the Contract Drawings. Protect installed product to ensure that, except for normal weathering, benches will be without damage or deterioration at time of Substantial Completion.

**Note:** Do not drag bench across concrete or other rough surfaces. This could damage the powder coat on the bottom of the base plate.

- C. **TOUCHUP AND REPAIR:** For all clean welds, bolted connections, and minor damage caused by transportation and installation of metal powder coated surface, the touch-up finish shall be in conformance with manufacturer's recommendations. Provide touch-up such that the repair is not visible from a distance of six feet (6'). The touch up color shall match the color of the powder coat.
- D. **FOUNDATION.** If directed by the Engineer due to the condition of the sidewalk or where drilling will crack distinctive pavements, two unreinforced concrete footings, 12" x 12" in plan and 18" deep shall be provided. Concrete shall be Class B-32 per Section 3.05. Foundation shall be centered under the bench leg base. Where footings are required, the openings for the footings are to be sawcut and the joints are to be finished per **Section 4.13.4.(F), EXPANSION JOINTS.**
- E. **ANCHORING.** Benches shall be anchored using sleeve anchors. Sleeve anchors shall be zinc-plated, 1/2" diameter, 2-1/2" length. An additional 3/4" zinc-plated flat washer shall be used under the 1/2" zinc-plated washer that comes with the sleeve anchor.

Anchoring Details are as follows:

1. Holes shall be drilled using a full-size template, not by drilling through the bench. Place template in desired position, and drill anchor holes in the desired locations. Hole depth shall be at least 2-1/2" to allow for full engagement of sleeve anchors.
2. Remove template and clean the holes per the anchor manufacturer's requirements.
3. Place bench in desired position and install anchors. Tighten as recommended by anchor manufacturer. After anchors are properly tightened, mar the threads with a center punch in two places on each anchor to prevent removal of the nuts.

#### **7.50CB2.5. SUBMITTALS.**

All submittals shall be as per Section 1.06.13 of the NYC Department of Transportation's Standard Highway Specifications, and in accordance with the following requirements:

- A. **WARRANTY:** The manufacturer guarantees a standard warranty that the products will be free from defects in material and/or workmanship for a period of three years from the date of invoice.

**7.50CB2.6. MEASUREMENT.**

The quantity of CityBench (version 2.0) to be paid for under this item shall be the number of City Bench(es) of each type installed at the site to the satisfaction of the Engineer.

**7.50CB2.7. PRICE TO COVER.**

The unit price bid for EACH type CityBench (version 2.0) shall include the cost of furnishing all labor, materials, equipment, insurance, and incidentals necessary to furnish, assemble and install benches including, but not limited to, bench arm rests and hardware; all in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

The unit price bid for this item shall also include the cost of concrete footings, sawcutting, sleeve anchors with nuts and washers, touch-up and repair.

*Payment will be made under:*

Item No.	Item	Pay Unit
7.50 CB2	CITYBENCH WITH BACK (V 2)	EACH
7.50 CBB2	CITYBENCH BACKLESS (V 2)	EACH

## **SECTION 8.22 EMW**

### **Elastomeric Waterproofing**

#### **8.22EMW.1. INTENT.**

Under this section, the Contractor shall furnish and apply Fluid Applied waterproofing for concrete substrates, in accordance to the Contract Drawings, the specifications, and the direction of the Engineer.

#### **8.22EMW.2. DESCRIPTION.**

Fluid-applied waterproofing rapidly cures to form a seamless, abrasion resistant, and chemical resistant waterproof liner for concrete substratum.

#### **8.22EMW.3. MATERIALS.**

##### **A. Fluid-Applied Waterproofing**

Two-component, high solids, elastomeric asphalt modified urethane. Designed for spray, squeegee, or roller application.

1. Fluid-Applied Waterproofing shall comply with the following:
  - a. Elastomeric Waterproofing, ASTM C836 and C957: Exceeds all criteria.
  - b. Solids by volume: 88 percent.
  - c. Volatile Organic Compounds (VOC): 0.76 pounds per gallon (92 g/L).
  - d. Mullen Burst Strength, ASTM D751, 50 mils in CIM Scrim: 150 pounds per square inch.
  - e. Tear Strength, ASTM D624, Die C: 150 pounds per inch.
  - f. Tensile Strength, ASTM D412, 100-mil sheet: 900 pounds per square inch.
  - g. Extension to Break, ASTM D412: 400 percent.
  - h. Recovery from 100 Percent Extension:
    - i. After 5-minutes: 98 percent.
    - ii. After 24-hours: 100 percent.
  - i. Coating Performance, Crack Bridging:
    - i. 10 Cycles at minus 15 degrees F (minus 26 degrees C): Greater than 1/8 inch.
    - ii. After Heat Aging: Greater than 1/4-inch.
  - j. Coating Performance, Weathering, ASTM D822: 5000 hours: no cracking.
  - k. Softening Point, ASTM D36: Greater than 325 degrees F (160 degrees C).
  - l. Deflection Temperature, ASTM D648: below minus 60 degrees (minus 50 degrees C).
  - m. Service Temperature: minus 60 degrees F to 220 degrees F (minus 50 degrees C to 105 degrees C).
  - n. Hardness, ASTM D2240, Shore A, 77 degrees F (25 degrees C): 60.
  - o. Permeability to Water Vapor, ASTM E96, Method E, 100 degrees F (38 degrees C), 100-mil sheet: 0.03 perms.
  - p. Abrasion Resistance, Weight Loss, ASTM D4060: 1.2 mg.

- q. Adhesion to Concrete, Dry, Elcometer: 350 pounds per square inch.
- r. Color: Black.
- 2. Fluid Applied Waterproofing (outlined above), Primer, Bonding Agent, Patching Material, and Reinforcing fabric (as described below) to be single source supplied by one of the following:
  - a. C.I.M. Industries Inc.  
23 Elm Street; Perterborough, NH 03459  
Telephone: 603-924-9u181  
Product: C.I.M. 1000
  - b. Tnemec Company, Inc  
6800 Corporate Drive, Kansas City, MO 64120-1372  
Telephone: 800-535-5053  
Product Elasto-Shield Black Series 264
  - c. Bridge Preservation, L.L.C.  
686 South Adams Street, Kansas City, MO 66105  
Telephone: 913-912-3305  
Product: BP-001
  - d. Approved equal.

**B. Primer**

Two-component, high solids, epoxy primer. Use as a primer coat on dry, porous substrates such as concrete.

- 1. Primer shall comply with the following:
  - a. Solids by Volume: 80 percent mixed.
  - b. Volatile Organic Compounds (VOC): 6.4 pounds per gallon (743 g/L).

**C. Bonding Agent**

Organosilane compound dispersed in isopropyl alcohol. Ensures a continuous and uniform bond between surfaces. Use the bonding agent over non-porous surfaces such as steel, except where primer has been installed. Do not use where solvent cleaners are prohibited.

- 1. Bonding agent shall comply with the following:
  - a. Solids by Volume: Less than 1 percent.
  - b. Volatile Organic Compounds (VOC): 6.4 pounds per gallon (743 g/L).

**D. Patching Material**

Liquid applied, chemical and corrosion resistant urethane elastomer, chemically thickened to allow trowel application with minimum sag. Use as a crack filler and for application to vertical surfaces and cold joints.

- 1. Patching Material shall comply with the following:
  - a. Elastomeric Waterproofing, ASTM C836 and C957: Exceeds all criteria.
  - b. Solids by volume: 89 percent.
  - c. Volatile Organic Compounds (VOC): 0.74 pounds per gallon (88 g/L).
  - d. Mullen Burst Strength, ASTM D751, 50 mils in CIM Scrim: 150 pounds per square inch.
  - e. Tear Strength, ASTM624, Die C: 150 pounds per inch.

- f. Tensile Strength, ASTM D412, 100-mil sheet: 800 pounds per square inch.
- g. Extension to Break, ASTM D412: 300 percent.
- h. Recovery from 100 Percent Extension:
  - i. After 5-minutes: 98 percent.
  - ii. After 24-hours: 100 percent.
- i. Coating Performance, Crack Bridging:
  - i. 10 Cycles at minus 15 degrees F (minus 26 degrees C): Greater than 1/8-inch.
- j. After Heat Aging: Greater than 1/4-inch.
- k. Coating Performance, Weathering, ASTM D 822: 5000 hours: no cracking.
- l. Softening Point, ASTM D36: Greater than 325 degrees F (160 degrees C).
- m. Deflection Temperature, ASTM D648: below minus 60 degrees (minus 50 degrees C).
- n. Service Temperature: minus 60 degrees F to 220 degrees F (minus 50 degrees C to 105 degrees C).
- o. Hardness, ASTM D2240, Shore A, 77 degrees F (25 degrees C): 60.
- p. Permeability to Water Vapor, ASTM E96, Method E, 100 degrees F (38 degrees C), 100-mil sheet: 0.03 perms.
- q. Abrasion Resistance, Weight Loss, ASTM D4060: 1.2 mg.
- r. Adhesion to Concrete, Dry, Elcometer: 350 pounds per square inch.
- s. Color: Black.

#### E. Reinforcing Fabric And Joint Cover Sheet

Stitch bonded polyester. Compatible with coating materials.

1. Reinforcing Fabric and Joint Cover Sheet shall comply with the following:
  - a. Weight: 3 ounces per square yard (100 g/m<sup>2</sup>).
  - b. Tensile Strength, ASTM D1682: 57.1 pounds (30 kg).
  - c. Elongation, ASTM D1682: 61.65 percent.
  - d. Mullen Burst Strength, ASTM D3726: 176.8 pounds per square inch (1,215 kPa).
  - e. Trapezoid Tear Strength, ASTM D1117: 16.1 pounds (7.2 kg).

#### F. Broadcast Aggregate

Broadcast Aggregate shall be Sand, type 14, in accordance with Section 2.21 of the NYCDOT Standard Highway Specifications. For proper adherence sand must be kiln dried.

### 8.22EMW.4. METHODS.

Inspect substrate and adjacent areas where fluid-applied waterproofing will be applied. Notify the Engineer of conditions that would adversely affect the application or subsequent utilization of the fluid-applied waterproofing. Do not proceed with application until unsatisfactory conditions are corrected. Protect adjacent work and surrounding areas from contact with fluid-applied waterproofing.

A. Environmental Requirements

1. Do not apply in wet weather or when rain is imminent.
2. Apply when the surface is a minimum 50 degrees F (10 degrees C) and a minimum of 5 degrees F (3 degrees C) above dew point. Consult manufacturer for application instructions if the ambient or surface temperature is below 50 degrees F (10 degrees F).
3. Do not apply to porous substrates when substrate or ambient temperatures are rising.
4. Do not apply to porous substrates when substrate is in direct sunlight.
5. Do not apply over substrates that are frozen or contain frost.

B. Surface Preparation

1. Prepare surface in accordance with manufacturer's instructions.
2. Provide clean, dry, and structurally sound concrete surface or apply cementitious coating over masonry and stone to provide a smooth surface.
3. Existing Concrete: Remove existing coating. Patch existing coating as approved by the Engineer. Abrade the existing coating and apply sample patch to test for suitability and adhesion.
4. Condition Survey: Perform a condition survey of existing concrete in accordance with ACI 201.1R.
5. Abrasive Blasting:
  - a. Prepare concrete surface to receive fluid-applied waterproofing by abrasive blasting.
  - b. Remove dirt, soil, grease, oil, paint, coatings, form release agents, curing compounds, laitance, loose material, unsound concrete, and other foreign materials that would inhibit performance of fluid-applied waterproofing in accordance with ASTM D4258 and by abrasive blasting.
  - c. Obtain a firm, sound concrete surface in which bug holes are fully opened or repaired.
  - d. Remove sharp concrete edges and projections.
  - e. Perform abrasive blasting in accordance with ASTM D4259-88.
  - f. Receive approval by Engineer of blasting media.
  - g. Maintain air supply for abrasive blasting free of oil and water in accordance with ASTM D4285.
  - h. Expose aggregate to obtain a profile of International Concrete Repair Institute (ICRI) Concrete Surface Profile 4 to 6 in accordance with ICRI 03732.
6. Repair concrete surface to be free of holes. Fully open bug holes before repair. Repair defects in the concrete surface, such as bug holes, air pockets, and honeycomb by filling and smoothing off with patching material, epoxy patching compound, or grout. Abrasive blast repaired surfaces.
7. Ensure substrate is clean and dry in accordance with manufacturer's instructions. Remove surface laitance from concrete surface to expose aggregate to obtain a profile of International Concrete Repair Institute (ICRI) Concrete Surface Profile 4 to 6 in accordance with ICRI 03732.
8. Repair cracks in concrete surface with material suitable for type and width of crack, compatible with substrate and fluid-applied waterproofing, and approved by the Engineer.

9. Moisture Tests: Do not apply primer or fluid-applied waterproofing to concrete surface unless two or more of the flowing moisture tests confirm appropriate moisture levels for properly prepared substrates:
  - a. Plastic Sheet Method (ASTM D4263): Pass/Fail.
  - b. Relative Humidity Test: Less than 75 percent relative humidity at 70 degrees F.
  - c. Calcium Chloride Test Less than 5 pounds per 1,000 square feet per 24 hours.
  - d. Radio Frequency Test: Less than 5 percent moisture.

### C. Application

Keep material containers tightly closed until ready for use. Keep equipment, air supplies, and application surfaces dry. Do not use adulterants, thinners, or cutback solutions. Blend and mix 2-component materials in accordance with manufacturer's instructions. Do not hand mix components. Maintain air supply for material spray application free of oil and water in accordance with ASTM D4285. Apply fluid-applied waterproofing in accordance with manufacturer's instructions. Contractor to be aware of recoating window of materials.

1. Apply primer to concrete surface a minimum of 10-mils wet thickness. A uniform coating free of holidays or pinholes is necessary to minimize out gassing effects curing the application of the fluid-applied waterproofing to porous surfaces such as concrete. Surfaces may require additional coats to obtain a pinhole free finish.
2. Allow primer to cure in accordance with manufacturer's instructions before topcoating with the fluid-applied waterproofing.
3. Apply sufficient fluid-applied waterproofing to achieve 60 mils wet film thickness.
4. Apply reinforcing fabric on to the tacky 60 mil layer of fluid-applied water proofing.
5. Recoat the fluid-applied waterproofing system within the recoat window to obtain maximum interlayer adhesion to build specific thickness by apply a second 60 mils layer of fluid-applied waterproofing directly to the clean and dry reinforcing fabric.
6. While within the recoat window, apply a 10 mil topcoat to accept broadcasted aggregate until refusal.
7. Apply a 6 to 12-inch wide strip of reinforcing fabric over cracks over 1/8-inch wide, nonworking joints, and edges. Adhere reinforcing fabric over all joints by applying a tack coat of the fluid-applied waterproofing.
8. Joint Lines:
  - a. Prepare for joint lines should rain or other conditions require work stoppage or extended delay.
  - b. Install joint lines clean and straight. Install overlap 6-inches minimum to ensure an impervious joint.
  - c. Severely abrade with wire brush, cup grinder, or sandpaper. Wipe the area with Xylene to ensure the surface is clean. Apply a light mist coat bonding agent to all areas where the fluid-applied waterproofing has cured beyond its recoat window. Once Bonding Agent flashes off, apply fluid applied waterproofing
9. Recoating:
  - a. Recoat the fluid-applied waterproofing system within the recoat window to obtain maximum interlayer adhesion to build specific thickness.
  - b. Immersion Service: Minimize areas to be recoated outside the recoat window, except at joint lines.



- c. Non-Immersion Service: Severely abrade with wire brush or surface grinder. Apply bonding agent, and recoat, if fluid-applied waterproofing has cured more than the recoat window. Acceptable adhesion can only be achieved through aggressive abrading.

**D. Curing**

1. Cure fluid-applied waterproofing in accordance with manufacturer's instructions.
2. Curing Time:
  - a. Allow sufficient time for solvents to evaporate from the cured fluid-applied waterproofing before placing into service.
  - b. Allow minimum solvent release time of 24-hours to 48-hours at 60 degrees F (15 degrees C) for a 60-wet mil coating thickness.
3. Receive approval of cured coating by Engineer.

**8.22EMW.5. SUBMITTALS.**

The following submittals shall be submitted in accordance to the conditions of the Contract Drawings and specifications.

- A. Product Data: Submit manufacturer's product data, including surface preparation, application, and curing for the Engineer's review.
- B. Samples: Submit 3-inch by 1 -inch samples for approval by the Engineer.
  1. Cured fluid-applied waterproofing assembly including reinforcing fabric, at 130 mils thick.
  2. Reinforcing fabric.
- C. Qualifications Data for Qualified Installer:
  1. Use applicator experienced in the application of the specified fluid-applied waterproofing for a minimum of 2-years on projects of similar size and complexity. Provide a list of minimum 3 completed projects including project name and location, name of engineer, name of coating manufacturer, and approximate quantity of coating applied.
- D. Warranty: Provide a 20-year material warranty. Obtain material warranty from manufacturer.

**8.22EMW.6. MAINTENANCE.**

The Contractor shall maintain all excavated building walls in accordance with the provision of Section 5.05 of the NYCDOT Standard Highway Specifications to the satisfaction of the Engineer. The Contractor shall take extra care in monitoring and protecting the building walls while uncovered as to not expose them to heavy rains or water infiltration

The Contractor shall replace, according to the original specification, any defective fluid applied waterproofing, prior to the expiration date of the guarantee period.

**8.22EMW.7. MEASUREMENT.**

The quantity of Elastomeric Waterproofing to be measured for payment shall be the number of square of feet of wall surface areas covered with Fluid Applied Waterproofing as shown on the Contract Drawings, specified or directed, and measured in place in the final position. No addition measurement will be taken for overlaps in the Fluid-Applied Waterproofing.

**8.22P.8. PRICE TO COVER.**

The contract price bid for Elastomeric Waterproofing shall be a unit price per square foot and shall cover the cost of furnishing all labor, materials, submittals as listed, plant, equipment, insurance, and

incidentals required to prepare surfaces and field apply and cure the Fluid-Applied Waterproofing in full compliance with the Contract Drawings, the specifications and the directions of the Engineer.

*Payment will be made under:*

Item No.	Item	Pay Unit
8.22 EMW	Elastomeric Waterproofing	S.F.

**SECTION 8.53 WFR**  
**Retaining Wall Flag Repair**

**8.53WFR.1. INTENT.**

This work shall consist of the repair of all flagged conditions (Safety and Structural) of the existing retaining wall and roadway as deemed necessary by the Engineer during the life of the contract.

Any damage to the existing retaining wall caused by the Contractor's negligence or any construction work performed on the wall by the Contractor, without the written approval of the Engineer, shall be repaired to the satisfaction of the Engineer at the sole expense of the Contractor. This item shall not relieve the Contractor of his requirements specified in **Section 10.20** and **Section 10.23** of the NYCDEP Standard Sewer and Water Main Specifications.

**8.53WFR.2. DESCRIPTION.**

A flagged condition is defined to be a deficient condition in a retaining wall or roadway identified during construction as requiring extra work to facilitate maintenance and protection of both vehicular and pedestrian traffic.

Flagged repairs may include, but are not be limited to:

- a) shifted or collapsed sections of wall;
- b) City-owned utility repairs; and,

Such extra City work shall be paid for under this item in accordance with the requirements of Article 26 in the Standard Construction Contract dated March 2017.

**8.53WFR.3. METHODS.**

The method for the repair of existing retaining walls shall be as directed by the Engineer.

All work shall be performed in accordance with the applicable section of the NYCDOT Standard Highway Specifications.

**8.53WFR.4. MEASUREMENT.**

The contract price for this item shall be a Fixed Sum of the amount as shown against this item in the Bid Schedule. The Bidder shall not alter this pre-entered amount. Should the amount shown be altered, the altered figures will be discarded and the pre entered price and amount will be used to determine the total amount bid for this contract.

No guarantee is given that this fixed price item will in fact be required in this contract. The estimated price for this item in the Bid Schedule is included in the total bid solely to insure a method of payment for this work.

**8.53WFR.5. PRICES TO COVER.**

Payment made under this Item shall be equal to the sum total of all vouchers submitted by the Contractor as payment for the cost of performing retaining wall flag repairs per as approved by the Engineer. Payments shall be in accordance with Article 26 of the Standard Construction Contract dated March 2017. Payment under this item, including partial payments, will not be made until the Contractor has furnished satisfactory evidence to the Engineer that the Contractor has performed the required retaining wall flag repairs.

The voucher for the payment shall be submitted to the Engineer on a monthly basis.

The "fixed sum" in the Bid Schedule is for bidding purposes only and shall not be varied in the bid; however, the Contractor will be paid only for the actual repair of existing retaining walls performed regardless of the fixed sum, which may be more or less than the fixed amount.

*Payment will be made under:*

Item No.	Item
8.53 WFR	Retaining Wall Flag Repair

Pay Unit
Fixed Sum

**SECTION 9.71 WBB**  
**Vibration Monitoring of Existing Buildings**

**9.71WBB.1. INTENT.**

The intent of this Section is to continuously monitor vibrations induced by construction activities for the existing step street reconstruction until the work is complete and submit the readings with a summary report.

**9.71WBB.2. DESCRIPTION.**

This work shall consist of performing vibration monitoring of background and construction activities, provide continuous email-notification of the readings to the Engineer (24-hours/7-days per week) and prepare daily and summary report(s) of vibration readings.

**9.71WBB.3. MATERIALS.**

Provide a 3-component seismograph, capable of measuring particle velocity data in three mutually perpendicular directions. Annual factory calibration is required throughout the duration of the work.

**9.71WBB.4. MONITORING CRITERIA.**

ANOMALY	PEAK PARTICLE VELOCITY
PEAK CRITERIA	0.5 INCHES PER SECOND

**9.71WBB.5. METHODS.**

The Contractor shall provide, as a minimum, a written vibration Monitoring Plan which shall include, but not limited to, the following items:

1. The name of the vibration monitoring specialist(s).
2. The scheduled start date and length of construction operations which require vibration monitoring.
3. The limits of vibration monitoring work for the proposed construction activities.
4. The location of any underground utilities in proximity to the construction operation.
5. Submit proof and details, as references, of two projects in the past five years where the vibration monitoring consultant performing the work has satisfactorily monitored construction operations by recording maximum peak particle velocities (PPVs). Include contact information for each reference.
6. Submit information on the required 3-component seismograph, capable of measuring particle velocity data in the three mutually perpendicular directions, including: the manufacturer's name, model number, and documentation of factory calibration performed within the last 12 months.
7. The location of monitoring points along the Step Street and at the adjacent buildings to be monitored and maximum allowable PPVs as indicated in the contract documents. If not otherwise specified, a maximum allowable PPV in accordance with the United States Bureau of Mines (USBM) Vibration Criteria shall be observed at locations along the existing wall.
8. The location of seismograph(s) placements shall be as directed by the Contractor's Professional Engineer, registered in the State of New York, and shall be of sufficient number to adequately monitor the construction-induced vibrations.

9. The location plan of seismograph(s) placements shall be submitted to the Engineer and Con Edison for review and approval.

10. Appropriate details for anchoring the geophone(s).

The vibration monitoring system shall inform the Engineer and the Contractor by email-notification immediately each time the measured particle velocities exceed 85% of the allowable peak particle velocity. The Contractor shall make equipment or procedural modifications as required to avoid exceeding the allowable vibration intensity.

If the measured velocities exceed the maximum allowable PPVs, the Contractor shall stop operations immediately and revise procedures to reduce vibrations to allowable levels.

If the seismographs show any indication of damage or vandalism, the seismographs shall be immediately recalibrated or replaced.

The Contractor shall be in communication with his monitoring firm's personnel during vibration monitoring at all locations to verify the data recorded.

The Contractor shall provide the Engineer with the results of the continuous vibration monitoring, one work day after the readings are taken. Upon completion of the construction operations for those locations requiring monitoring, the daily submittals shall be synthesized into a final report.

#### **9.71WBB.6. MEASUREMENT.**

The vibration monitoring work shall be measured on a lump sum basis.

#### **9.71WBB.7. PRICE TO COVER.**

The contract price bid for vibration monitoring of existing wall shall be a Lump Sum Price and shall include the cost of furnishing all labor, materials, equipment, insurance, and incidentals necessary to continuously monitor vibrations and prepare and submit required reports with all other work incidental thereto all in accordance with the specifications and as directed by the Engineer.

Payment for this work shall be made proportional to the work completed as follows:

- |  |     |
|--|-----|
| 1. Equipment Installation  | 20% |
| 2. Month to month progress payments in accordance with the amount of work completed and upon receipt of the required reporting documentation | 70% |
| 3. End of Work   | 10% |

*Payment will be made under:*

Item No.	Item	Pay Unit
9.71 WBB	Vibration Monitoring Of Existing Buildings	L.S.

## SECTION 9.95 G Dimensioned Stone Masonry

### 9.95G.1. DESCRIPTION.

This Section describes the furnishing and installation of all dimensioned stone masonry indicated, including Granite Coping; Granite Coping with Integral Bike Channel; Granite Flush Coping; Granite Curbwall; Granite Lighting Piers; Granite Stair Treads; and Granite Veneer; all in accordance with Contract Drawings, the specifications and the directions of the Engineer.

This section does not pertain to Granite Block Pavers, which are specified in **Section 6.06** of the NYCDOT Standard Highway Specifications.

### 9.95G.2. MATERIALS.

#### A. Stone Materials

All stone shall be carefully selected, from sound stock, and free from defects impairing strength, durability or appearance, such as cracks, seams, starts, holes, flaws, or imperfections, which have been patched or filled. All stone shall be uniformly consistent in color, value, graining texture, and other features to the extent inherent in the specified stone type. Color and value variations shall be within ranges established by approved samples.

Graining and texture variations, whether highly figured or uniform, shall be consistent in all material supplied. Material sources and quarry locations shall be approved by Engineer for each stone type.

All stone under these items shall be "Deer Isle", a medium-grained granite with warm grey, black and brown crystals, of compressive strength of 25,900 psi (MPa) per ASTM C170, density of 163.3 lb/cf per ASTM C97, flexural strength 1,644 psi per ASTM C880, and absorption rate of 0.30% per ASTM C97, as supplied by the following:

- (1) North Carolina Granite Corporation  
P.O. Box 151  
Mount Airy, NC 27030  
New York, NY 10017  
Rep: Richard Zinsmeister  
(800) 719-2624  
sales@ncgranite.com
- (2) Polycor Granite Corporation  
200 Georgia Marble Lane  
Tate Georgia 30177  
Rep: Gorica Sefer  
(212) 920-4563  
gorica@polycor.com
- (3) Coldspring Granite  
17482 Granite Road West  
Cold Spring, MN 56320  
Rep: Randy Huber  
Phone#: (860) 657-8061  
rhuber@coldspringusa.com
- (4) or approved equivalent.

Stone from other suppliers may be deemed acceptable as "equivalent" based on criteria including individual specimen color and texture, material properties, contrast and compatibility of texture and color with other material specified. The Engineer shall be the sole arbiter of such compatibility.

Source Quality Control of Stone Material: Furnish testing of each stone type and finish for this Project, prepared by an approved independent and qualified testing agency. Tests shall be performed at thicknesses and finishes as required by test standards. Granite materials shall conform to ASTM C615, Granite Building Stone. In addition, granite materials shall conform to material properties requirements more stringent than ASTM C615 as stated herein. Test reports for stone materials shall show and list minimum values for the following physical characteristics as a minimum: Modules of rupture, ASTM C99; Compressive strengths, ASTM C170; Absorption, ASTM C97; Flexural Strength, ASTM C880. Provide mineral and chemical compositions of stone and identification of any material composition that may cause staining within stone or on surface of stone such as iron pyrites or other detrimental material.

#### B. Stone Fabrication

Stone shall be cut to sizes, shapes, dimensions, and details shown for each type and condition. Relate to and adjust stone fabrication together with installation requirements specified, herein. Include all cutting, drilling, and fitting of stone required to accommodate the work of other trades.

Where shapes are indicated on Contract Drawings as curved, either graphically or in text, edges shall be cut to true radii. Where elements curve horizontally and slope vertically, curvature shall be accurate in the horizontal plane.

Exposed surfaces and edges of stone units shall be free from cracks, broken corners, chipped edges, scratches, or other defects affecting appearance. No patching, joining, or hiding of defects will be permitted.

Provide stone of the thickness specified or otherwise shown as a minimum. Maximum variations in thickness from that shown shall not exceed 1/8" on units 4" or less.

Cut stone full and true on faces, reveals, beds, joints, and top to the full dimensions required by Contract Drawings. All sawn edges shall be straight and true. Maximum deviation from straight line or radii indicated shall not exceed 1/16" when measured with a 10' straightedge or radial template, or plus or minus one-fourth the width of joints, whichever is more stringent. All units shall fit together accurately. Final placement and locational tolerance per artist approval.

Fabricate stone so that joints between units shall be as shown on Contract Drawings typically for alignment and spacing. Make faces of stone in same plane flush at joints. All finished surfaces of stone panel and coping units shall be true and out of wind.

Typical joint width shall be 1/4" unless otherwise specified in the Contract Drawings.

Shop Cutting, Drilling, and Fitting: Include all cutting, drilling, and fitting of stone required to accommodate the work of other trades. Accurately shop-drill holes for fences and steel railings in locations coordinated with fence and railing shop drawings. Holes shall be 0.25" greater than the diameter of the posts, drilled and angle required to allow setting of the posts plumb. In cutting and fitting, carefully cut and grind edges to a neat, tight, fit. Cutting shall be in such a manner so as not to impair strength or appearance. Use physical templates (not just drawing dimensions) for all cutting and drilling. Obtain required templates from appropriate trades and suppliers.

Exposed Faces and Edges: Provide finish characteristics and quality indicated for each stone material type, condition of use, and as approved. Exposed stone surfaces shall be "Thermal" and "Rock-Face" finishes as defined by National Building Granite Quarries Association (NBGQA). Thermal finish shall be mechanically applied by flame in the long dimension of finished work. The application of thermal finish shall be controlled to avoid any visible



directionality. Rock-Face finishes shall be pitched from neat corners with a chisel, to the tolerances indicated on the Contract Drawings.

### C. Installation Materials

Furnish all anchors, cramps, dowels, tiebacks, and the like fitting hardware as necessary to properly secure stone units. Types to be approved, of sizes and shapes to fit each particular support condition encountered. Metal components for exterior work shall be stainless steel, Type 302/304, nonmagnetic.

Lead or plastic buttons used shall be of the thickness required for the joint size shown or specified, and of the size required to maintain a uniform joint width, and meet the load requirements of stone installation condition.

Epoxy for setting stainless steel dowels and other metal anchors shall be a commercial-grade, high-strength, two-part epoxy as Quikrete High Strength Anchoring Epoxy (No. 8620-31), or equivalent product as manufactured by Sika, Mapei, or Hilti.

Grout for all exposed mortar joints shall be colored, pre-packaged epoxy grout as Laticrete Spectralock Pro Premium Grout, or equivalent type by Sika or Mapei, or approved equivalent. Colors to be used shall be as selected from a full range of manufacturer's colors by the Engineer, which shall include no fewer than 40 (forty) alternative colors.

Mortar Setting Beds shall be a pre-packaged latex-modified mortar mix as Laticrete 3701 Fortified Mortar Bed, or approved pre-packaged equivalent by Sika, Mapei, or approved equivalent.

Setting Adhesive and Slurry Bond Coat shall be a latex-modified adhesive masonry setting product as Laticrete 254 Platinum, or approved equivalent adhesive type by Sika, Mapei, or approved equivalent.

Mortar for veneer installation shall be a pre-packaged polymer-modified mortar mix exceeding ASTM C270-14a for Type "S" mortar, as Quikrete Polymer Modified Veneer Stone Mortar No. 1137, or equivalent by Sika, or Mapei, or approved equivalent.

Pourable grout for backfilling collar joint between veneer stone and concrete structural wall shall be a pre-packaged grout product intended for superior performance in poured applications, as Quikrete Core-Fill Masonry Grout (Fine) 1585-08, or equivalent by Sika, or Mapei, or approved equivalent.

#### Caulk/Expansion Joint Materials:

- (1) Joint filler material shall be a non-extruding premolded non-bituminous material, compatible with backer rod and sealant.
- (2) Backer rod shall be closed cell polyethylene, of diameter as required to provide secure stop of sealant per manufacturer recommendations.
- (3) Sealant shall be "BASF MasterSeal NP2" two-part elastomeric polyurethane, or "Latisil" one-component, neutral-cure, silicone sealant, or approved equivalent type by Sika or Pecora, or approved equivalent. The product must be available in at least 40 (forty) alternative colors. Colors to be used shall be as selected from a full range of manufacturer's colors by the Engineer in consultation with DDC's Landscape Architect. Color shall be selected to match granite, as determined by cured mock-up.

### 9.95G.3. QUALITY ASSURANCE.

- A. References Standards (as applicable generically to stone type(s) or material specified: National Building Granite Quarries Association (NBGQA); American Society for Testing and Materials

(ASTM); American National Standards Institute (ANSI); American Iron and Steel Institute (AISI). In case of conflict between the referenced standards, codes, or Contract Documents, the referenced standard, code, or Contract Document having the more stringent shall govern as approved by Engineer.

- B. Fabrication Qualifications: Stone fabrications shall be by a firm or firms that have successfully fabricated stonework similar to the quality and in the quality shown of each material type and condition, specified, and in the quality specified, for a period of not less than 5 years. Special attention is drawn to the Granite Coping with Integral Bike Channel, with complex shapes to be cut out of single granite units, including special units with tapering bike channel at top and bottom of each stair landing, integral with beveled coping. It shall be understood that computer numerical control (CNC) machinery and/or advanced craftsmanship may be required for fabrication of these features. Special attention is also drawn the pitched rock-face finish of the Granite Curbwall. Special attention is also drawn to the Granite Lighting Piers, with the requirement for a large-diameter core drilled center. Fabricator must demonstrate ability to fabricate these elements to the lines and contours as indicated on the Contract Drawings, by submission of photographs of similar projects.
- C. Installation Company Qualifications: Erection of stonework shall be by a firm that can exhibit proof of expertise in the field and prior successful experience with stone installations of equivalent type and similar scope to this Project.

#### 9.95G.4. SUBMITTALS.

All submittals shall be as per NYC DOT Standard Highway Specifications, under Division 1 Contract Requirements, **Sections 1.06.13 and 1.06.31.**

- A. Fabricator Qualifications: Submit complete data on fabrication facilities for stonework. Include information of location, production capabilities, and photographic information as necessary to demonstrate capability to complete the required work.
- B. Installer Qualifications: Submit to identify and exhibit installation company qualifications as specified herein.
- C. Stone Quarry Data: Submit complete data on quarry location and facilities for each stone type.
- D. Stone Material Properties Data: Material properties data for each stone material type shall be submitted by the stone suppliers and certified as representative of the properties of stone material to be supplied for the Project. Include references to appropriate ASTM tests as conducted by a certified testing laboratory.
- E. Product Information: Submit product information for each installation material item including fitting hardware, fastening devices, accessories, mortars, caulk, grouts, and the like.
- F. Shop Drawings: The Contractor shall submit Shop Drawings when required, in accordance with the requirements of the **Section 1.06.13** of NYC DOT Standard Highway Specifications. Submit overall and detailed plans, sections, and elevations as necessary to accurately and fully describe the required elements for each stone material type furnished and each related application condition of the Project work. Include necessary coordination and preparation of composite drawing information together with installation trades contractors of different components, including railings, edgings, and concrete foundations. Establish and verify locations of expansion joints, which shall be coordinated with concrete shop drawings. All shop drawings for items under this section shall be submitted concurrently.

Submit complete Cutting and Setting Drawings showing shop sizes, shapes, thickness, jointing, anchoring, connection with other work, typical and special anchoring details, supports, dimensions, and setting numbers for each piece. Setting Drawings shall show relationship to adjoining construction and, after fabrication and final selection, shall indicate the location of each

stone unit with a number designation corresponding to number marked on each unit. Show location layouts and patterns coordinating with Contract Drawings and related survey control points and dimensions. Establish and verify dimensions with concrete work of on-site walls, masonry layouts and patterns, and other like conditions. Show location, type, and extent of anticipated field cutting and finishing. Do not fabricate any stone (except for samples) until Engineer has approved Shop Drawings for fabrication.

- G. Stone Samples: Submit set of a minimum of 3 unit samples, minimum 1 square foot finished surface each, of each stone material and each stone finish type. Include in each set the full and extreme range of exposed color, texture, and finish to be expected in the completed work. Engineer's review of samples will be for color, texture, and finish only. Compliance with all other requirements is the exclusive responsibility of the Contractor. Approved samples shall set the finish standard for the work.
- H. Grout and Sealant Material Samples: Submit samples for each condition of use to show selected colors. Submit samples of eight colors closest in coloration to the granite when the granite is wetted.
- I. Stone Support and Accessory Items Samples: Submit samples for each type and material composition, full size.
- J. Pre-Mockup Photographs: Provide clear digital photographs of fabrications required for Mock-ups after shop fabrication but before shipping of materials. Provide photographs as necessary to show all exposed surfaces. Photographs may be taken before or after application of thermal finish to surfaces.
- K. Mock-Ups: Following approval of Pre-Mockup Photographs, construct at the earliest possible time and at approved location, before proceeding with work and after Engineer's approval of submitted samples. Submit proposed locations for typical field samples/mockups, and receive approval of locations prior to construction of field samples. Mock-up shall be per Contract Drawings unless otherwise directed, using materials, setting bed, pattern and joint treatment. The field mock-up/sample must be approved by the Engineer before the actual work may proceed. If necessary remove and reconstruct field sample until approved. Accepted mock-up establishes minimum standard of quality and workmanship for granite masonry work of this section. Demolish and remove field sample at a time approved by Engineer when no longer required to serve as standard of work. Mock-up may be incorporated as part of work if conforming to the specified requirements, and if accepted by the Engineer. Provide and construct mock-ups as follows:
  - 1. Granite Curb: minimum 4 linear feet
  - 2. Granite Coping with Integral Bike Channel: minimum 4 linear feet
  - 3. Granite Coping: minimum 4 linear feet, in combination with adjacent Granite Veneer
  - 4. Granite Veneer: minimum 10 square feet, in combination with Granite Coping at Veneer Wall
  - 5. Granite Stair Treads: minimum 3 steps, 9 linear feet total, in combination with Granite Coping with Integral Bike Channel.
- L. Delivery, Storage, and Handling
  - 1. Protect, store, and handle stone materials as recommended by stonework fabricating company in addition to requirements specified herein.
  - 2. Properly crate and band stone units for shipment receiving at job site. Crating of stone and packaging accessory item shall be respective and related to the conditions for installation.

3. Handle each stone material type to prevent chipping, breakage, soiling, or other damage. Do not use pinch or wrecking bars without protecting edges of stone with wood or other rigid materials.
4. Store stone materials on wood skids or pallets, covered with non-staining, waterproof membrane. Place and stack skids and stone to distribute weight evenly and to prevent breakage or cracking of stone. Protect stone from detrimental weather conditions with waterproof, non-staining covers or enclosures, but allow air to circulate around stone during extended period of storage.

#### M. Environmental Requirements

Protect mortar materials and stone accessories from weather, moisture, and contamination with earth and other foreign materials. Do not use mortar materials to install stone when the temperature is below 4 degrees Celsius (40 degrees Fahrenheit). When exposed during construction activities, protect partially completed stonework against weather when work is not in progress. Cover top of uncompleted work sections with strong, waterproof, non-staining membrane extending down both sides of walls and anchor securely in place.

#### 9.95G.5. METHODS.

- A. Preparation: Verify all measurements and dimensions and coordinate the installation of support structures for this work. Coordinate and schedule stonework fabrications and installations with the work of other related trades and separate contracts. Give particular attention to the location and size of cutouts required to accommodate mechanical, electrical, and other work or adjoining construction.

Verify that surface of foundation has suitably-roughened texture to receive setting mortar.

Clean dirty or stained stone surfaces by removing soil, stains, and foreign materials before setting. Clean stone by thoroughly scrubbing with fiber brushes and then drenching with clear water. Use only mild cleaning compounds that contain no caustic or harsh materials or abrasives.

Protection: Protect contact of exposed surfaces from contact with mortar materials. Apply protective, removable wax coating to stone surface if adhesive, mortar, epoxy adhesive or any other setting material would stain the stone. Wax shall be applied carefully to prevent contact with surfaces to be joined. Wax shall be steam-cleaned off after work is completed.

- B. Installation: Do not use stone units with chips, cracks, voids, stains, or other defects that might be visible in the finished work. If installed, remove and replace with units meeting specification requirements and approval of the Engineer.

Execute work by skilled mechanics, and employ skilled stone fitters/cutters at site for necessary field cutting, as stone is set. Clean stone (especially edges) before setting.

Set stone in accordance with Contract Drawings and final approved shop drawings. Provide anchors, supports, fasteners, and other attachments shown, or necessary to secure stone in place. Shim and adjust accessories as required for proper and correct setting of stone. Completely fill holes, slots and other sinkages for anchors, dowels, fasteners and supports with epoxy material as applicable to conditions during setting of stone. Provide compressible filler in dowel holes as necessary to insure that stone units do not bear on dowels such that may cause cracking.

Setting Surfaces, General: Before starting the installation, the concrete slab, structural concrete, and all other surfaces to contact mortar materials shall be cleaned to remove soil and loose mortar. Dry or dusty concrete surfaces shall be wet down or washed and excess water removed just prior to the application of setting bed. Immediately prior to placing the mortar, apply a slurry bond coat of approved setting adhesive to all surfaces to contact mortar materials. The mortar

bedding course shall be placed, screeded and shaped upon the concrete base, its finished depth shall be as shown on the detail drawings and at correct depth to achieve required grades. The bedding shall be shaped to a true surface parallel with the seating surface of the elements. The surface shall be formed by means of template or striking board (12' X 2" X 6" board). The bed shall then be struck off until proper alignment is secured. The area of bedding placed in any work day shall be scheduled so that no bedding course remains at the end of the day without stone installed. After final shaping, the bedding course shall not be disturbed prior to laying the stone.

**Stone Setting, General:** Clean stones thoroughly before setting and set stones before initial mortar set occurs. Do not set stone on dry mortar bed. For all stone installation except stone veneer, apply slurry bond coat of approved Setting Adhesive to all surfaces that will come into contact with mortar. Care should be taken to prevent contact of Setting Adhesive with any surface of stone to be exposed. Do not apply slurry bond coat near exposed face of stone to any portion of stone that will contact grout.

For monolithic stone installation, including stair treads, lighting piers, curb, curbswall and copings, apply slurry bond coat and set stone unit in wet setting bed, providing supports as necessary to achieve accurate grades. Set stones with anchor dowels in full bed of mortar with back-up spaces and vertical joints slushed full, unless otherwise indicated. Stone surface shall be beaten with a wooden block as necessary to embed units in the mortar. Rake out joints for grouting before setting mortar has hardened. Rake joints to uniform depths with square bottoms and clean sides.

For veneer installation, stone units shall be laid up in lifts and concrete shall be poured behind the stone units. Prior to veneer installation, hooked anchor dowels shall be installed in veneer stone units, at spacing as indicated on drawings. Hooked dowels shall be embedded in drilled holes to depth as indicated on drawings, and secured with epoxy grout per grout manufacturer instructions.

Set veneer stone units in full bed of mortar with full head joints unless otherwise indicated. Rake out joints for pointing with grout before setting mortar has hardened. Rake joints to uniform depths with square bottoms and clean sides. Concrete shall be poured in lifts behind veneer units, without damage to joint material. Concrete liquid shall not be allowed to seep through the veneer joints.

For all granite installation, grout joints shall be installed with approved color and type of epoxy grout material in accordance with manufacturer instructions. Grout joints as soon as possible after initial set of setting bed. Employ all methods necessary to prevent dirt or other debris to enter ungrouted joints. If dirt or debris of any kind enters ungrouted joints despite these measures, clean joints completely according to grout manufacturer requirements before proceeding to grout installation. Force grout into joints, taking care not to smear grout on adjoining exposed stone surfaces. Compact each layer thoroughly and allow to it become thumbprint hard before applying next layer. Tool joints, when pointing mortar is thumbprint hard, with a smooth jointing tool to produce slightly concave profile. Cure grout as recommended by manufacturer.

**Caulk/Expansion Joints:** Provide caulk (sealant) joints when meeting adjacent vertical elements, at expansion joints, where shown on Contract Drawings, and where required to prevent stone cracking. Keep sealant joints free of dirt, debris, mortar, and other rigid materials. Caulk joints shall be finished cleanly per approved sample installation, with slightly concave section. Joints shall be one-quarter (3/8") inch in width unless otherwise specified on the Contract Drawings. Expansion joints shall be filled with specified joint filler to within 3/4" of the surface. All caulk and expansion joints shall then be filled with sealant over a backer rod. Sealant to be of the approved color or other color as directed by the Engineer. Prepare joints and apply sealants of type and

at locations indicated to comply with applicable requirements of the sealant manufacturer's instructions.

Include all field cutting, drilling, and fitting of stonework not performed in the shop and required to accommodate the work of other trades or contracts. In cutting and fitting, carefully cut and grind edges to a neat tight fit. Do cutting in such manner so as not to impair strength or appearance of stone.

Use physical templates for all cutting and drilling and obtain required templates from appropriate trades.

**C. Erection Tolerances:**

Variation from true horizontal alignment or curvature: Do not exceed 1/8".

Variation from Plumb for lines and surfaces of walls and arises: Do not exceed 1/8" in 10'.

Variation from Level, Slope, and Grade: For grades, slopes, level conditions, and other conspicuous lines indicated, surfaces shall be true to grade, slope, and line indicated within 1/8" in any 20'.

Variation in Cross-Sectional Dimensions: For thickness of walls and other conditions from dimensions shown, do not exceed minus 1/8", nor plus 1/8".

Offset at Joints: Do not exceed plus or minus 1/16".

Tolerances shall not be accumulative.

- D. Protection:** Prevent materials used for installing work of this Section from staining or damaging the exposed surfaces of stone units or the exposed surfaces of the adjoining construction. Immediately remove mortar, grout, wax, or other detrimental materials from exposed surfaces of stone or adjoining construction. After installation, protect stonework from damage during subsequent construction activities.
- E. Cleaning and Repairing:** At completion of Work, replace defective, broken, or damaged stone units installed as work of this Section. Unfilled or defective joints shall be properly repaired. After completion of any repair work, clean exposed surfaces of all stone units installed as work of this Section with clean water and stiff fiber brushes until all dirt, stains, efflorescence, mortar, and other defacements are removed. Use cleaner and procedures recommended by stone quarry and stone fabricating company. Do not use wire brushes, metal scrapers or acids. Protect adjacent surfaces from damage during cleaning operations.

**9.95G.6. MEASUREMENT.**

The quantity to be measured for payment shall be:

- A. GRANITE COPING:** The quantity to be measured for payment hereunder shall be the number of LINEAR FEET of GRANITE COPING installed on site, as measured along the path of travel of the bicycle, to the satisfaction of the Engineer, in accordance with the Contract Drawings, irrespective of cross-sectional shape, slope, thickness, depth or width. Special transition units at corners and ends shall be counted as standard units.
- B. GRANITE COPING WITH INTEGRAL BIKE CHANNEL:** The quantity to be measured for payment hereunder shall be the number of LINEAR FEET of GRANITE COPING WITH INTEGRAL BIKE CHANNEL installed on site, as measured along the path of travel of the bicycle, to the satisfaction of the Engineer, in accordance with the Contract Drawings, irrespective of cross-sectional shape, slope, thickness, depth or width of bike channel section. Special transition units at top and bottom of bike channel runs shall be counted as standard units.

- C. GRANITE FLUSH COPING: The quantity to be measured for payment hereunder shall be the number of LINEAR FEET of GRANITE FLUSH COPING installed on the site, as measured in place, to the satisfaction of the Engineer, in accordance with the Contract Drawings, irrespective of whether sloped, horizontal, or a combination of sloped and horizontal.
- D. GRANITE CURBWALL: The quantity to be measured for payment hereunder shall be the number of CUBIC FEET of GRANITE CURBWALL installed on the site, as measured in place, to the satisfaction of the Engineer, in accordance with the Contract Drawings.
- E. GRANITE LIGHTING PIERS: The quantity to be measured for payment hereunder shall be the number of CUBIC FEET of GRANITE LIGHTING PIERS installed on the site, as measured in place, to the satisfaction of the Engineer, in accordance with the Contract Drawings. The volume of the core drilled interior shall not be deducted from the C.F. quantity.
- F. GRANITE STAIR TREADS: The quantity to be measured for payment hereunder shall be the number of LINEAR FEET of GRANITE STAIR TREADS as measured along the nose of the tread actually installed at the site, to the satisfaction of the Engineer, in accordance with the Contract Drawings, irrespective of cross-sectional shape, thickness, depth or width of tread section.
- G. GRANITE VENEER: The quantity to be measured for payment hereunder shall be the number of SQUARE FEET of GRANITE VENEER actually installed on vertical face of wall, irrespective of shape, thickness or size of veneer, as indicated on the Contract Drawings, to the satisfaction of the Engineer.

#### 9.95G.7. PRICES TO COVER.

- A. The contract price per LINEAR FOOT of GRANITE COPING, GRANITE COPING WITH INTEGRAL BIKE CHANNEL, GRANITE FLUSH COPING, and GRANITE STAIR TREADS shall cover that cost of all labor, materials, fabrication, plant, equipment, insurance, and necessary incidentals required for completing the work; all in accordance with the Contract Drawings, the specifications and the directions of the Engineer.
- B. The contract price per CUBIC FOOT for GRANITE CURBWALL and GRANITE LIGHTING PIERS shall cover that cost of all labor, materials, fabrication, plant, equipment, insurance, and necessary incidentals required for completing the work; all in accordance with the Contract Drawings, the specifications and the directions of the Engineer.
- C. The contract price per SQUARE FOOT for GRANITE VENEER shall cover that cost of all labor, materials, fabrication, plant, equipment, insurance, and necessary incidentals required for completing the work; all in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

#### *Payment will be made under:*

Item No.	Item	Pay Unit
9.95 GC	GRANITE COPING	L.F.
9.95 GCBC	GRANITE COPING WITH INTEGRAL BIKE CHANNEL	L.F.
9.95 GCF	GRANITE FLUSH COPING	L.F.
9.95 GCB	GRANITE CURBWALL	C.F.
9.95 GP	GRANITE LIGHTING PIERS	C.F.
9.95 GST	GRANITE STAIR TREADS	L.F.
9.95 GV	GRANITE VENEER	S.F.

**SECTION NYC-29634.1837**  
**Incidental Repairs**

**NYC-29634.1837-01. DESCRIPTION.**

This work shall consist of the incidental repair of safety and structural conditions of the existing bridges, retaining walls, and roadways as revealed during construction operations and as ordered by the Engineer during the life of the Contract. Incidental repairs shall include, but not be limited to existing bridges (including abutments and wing walls), concrete roadway slabs, concrete sidewalk slabs, and retaining walls.

**NYC-29634.1837-02. MATERIALS AND METHODS OF CONSTRUCTION.**

All material and construction methods shall comply with the appropriate requirements of the current NYCDOT Standard Highway Specifications.

**NYC-29634.1837-03. PRICE TO COVER.**

Payment made under this Item shall be equal to the sum total of all vouchers submitted by the Contractor as payment for the cost of performing incidental repairs per as approved by the Engineer. Payments shall be in accordance with Article 26 of the Standard Construction Contract dated March 2017. Payment under this item, including partial payments, will not be made until the Contractor has furnished satisfactory evidence to the Engineer that the Contractor has performed the required incidental repairs.

The voucher for the payment shall be submitted to the Engineer on a monthly basis.

The "fixed sum" in the Bid Schedule is for bidding purposes only and shall not be varied in the bid; however, the Contractor will be paid only for the actual repairs performed regardless of the fixed sum, which may be more or less than the fixed amount.

*Payment will be made under:*

Item No.	Description	Pay Unit
NYC-29634.1837	INCIDENTAL REPAIRS	F.S.



**S - PAGES**

## **SPECIAL PROVISIONS**

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### **NOTICE**

THE PAGES CONTAINED HEREIN (S-PAGES) ARE SPECIAL PROVISIONS THAT SHALL APPLY TO AND BECOME A PART OF THE CONTRACT.

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## SPECIAL PROVISIONS

The following shall become a part of and apply to the Contract:

### A. SCOPE OF WORK

It is strongly advised that the Contractor inspect the site before bidding to assess and familiarize himself with the existing conditions and to judge for himself the extent and nature of the work to be done under this contract and the equipment and methods it can employ.

The work to be performed under this Contract consists of the Reconstruction of the West Tremont Avenue Step Street and adjacent curbs and sidewalks; all work is located between Sedgwick Avenue on the upper end and Cedar Avenue on the lower end in the Borough of the Bronx. The anticipated scope of work for this project includes, but is not limited to, the following:

#### 1. Pre-Construction Stage

- In order to complete the work within the prescribed schedule and to minimize the inconvenience to the public, the Contractor must adhere to the construction phases specified on the Plans.
- Submit shop drawings for all steel bar reinforcement, granite units, pipe handrails, drainage structures, and catalog cuts of material specifications for all materials to be incorporated into the final structure.
- Perform condition survey of adjacent buildings documenting existing conditions.
- Procure all permits necessary to commence contractual work and obtain approval of Maintenance and Protection of Traffic Plans.

#### 2. Construction Stage

- The Contractor will not be permitted to commence construction until all work necessary for the uninterrupted construction activities are satisfactorily completed.
- The Contractor shall be required to maintain access to adjacent property entrances and protect pedestrian traffic for the duration of the Contract and furnish all safeguards for the protection of persons and properties. The Contractor shall be responsible for any damage to persons or properties during the construction. He shall provide such protective measures as protective shields, warning and construction signs, barriers, and fencing around the demolition and construction areas.
- All work shall be carried out in such a manner as to prevent the creation of dust nuisance to the general public. The Contractor is required to employ dust allaying materials and methods to keep the dust nuisance at a minimum to the satisfaction of the Engineer in addition to adhering to all similar Department of Environmental Protection (DEP) requirements.
- All materials removed and not designated to be reused shall be disposed of away from the site by the Contractor at his expense, unless otherwise indicated in the contract documents or as directed by the Engineer.
- The work shall include the furnishing of all labor, materials, plant, equipment, insurance, and incidentals, required to satisfactorily complete the project within the prescribed schedule in accordance with the plans and specifications, and directions of the Engineer.

- Implement and continuously monitor the adjacent building for possible impacts of vibrations due to construction operations during this contract. Implement and continuously survey and monitor the existing buildings for possible impacts of construction operations during this contract.
- Install new drainage inlets, manholes and piping on Step Street and connect to new combined sewer along West Tremont Avenue to Cedar Avenue.
- Install new 15" combined sewer along West Tremont Avenue, from Fordham Place to Cedar Avenue, removing the existing. Remove and replace at connections as indicated on Contract Drawings. Replace existing house connections.
- Resurface roadway on West Tremont Avenue, from Fordham Place to Cedar Avenue. Restore traffic signs, pavement markings and open sidewalks to pedestrian traffic.
- Remove sidewalks and curbs along West Tremont Avenue, including curb cuts at the corner of West Tremont Ave and Cedar Ave, as indicated on the drawings. Install new sidewalks including relocation of manholes, fire hydrants, watermain, fire alarm box, and catch basins.
- Demolish all existing conduit, wiring, manholes, lampposts and luminaires, except for utility pole on West Tremont Ave, between Fordham Place and Cedar Avenue. Install new conduit, wiring, manholes, lampposts, and luminaires; provide temporary light fixtures as necessary.
- Demolish granite stair treads, concrete landings, and retaining walls, as indicated on Contract Drawings. Construct new retaining walls, terraces, stairs and stair landings. Install new granite treads, granite coping units, retaining walls, and sidewalks; install new guard railing and pipe hand railing;
- Remove sidewalk along Sedgwick Avenue. Install new sidewalk and new steel bench, as indicated on the drawings.
- Plant new trees in new tree pits.
- Complete punch list items.
- Demobilize and restore the work area.

### 3. Post-Construction Stage

- Perform post construction inspection of structures in the project vicinity and submit post construction report.

## B. COORDINATION WITH UTILITIES

All known public and private utility lines within or adjacent to the site of the work are shown based on the best available information in their existing approximate locations on the Contract plans. The Contractor is cautioned that these locations are neither guaranteed nor is there a guarantee that all such lines in existence have been shown on the plans.

The Contractor shall conduct its operations to prevent damage to such, all public and private, utility lines within or adjacent to the site of the work. The Contractor shall make such explorations as may be necessary to determine the dimensions and locations of lines that may be subject to damage.

Where existing utilities are located within the contract limits, the Contractor will be required to give the proper City agency(s) and the various owning companies at least 72 hour notice before

doing any work, in accordance with the provisions of NYCRR Part 753 (also cited as Industrial Code 53 or Code Rule 53), relating to construction, excavation and demolition operations at or near underground facilities. THE CONTRACTOR IS ADVISED THAT THE PROVISIONS OF 16 NYCRR PART 753 DO NOT APPLY TO CITY OWNED UTILITIES. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE LOCATION OF THE CITY OWNED UNDERGROUND DISTRIBUTION SYSTEMS. THE CONTRACTOR SHALL MAKE HIS OWN FIELD OBSERVATIONS AND RESEARCH THE CITY'S RECORDS TO DETERMINE THE LOCATION OF SUCH FACILITIES BEFORE THE COMMENCEMENT OF EXCAVATION.

The Contractor shall satisfy himself as to the exact locations of utility lines and shall protect and support in a suitable manner all utilities encountered in its excavating and trenching operation. If the nature of the damage to these utilities is such as to endanger the satisfactory operations of the utilities and the necessary repairs are not immediately made by the Contractor, the work may be done by the respective owning companies and the cost thereof charged against the Contractor.

If utility relocation becomes necessary during the construction phase as a result of more precise location data or other changes that might develop, these relocations are to be performed by the owner and at the owners cost with coordination by the Contractor. Suitable time frames for these additions shall be coordinated between the Contractor and the Utility Company. Such time frames are not to be included within previously established time frames.

**C. PRIVATE UTILITY FACILITIES WORK (JOINT – BIDDING).**

The Contractor is advised that this project contains private Utility Facilities work as specified in JB-Pages, herein Book 3 of 3, and the "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN", which is available for pick-up in the Bid Procurement Office at 30-30 Thomson Ave., Long Island City, NY 11101.

Unit Price Items that are listed in the Bid Schedule and the Contingency Item List, that begin with "JB" are to be done in accordance with the corresponding "JB" specifications contained in the "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN" document issued August 1, 2005. In addition, each "JB" item contains one of the following suffixes to denote the Utility Company that the work is chargeable to: "(CE)" for Consolidated Edison Company of New York, Inc.; "(ECS)" for Empire City Subway Company, Ltd.; "(AT&T)" for American Telephone and Telegraph"; and, "(TW)" for Time Warner Entertainment Company, L.P. (e.g.: JB 200(CE) refers to Section JB 200 in the "JB" specifications for work that is chargeable to Consolidated Edison Company of New York).

**D. SHOP, WORKING AND RECORD AS-BUILT DRAWINGS, COMPUTERIZED INDEXING AND MICROFILMING.**

The preparation and furnishing of record as-built drawings; computerized indexing and microfilming of all shop, working and record as-built drawings; and a "shop and working drawing indexing sheet" will be performed by the Resident Engineering and Inspection Services (R.E.I.) or Construction Support Services (C.S.S.) under separate contracts. However, the Contractor shall coordinate with R.E.I. or C.S.S. and provide the R.E.I. and C.S.S. with all relevant information for the preparation of record as-built drawings, shop, and working drawing indexing sheet.

The Contractor shall prepare and furnish all shop and working drawings in accordance

with this special provision and the following:

1. Section 1.06.13 of the "General Provisions" in the NYCDOT Standard Specifications.
2. Specifications for the preparation of Record Drawings, Indices, Microfilm, and CD Media and latest revision thereof.

Copies of the Specifications are available at Records Management Unit, Department of Transportation, Division of Bridges, 55 Water St., 5th Fl., New York, NY, 10041.

3. A.N.S.I. (American National Standards Institute) standards latest edition, as listed below:

Y1.1-1972	Abbreviations for use of Drawings in Text (Where Applicable)
Y10.1-1972	Glossary of Terms Concerning Letter Symbols
Y14.1-1980	Drawing Sheet Size and Format
Y14.2M-1979	Line Conventions and Lettering

ANSI Standards may be obtained from American National Standards Institute, 11 West 42<sup>nd</sup> Street, New York, New York 10036.

#### E. SUPERINTENDENT.

The Contractor shall have a fully competent superintendent in charge of the work at the site. Any careless or incompetent superintendent or employee shall be removed forthwith by the Contractor when notified to do so in writing by the Engineer.

#### F. NEW YORK CITY REQUIREMENTS TO PREVENT OVERLOADING OF CRANES DURING CONCRETE PLACEMENT OPERATIONS.

1. Each concrete bucket shall be labeled with a metal tag welded to the bucket which shall indicate the capacity of the bucket in cubic yards and shall also give the combined weight of the bucket and concrete in pounds when the bucket is filled to capacity.
2. Buckets which, when filled to capacity, exceed the allowable load on the crane shall not be permitted to be used.
3. Any concrete placement operations with crane and bucket which do not comply with the above requirements shall be issued stop work orders by the Engineer.

#### G. LEGAL LOADS.

It is the intent of these specifications to permit the use of the most efficient equipment that is consistent with conditions at the time of use. It is anticipated that seasonal or weather conditions combined with the nature of the terrain will often require the use of lighter and smaller equipment than might be used under optimum conditions.

Construction equipment or vehicles delivering materials or traveling to a project from outside the contract limits shall have all required permits issued through the established Department vehicle permit system in accordance with Section 385 of the Vehicle and Traffic Law of the State of New York. The permit will indicate the limits within which such equipment with over-legal gross weights or axle loadings may operate, the frequency of such passages and all other limiting factors.

Construction equipment or vehicles operating within the contract limits having gross

weights or axle loadings within the legal limits stated in Section 385 of the Vehicle and Traffic Law may operate without specific approval.

Prior to the use of construction equipment or vehicles with over-legal gross weights or axle loadings on any structure, on any new pavement, existing pavement to remain, or on any resurfaced pavement within the project limits, the Contractor shall submit a written request to the Engineer. This request shall be accompanied, upon request, by an appropriate analysis performed by a New York State licensed Professional Engineer, including the pertinent equipment data, and shall demonstrate that the operations will not result in detrimental effects on any pavement or structure to be retained in the completed work.

Use of over-weight construction equipment or vehicles on portions of the project other than the listed above shall be subject to the approval of the Engineer. If it is determined that the use of construction equipment or vehicles is having a detrimental effect or will result in detrimental effects on the finished highway, the Engineer will notify the Contractor to modify or cease the operations.

This Special Provision does not apply to vehicles and construction equipment operating solely within the project limits and which do not operate on structures or pavement courses which are to be retained in the finished work.

All bidders are cautioned to reflect in the bid prices the cost of operating all affected hauling units and construction equipment within the legal load limitations, including the cost of operating presently owned equipment at less than full vehicle capacity as well as the costs involved in mobilizing, leasing, or purchasing new equipment.

No waivers shall be granted for off-site operations or deliveries. This may require the use of existing concrete, blacktop, or aggregate delivery units at less than optimum loading capacity. Such units may be used only to the extent that their partial loading is within the legal load limitations and conforms with other materials specifications requirements.

#### H. FALL PROTECTION REQUIREMENT.

This project includes work that may require exposure of workers to risks associated with elevated work locations. By issuance of this Special Note, Contractors are on notice that the provision of fall protection for all workers, in full compliance with OSHA Part 1926, is mandatory on all Department contracts, including this contract. The Contractor is further placed on notice that the proposed procedures to meet the fall protection requirements must be identified in the Project Safety and Health Plan, as required under Section 107-05 of the New York State Department of Transportation, Standard Specifications.

#### I. NIGHT WORK.

When the Contractor is permitted to perform work at night, the work site shall be illuminated to an intensity required by applicable regulations, but not less than 50 lux (5 foot candles). In addition, for the purpose of inspection by the Engineer, the Contractor shall provide satisfactory lighting of an intensity of 500 lux (50 foot candles) over any area designated by the Engineer.

#### J. LINES AND GRADES.

The Contractor shall furnish lines and grades in accordance with Section 1.06.27 of the Standard Highway 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.

**K. SPECIFIC TRAFFIC STIPULATIONS.**

Under this contract, the Contractor shall perform the work in strict accordance with the requirements of Subsection 1.06.44 and Section 6.70 in the NYCDOT Standard Highway Specifications, specific traffic stipulations as called for on the Contract Drawings, 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.

**L. 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>**

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.

- \* **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>**



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.

M. NIGHT TIME AND/OR WEEKEND DIFFERENTIAL. Any item of work ordered by the Engineer to be performed outside the normal permissible working hours of 7:00 a.m. and 6:00 p.m., Monday through Friday and/or between the hours of 6:00 p.m. Friday evening and 6:00 a.m. Monday morning, with the exception of lump sum items, will be paid at the unit price bid plus a ten (10%) percent night time and/or weekend differential. No differential will be applied to lump sum items. This shall not apply to night or weekend work for convenience of the Contractor.

N. DISPOSAL OF EXCESS EXCAVATED MATERIAL BY THE CONTRACTOR AT A SITE DESIGNATED BY THE CONTRACTOR.

Excess material excavated by the Contractor becomes the Contractor's property and is to be properly disposed of at the Contractor's expense.

O. 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 Highway 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.

P. SCHEDULING PRESENTATION.

The Contractor shall submit construction schedule in the form of a bar chart using "Microsoft Project 2010" or latest version, 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.

Q. ACCELERATED PROJECT SCHEDULE AND COMBINATION OF STAGES.

Contractor shall plan and/or stage his/her 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 Requirements of the Standard Highway Specifications and the above "Scheduling Presentation" Article, and shall be submitted for approval of the Engineer.

R. 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 shutdown period, except as otherwise provided in Schedule A.

S. DUST CONTROL.

During the progress of the work under this contract, the Contractor shall be required to furnish and apply water and/or calcium chloride for the purpose of allaying dust conditions. Materials to be used, area to be covered, and time and rate of application shall be as directed by the Engineer.

Equipment used shall be capable of a uniform application over the surface to be covered. There will be not separate measurement or payment for this work but the cost thereof is deemed to be included in the other various items of work.

T. EMERGENCY CONTACT PERSON

The Contractor shall designate an individual to be available twenty-four hours a day, seven days a week, for the duration of the project to respond to emergency calls. The name of the person and the telephone number at which he/she can be reached shall be provided in writing to the engineer, and all police agencies in the area. Such person shall have full authority and capability to mobilize forces promptly as required to respond to an emergency and protect the public, or as directed by the Engineer or the City's representative.

U. 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.

V. PROTECTION OF PRIVATE PROPERTY.

Prior to the start of work, the Contractor shall contact the owners of all buildings abutting the project for the purpose of obtaining access to said buildings. The Contractor shall make a complete interior and exterior videotaped survey of all said structures, and any existing damage to the structures shall be noted. A copy of the video tape shall be presented to the Engineer for approval prior to commencing any work.

W. USE OF CITY WATER.

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.

X. DPR CONSTRUCTION PERMITS.

DPR construction permits are required for all work on parkland or on sidewalks adjacent to parks or other areas maintained by DPR.

Y. THE FUEL COST.

The contractor is notified that the fuel cost per gallon used in the formula under Sub-Article 26.2.8 of the Standard Construction Contract for Extra Work will be derived from the fuel price index for the United States East Coast published weekly by the United States Energy Information Administration ("USEIA"), and available on its website at <http://www.eia.gov/petroleum/gasdiesel/>. The USEIA-published cost per gallon for the applicable fuel on the East Coast for the week in which the first day of each calendar quarter during the contract term occurs (i.e., January 1st, April 1st, July 1st and September 1st) will be used in the reimbursement formula for all Extra Work invoiced that was performed during that calendar quarter. Should the USEIA stop publishing this fuel price index, the fuel cost per gallon will be determined by reference to a substitute index to be agreed upon by the Contractor and the City.

Z. 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 TRAFFIC STIPULATIONS

June 27, 2016

OCMC FILE NO: Bxec 16-183

CONTRACT NO: HWXS511

PROJECT: Reconstruction of West Tremont Step Street

LOCATION(S): West Tremont Avenue from Sedgwick Avenue to Cedar Avenue - Bronx

PERMISSION IS HEREBY GRANTED TO THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION AND ITS DULY AUTHORIZED AGENT, TO ENTER UPON AND RESTRICT THE FLOW OF TRAFFIC AT THE ABOVE LOCATION(S) FOR THE PURPOSE OF CARRYING OUT THE ABOVE NOTED PROJECT, SUBJECT TO THE STIPULATIONS, AS NOTED BELOW:

**A. SPECIAL STIPULATIONS**

1. **EMBARGOES** – A CONSTRUCTION EMBARGO WILL APPLY TO THOSE LOCATIONS BELOW WHICH FALL WITHIN THE **HOLIDAY EMBARGO** OR ANY OTHER SPECIAL EVENT EMBARGOES SUCH AS THE **(OTHER EMBARGOES IF APPLICABLE)** AS PUBLISHED BY THE BUREAU OF PERMIT MANAGEMENT AND CONSTRUCTION CONTROL.
2. **BIKE LANES** – IF WORK IS IN OR AFFECTING A BIKE LANE, THE PERMITTEE MUST POST ADVANCE WARNING SIGNS 350 FEET AND 200 FEET PRIOR TO THE WORK ZONE STATING "CONSTRUCTION IN BIKE LANE AHEAD PROCEED WITH CAUTION", AND ALSO POST A SIGN AT THE WORK ZONE STATING "CONSTRUCTION IN BIKE LANE PROCEED WITH CAUTION". SUCH SIGNS SHALL BE ORANGE, 3' X 3', DIAMOND-SHAPED WITH 4" BLACK LETTERING. SIGNS SHALL BE POSTED IN ACCORDANCE WITH THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
3. **BIKE SHARE STATIONS**: THE PERMITTEE SHALL NOT REMOVE, RELOCATE, DAMAGE OR DISRUPT THE OPERATION OF EXISTING BIKE SHARE STATIONS WITHOUT FIRST CONTACTING NYC BIKE SHARE AT 855-245-3311 FOR THEIR REQUIREMENTS PRIOR TO COMMENCING WORK.
4. **BUS STOPS** – THE PERMITTEE SHALL PROVIDE WRITTEN NOTICE TO NYC DOT OCMC AND NEW YORK CITY TRANSIT (NYCT) A MINIMUM OF FIVE (5) WEEKS IN ADVANCE FOR LANE/STREET CLOSURES THAT AFFECT BUS ROUTES/BUS STOPS.
5. **STREET LIGHTS / TRAFFIC SIGNALS**: THE PERMITTEE SHALL NOT REMOVE OR RELOCATE EXISTING STREET LIGHTS OR TRAFFIC SIGNALS WITHOUT FIRST OBTAINING APPROVAL FROM NYCDOT STREET LIGHTING / TRAFFIC SIGNALS UNIT.
6. **TRAFFIC CAMERAS, DETECTION/COMMUNICATION EQUIPMENT**: IF AT ANY TIME DURING THE APPROVED WORK, THE PERMITTEE ENCOUNTERS TRAFFIC SURVEILLANCE CAMERAS, DETECTION EQUIPMENT OR ANY TYPE OF COMMUNICATION EQUIPMENT (WIRELESS OR HARD-WIRED) ON ANY NYC DOT FACILITY, THAT IS NOT INCLUDED ON THE DESIGN/BUILD DRAWINGS, THE PERMITTEE SHALL IMMEDIATELY NOTIFY NYC DOT TRAFFIC MANAGEMENT BY PHONE AT 718-433-3390 OR 718-433-3340 AND VIA EMAIL AT [IMC@DOT.NYC.GOV](mailto:IMC@DOT.NYC.GOV) AND AWAIT DIRECTION PRIOR TO CONTINUING WORK.
7. **METERS** – THE PERMITTEE SHALL NOT REMOVE OR RELOCATE PARKING METERS WITHOUT FIRST OBTAINING APPROVAL FROM NYCDOT PARKING METER DIVISION AT 718-894-8651.
8. **TEST PITS** – THE BELOW TRAFFIC STIPULATIONS DO NOT APPLY TO TEST PIT WORK RELATED TO THIS CONTRACT. WORK HOURS AND OTHER REQUIREMENTS FOR TEST PIT OPERATIONS MAY DIFFER FROM THE STIPULATIONS IDENTIFIED BELOW. THE PERMITTEE SHALL BE REQUIRED TO OBTAIN SEPARATE PERMITS RELATED TO TEST PITS.
9. **TEMPORARY PARKING REGULATIONS/PAVEMENT MARKINGS** – THE PERMITTEE IS REQUIRED TO INSTALL, MAINTAIN AND REMOVE ALL NECESSARY TEMPORARY PARKING AND REGULATORY SIGNS AND PAVEMENT MARKINGS, AND RESTORE THEIR ORIGINAL CONDITION PER NYC DOT STANDARDS, PRIOR TO EXPIRATION OF THEIR PERMITS. THE PERMITTEE OR AGENCY PERFORMING PUBLIC OUTREACH SHALL POST AND MAINTAIN ADVISORY SIGNS A MINIMUM OF 48 HOURS PRIOR TO CHANGING EXISTING PARKING REGULATION SIGNS TO APPROVED TEMPORARY CONSTRUCTION PARKING REGULATION SIGNS. THE ADVISORY SIGNS SHOULD BE POSTED ON ALL POLES AND DRIVE RAILS ON THE SEGMENT AFFECTED, INDICATING THE DATE OF THE CHANGE, THE NEW REGULATIONS AND A TELEPHONE NUMBER TO OBTAIN MORE INFORMATION.
10. **ACCESS TO ADJUTING PROPERTIES** – THE PERMITTEE SHALL COORDINATE ALL ACTIVITIES WITH ADJUTING PROPERTY OWNERS TO ENSURE ACCESS IS PROVIDED TO/FROM ENTRANCES/DRIVEWAYS AT ALL TIMES.
11. **AUTHORIZED PARKING** – PRIOR TO PERFORMING WORK WHICH IMPACTS AUTHORIZED PARKING, THE PERMITTEE SHALL SUBMIT IN WRITING, AND COPY OCMC-STREETS, A REQUEST TO OCCUPY SPACE CURRENTLY USED BY AUTHORIZED VEHICLES. APPROVAL MUST BE RECEIVED FROM AUTHORIZED PARKING PRIOR TO OCCUPYING THESE AREAS.

NYC Department of Transportation

Bureau of Permit Management and Construction Control

30-30 Thomson Avenue – 2<sup>nd</sup> Floor South

Long Island City, NY 11101

T: 212.839.9621 F: 718.391.3631

[www.nyc.gov/dot](http://www.nyc.gov/dot)

12. **NOTIFICATION** – THE PERMITEE MUST AT LEAST TWO (2) WORKING DAYS BEFORE THE START OF CONSTRUCTION NOTIFY THE NYC FIRE DEPARTMENT, NYC POLICE DEPARTMENT, NYC EMS, LOCAL COMMUNITY BOARD, BOROUGH PRESIDENT'S OFFICE-CHIEF ENGINEER, NYCDOT OCMC OFFICE, AND ALL ADJUTING PROPERTY OWNERS.
13. **CONSTRUCTION INFORMATIONAL SIGNS** – THIS PROJECT REQUIRES A CONSTRUCTION PROJECT INFORMATIONAL SIGN (CPIS) IN ACCORDANCE WITH NYCDOT HIGHWAY RULE SECTION 2-02 (4) AND (5). CRITERIA AND A PROTOTYPE FOR THIS SIGN MAY BE FOUND ON THE NYCDOT WEBSITE AT:

[HTTP://WWW.NYC.GOV/HTML/DOT/DOWNLOADS/PDF/DOT\\_CPIS\\_DIRECTIONS.PDF](http://www.nyc.gov/html/dot/downloads/pdf/dot_cpis_directions.pdf)

14. **ENHANCED MITIGATIONS**

- o **ENHANCED MITIGATIONS FOR PEDESTRIAN FLOW**, INCLUDING METAL FENCING, SHALL BE PROVIDED TO ENSURE PEDESTRIANS STAY WITHIN THEIR DESIGNATED PATH/ROUTE. FLAGGERS SHALL BE PROVIDED TO ASSIST WITH PEDESTRIANS AT THE DESIGNATED CROSSWALK AREAS. THESE FLAGGERS SHALL BE ASSIGNED TO THIS FUNCTION ONLY.
- o **VARIABLE MESSAGE SIGNS (VMS)** SHALL BE PROVIDED FOR THIS PROJECT. THE LOCATIONS AND MESSAGES SHALL BE RECOMMENDED BY NYCDOT AND THEIR CONTRACTOR A MINIMUM OF TWO (2) WEEKS PRIOR TO WORK COMMENCING, FOR OCMC REVIEW AND APPROVAL.
- o **"NO STANDING ANYTIME-TEMPORARY CONSTRUCTION" SIGNS** AND TEMPORARY PAVEMENT MARKINGS SHALL BE INSTALLED AND MAINTAINED AS WARRANTED BY THE MAINTENANCE AND PROTECTION OF TRAFFIC (MPT) REQUIRED TO FACILITATE TRAFFIC MOVEMENTS THROUGH THE WORK ZONE. ALL TEMPORARY SIGNS AND PAVEMENT MARKINGS SHALL BE REMOVED UPON COMPLETION OF THE PROJECT.
- o **COMMUNITY OUTREACH** SHALL BE PROVIDED FOR THE DURATION OF THE PROJECT.

**B. MAINTENANCE AND PROTECTION OF TRAFFIC FOR THE RECONSTRUCTION OF WEST TREMONT AVENUE STEP STREET**

**1. WEST TREMONT AVENUE FROM SEDGWICK AVENUE TO CEDAR AVENUE**

- Work hours shall be as follows: 7:00 am to 6:00 pm, Monday to Friday.  
7:00 am to 6:00 pm, Saturday/Sunday.
- Contractors must maintain 5 ft. clear sidewalk at Sedgwick Avenue and do not obstruct bus stop.
- Contractors may full close step street on West Tremont Avenue. Prior to closing a 7 days notification must be in place.

**Special Notes:**

- ❖ Do Not block driveway to Con Edison Facility nor residence in the area at Fordham Place.
- ❖ Contractors may store material and equipment on East side of Cedar Avenue between West Tremont Avenue and West 179 Street.
- ❖ Prior to closing to step street a 7 days notification must go to NYPD, FDNY, and Community Board.

**C. GENERAL NOTES**

1. **THIS IS NOT A PERMIT.** THIS STIPULATION SHEET MUST BE SUBMITTED WITH ALL REQUESTS FOR PERMITS PERTAINING TO THE ABOVE CONTRACT AND PRESENT AT THE WORK SITE ALONG WITH ALL ACTIVE CONSTRUCTION PERMITS WHEN THE APPROVED WORK IS BEING PERFORMED.
2. THE CONTRACTOR MUST COMPLY WITH ALL CONSTRUCTION EMBARGOS ISSUED BY THE NYCDOT INCLUDING THE HOLIDAY EMBARGO.
3. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE NYCDOT SPECIAL EVENTS UNIT AS IDENTIFIED BELOW:

**A. STREET FAIRS / FESTIVALS**

- ALL EXCAVATIONS MUST BE PLATED WITH SKID RESISTANT PLATES.
- PLATES MUST BE RECESSED AND FLUSH WITH PAVEMENT.
- ALL PAVEMENT DEFECTS MUST BE CORRECTED WITHIN OR ADJACENT TO THE WORK ZONE.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DEFICITS WITHIN THE IMMEDIATE VICINITY IF NYCDOT STREET & ARTERIAL MAINTENANCE CANNOT MAKE REPAIRS DUE TO PROJECT INTERFERENCE (AS DETERMINED BY NYCDOT).
- ALL EQUIPMENT, TRAILERS AND MATERIAL STORAGE MUST BE REMOVED.

**B. RUNNING / WALKING / BIKING EVENTS**

- ALL EXCAVATIONS MUST BE BACKFILLED AND PAVED OR PLATES MUST BE RECESSED AND PAVED OVER FLUSH WITH PAVEMENT.

- ALL PAVEMENT DEFECTS MUST BE CORRECTED WITHIN OR ADJACENT TO THE WORK ZONE.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DEFECTS WITHIN THE IMMEDIATE VICINITY IF NYCDOT STREET & ARTERIAL MAINTENANCE CANNOT MAKE REPAIRS DUE TO PROJECT INTERFERENCE (AS DETERMINED BY NYCDOT).
- ALL EQUIPMENT, TRAILERS AND MATERIAL STORAGE MUST BE REMOVED.

**C. PARADES**

- ALL EXCAVATIONS MUST BE BACKFILLED AND PAVED OR PLATES MUST BE RECESSED AND PAVED OVER FLUSH WITH PAVEMENT.
- FORMATION AND DISPERSAL AREA PLATES MUST BE RECESSED AND FLUSH WITH PAVEMENT (PLATE MUST BE SKID RESISTANT).
- ALL PAVEMENT DEFECTS MUST BE CORRECTED WITHIN OR ADJACENT TO THE WORK ZONE.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DEFECTS WITHIN THE IMMEDIATE VICINITY IF NYCDOT STREET & ARTERIAL MAINTENANCE CANNOT MAKE REPAIRS DUE TO PROJECT INTERFERENCE (AS DETERMINED BY NYCDOT).
- ALL EQUIPMENT, TRAILERS AND MATERIAL STORAGE MUST BE REMOVED.

**D. MAYORAL EVENTS**

- ALL EXCAVATIONS MUST BE BACKFILLED AND PAVED OR PLATES MUST BE RECESSED AND PAVED OVER FLUSH WITH PAVEMENT.
- ALL PAVEMENT DEFECTS MUST BE CORRECTED WITHIN OR ADJACENT TO THE WORK ZONE.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DEFECTS WITHIN THE IMMEDIATE VICINITY IF NYCDOT STREET & ARTERIAL MAINTENANCE CANNOT MAKE REPAIRS DUE TO PROJECT INTERFERENCE (AS DETERMINED BY NYCDOT).
- ALL EQUIPMENT, TRAILERS AND MATERIAL STORAGE MUST BE REMOVED.

4. ALL RELOCATION WORK BY THE UTILITIES SUCH AS: CON EDISON, TELEPHONE, GAS AND CABLE COMPANIES SHALL PRECEDE THE CONTRACTORS' START OF WORK ON ALL AFFECTED ROADWAYS IN THE IMPACTED CONTRACT AREA.
5. THE CONTRACTOR IS ADVISED THAT OTHER CONTRACTORS MAY BE WORKING IN THE GENERAL AREA DURING THE TERM OF THIS STIPULATION. IN WHICH EVENT, THE CONTRACTOR MAY REQUIRE MODIFICATIONS BY THE OCMC-STREETS.
6. THE PERMITEE IS NOT AUTHORIZED TO ENTER, OCCUPY OR USE ANY PUBLICLY-OWNED OR PRIVATELY OWNED, NON-PAVED, LANDSCAPE OR NON-LANDSCAPED LOCATION WITHOUT SPECIFIC WRITTEN PERMISSION. WHEN THE LOCATION IS WITHIN THE RIGHT-OF-WAY OF A LIMITED-ACCESS ARTERIAL HIGHWAY, WRITTEN APPROVAL FROM THE NYCDOT OCMC-HIGHWAYS IS REQUIRED. WHEN THE LOCATION IS WITHIN THE RIGHT-OF-WAY OF A PUBLIC STREET OR PUBLIC PARK, WRITTEN APPROVAL FROM THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION OR NEW YORK CITY DEPARTMENT OF PARKS AND RECREATION IS REQUIRED. WHEN THE LOCATION IS WITHIN THE RIGHT-OF-WAY OF ANY OTHER JURISDICTION SUCH AS PRIVATE PROPERTY, STATE, FEDERAL ETC., IT IS THE PERMITEE'S RESPONSIBILITY TO DETERMINE THE PROPERTY OWNER AND OBTAIN THE WRITTEN APPROVAL.
7. THE PERMITEE SHALL ADHERE TO THE NYCDOT BUREAU OF BRIDGES' SPECIAL PROVISIONS FOR LANDSCAPE PROTECTION, MAINTENANCE AND RESTORATION, ITEMS 1.18.15 THROUGH 1.18.19, WHENEVER AND WHEREVER ANY OF THE PERMITEE'S ACTIVITIES OCCUR WITHIN A LIMITED ACCESS ARTERIAL HIGHWAY RIGHT-OF-WAY.
8. NO DEVIATION OR DEPARTURE FROM THESE STIPULATIONS WILL BE PERMITTED WITHOUT THE PRIOR WRITTEN APPROVAL FROM THE OCMC-STREETS. REQUEST FOR SUCH MODIFICATIONS SHALL BE SUBMITTED TO THE OFFICE OF THE OCMC-STREETS, NEW YORK CITY DEPARTMENT OF TRANSPORTATION, A MINIMUM OF TWENTY (20) DAYS IN ADVANCE FOR CONSIDERATION.
9. FOR ANY CONSTRUCTION ACTIVITY RESULTING IN THE FULL CLOSURE OF A ROADWAY FOR MORE THAN 180 CONSECUTIVE CALENDAR DAYS, THE CONTRACTOR MUST PRODUCE AND SUBMIT A COMMUNITY REASSESSMENT, IMPACT AND AMELIORATION (CRIA) STATEMENT TO NYCDOT PLANNING AND OBTAIN THEIR APPROVAL BEFORE APPLYING FOR PERMITS, IN COMPLIANCE WITH THE PROVISIONS OF **LOCAL LAW 24 STREET CLOSURE LAW**.
10. FOR THIS PROJECT THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN ALL NECESSARY ADVANCE WARNING AND DETOUR SIGNS, TEMPORARY CONTROL DEVICES, BARRICADES, LIGHTS AND FLASHING ARROW BOARDS IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," THE TYPICAL SCHEMES INCLUDED IN THIS SPECIFICATION; AND AS ORDERED BY THE ENGINEER-IN-CHARGE AND THE OCMC-STREETS.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING HIS CONSTRUCTION SIGNAGE. THE IDENTIFICATION SHALL INCLUDE THE CONTRACTOR'S NAME, SPONSORING AGENCY NAME AND THE CONTRACT NUMBER. THE IDENTIFICATION SHALL BE PLACED ON THE BACK OF THE SIGN. THE LETTERING SHALL BE THREE (3) INCHES HIGH.
12. THE OCMC-STREETS RESERVES THE RIGHT TO VOID OR MODIFY THESE STIPULATIONS SHOULD CONSTRUCTION FAIL TO COMMENCE WITHIN TWO (2) YEARS OF THE SIGNED DATE OF THESE STIPULATIONS.

  
**GARY SMALLS**  
DIRECTOR  
OCMC-STREETS

  
**MILAGROS RIVERA**  
PROJECT MANAGER - BRONX  
OCMC-STREETS

THE CITY OF NEW YORK DEPARTMENT OF SANITATION

Interpretive Memorandum # 2

The Contractor is notified that the following Department of Sanitation (DOS) Interpretive Memorandum # 2 does not guarantee that a temporary stockpile location will be approved for this project. In addition, the Department of Design and Construction (DDC) reserves the right to rescind approval for any temporary stockpile location at any time. No payment will be made to the Contractor if either a temporary stockpile location is not approved for this project, or DDC rescinds an approval for any reason.



# THE CITY OF NEW YORK Department of Sanitation

S. ELIZABETH SEARLE  
Assistant Commissioner  
for Legal Affairs

Bureau of Legal Affairs  
44 Beaver Street  
New York, NY 10004  
Telephone (212) 837-8110  
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## Department of Sanitation Rules and Regulations Governing Non-Putrescible Solid Waste Transfer Stations

### INTERPRETIVE MEMORANDUM # 2 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 materials") from a contract site or to remove from a contract site construction materials resulting from construction, demolition, alteration, repair or renovation of structures, 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 "Department") will not deem its Rules and Regulations Governing Non-Putrescible Solid Waste Transfer Stations (the "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.

#### 1. When No Transfer Station Permit is Required

Where a City contractor has:

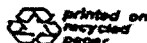
- (a) set aside an area of a contract site for stockpiling construction materials excavated from and/or intended for that site; or
- (b) received written approval from the contracting agency for an off-site stockpiling location,

the Department will not deem such stockpiling location a transfer station and will not require the contractor to obtain a transfer station permit so long as: -

- (c) no construction materials or debris from off the contract site are received at the designated location for subsequent 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 Department 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.



Help Reduce  
New York's Waste.





*Example: Street Construction Projects*

As part of a contract for street 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 materials. Both ends 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 procedures set out in this memorandum are followed.

2. Procedure for Exception.

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 restoration 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 will ensure the contractor's compliance. The letter to be submitted must 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 \_\_\_\_\_ (the "Agency")  
has awarded a construction contract to \_\_\_\_\_ (Contractor)  
\_\_\_\_\_ (the "Contractor") for work to be performed at \_\_\_\_\_ (Contract  
Site) \_\_\_\_\_.

a. This Agency has approved the following locations to be used by the Contractor for the temporary storage, processing and/or stockpiling of construction materials (the "Stockpiling Locations") excavated from the construction site or intended for the construction site:

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b. The terms of the contract require the Contractor to clean up and restore the Stockpiling Locations, whether on or off the contract site, at or before the completion 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 earlier, 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 circumstances 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 whether 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.

**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 5, 2009), Water Main Standard Drawings of the Department of Environmental Protection (latest revisions), and Specifications For Trunk Main Work of the Department of Environmental Protection (dated July 2014) shall be included as part of the contract documents. These said specifications and standard drawings are hereby revised under the following section headings:

- A. NOTICE TO BIDDERS
- B. REVISIONS TO THE STANDARD SEWER AND WATER MAIN SPECIFICATIONS
- C. REVISIONS TO THE SPECIFICATIONS FOR TRUNK MAIN WORK

**A. NOTICE TO BIDDERS**

- (1) 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.
- (2) 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.
- (3) 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.
- (4) 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.
- (5) 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.
- (6) 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.
- (7) 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.
- (8) The Contractor is notified that the fuel cost per gallon used in the formula under **Sub-Article 26.2.8** of the Standard Construction Contract for **Extra Work** will be derived from the fuel price index for the United States East Coast published weekly by the United States Energy Information Administration ("USEIA"), and available on its website at <http://www.eia.gov/petroleum/gasdiesel/>. The USEIA published cost per gallon for the applicable fuel on the East Coast for the week in which the first day of each calendar quarter during the contract term occurs (i.e., January 1<sup>st</sup>, April 1<sup>st</sup>, July 1<sup>st</sup> and September 1<sup>st</sup>) 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.
- (9) 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.

**DATED: April 28, 2017**

**PROJECT ID.: HWXS511**

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 (212) 839-3799.

(NO FURTHER TEXT ON THIS PAGE)

**B. REVISIONS TO THE STANDARD SEWER AND WATER MAIN SPECIFICATIONS**

- (1) **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. Peter Gordon, P.E., Chief, Linear Capital Program Management Division at the Department of Environmental Protection, 59-17 Junction Blvd., 3rd floor low rise, Corona N.Y. 11368, at least thirty (30) days prior to the start of construction.

(2) N.Y.C. DEPARTMENT OF TRANSPORTATION

The Contractor shall notify Mr. Michael Lofesse/Ghanshyam Patel - Signal/Street Lighting Operations, 34-02 Queens Blvd., Long Island City, N.Y. 11101 at (212) 839-3799/ (212) 839-3359, at least seventy-two (72) hours prior to the start of construction.

- (2) **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. HWXS511

- (3) **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. HWXS511.

**C. REVISIONS TO THE SPECIFICATIONS FOR TRUNK MAIN WORK**

- 1) **Refer** to Part 1 – Furnishing And Delivering Steel Pipes And Appurtenances 30 Inches In Diameter And Larger, Section 11. Fabrication:, Page 4;  
**Add** the following to Section 11:

All steel water mains shall be spiral welded pipes, and all steel water main fittings shall be fabricated from qualified spiral welded pipe. Can type pipe is not acceptable.

- 2) **Refer** to Part 1 – Furnishing And Delivering Steel Pipes And Appurtenances 30 Inches In Diameter And Larger, Section 13. Special Fittings:, Page 5;  
**Add** the following to Section 13:

The steel reducer shall have a length of seven (7) feet for every twelve (12) inches reduction in diameter.

**END OF SECTION**

**This Section consists of four (4) pages.**

**HAZ - PAGES**

**SPECIFICATIONS FOR HANDLING,  
TRANSPORTATION AND DISPOSAL  
OF NONHAZARDOUS AND POTENTIALLY  
HAZARDOUS CONTAMINATED MATERIALS**

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**NOTICE**

THE PAGES CONTAINED IN THIS SECTION ARE ISSUED FOR THE PURPOSE OF SPECIFYING THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND HEREBY MADE PART OF SAID CONTRACT DOCUMENTS.



**SPECIFICATIONS FOR  
HANDLING, TRANSPORTATION AND DISPOSAL  
OF NON-HAZARDOUS AND POTENTIALLY HAZARDOUS  
CONTAMINATED MATERIALS**

**RECONSTRUCTION OF WEST TREMONT AVENUE STEP STREET  
WEST TREMONT AVENUE BETWEEN SEDGWICK AVENUE AND FORDHAM  
PLACE**

**BOROUGH OF THE BRONX**

**Capital Project ID: HWXS511**

**Prepared By:**



**30-30 Thomson Avenue, 3<sup>rd</sup> Floor  
Long Island City, New York 11101**

**May 3, 2017**

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## **ITEM 8.01 C1 HANDLING, TRANSPORTING, & 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 on-site 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 C1.1 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 C1. 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 Management, Office of Environmental and Geotechnical Services (OEGS) 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 non-hazardous 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 Management, OEGS for review, a Material Handling Plan (MHP). The MHP must be approved by the Program Management, OEGS, 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 Management, OEGS.

#### **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 W1 – Removal, Treatment and Discharge/Disposal of Contaminated Water.
5. Provide and operate field organic vapor test equipment, a PID or a flame ionization detector (FID), to detect general organic vapor levels at intervals of approximately 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 Management, OEGS 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 Management, OEGS 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 Management, OEGS, 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 C1.3.B1, 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 C1 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 non-hazardous 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:*

<u>ITEM NUMBER</u>	<u>ITEM</u>	<u>PAYMENT UNIT</u>
8.01 C1	Handling, Transporting, and Disposal of Non-Hazardous Contaminated Soil	Tons



**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) and an Investigation Health and Safety Plan to the Program Management, Office of Environmental and Geotechnical Services (OEGS) for review and approval. The SSP/FSP shall include the name, address, DOH's ELAP status, and telephone numbers of the proposed laboratory. The SSP/FSP shall also include training and experience of the personnel who will collect the samples. The Investigation HASP shall identify actual and potential hazards associated with planned sampling field activities and stipulate appropriate health and safety procedures, so as to minimize field personnel exposure to physical, biological, chemical hazards that may be present in the all sampling media.
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 Management, OEGS 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:
  1. Sample identification number
  2. Sample location
  3. Field observation
  4. Sample type
  5. Analyses
  6. Date/time of collection
  7. Collector's name
  8. Sample procedures and equipment utilized
  9. Date sent to laboratory and name of laboratory
8. 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.
9. 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.
10. 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 C2 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 C2	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 C2 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 Management, Office of Environmental and Geotechnical Services (OEGS).

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 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 Management, OEGS for review, a Material Handling Plan (MHP). The MHP must be approved by the Program Management, OEGS, 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 Management, OEGS 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 Management, OECS.**

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 H1.3.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 C1 – 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:*

<u>ITEM NUMBER</u>	<u>ITEM</u>	<u>PAYMENT UNIT</u>
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 Management, Office of Environmental and Geotechnical Services (OEGS).

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 Management, OEGS 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, a written HASP, as specified herein, to Program Management, OEGS for review and comment. The written HASP shall be submitted, within thirty (30) calendar days after the availability of analytical results of the soil and groundwater testing, as required under Section 8.01 C2 and Section 8.01 W2. The Contractor shall make all necessary revisions required by Program Management, OEGS and resubmit the HASP to the Program Management, OEGS for acceptance. Start-up work for the project will not be permitted until written acceptance has been issued by the Program Management, OEGS.
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 C1 – Handling, Transporting and Disposal of Non-Hazardous Contaminated Soils, 8.01 C2 – 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:*

<u>ITEM NUMBER</u>	<u>ITEM</u>	<u>PAYMENT UNIT</u>
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 Management, Office of Environmental and Geotechnical Services (OEGS) 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 Management, OEGS for review, a Water Handling Plan (WHP). The WHP must be approved by the Program Management, OEGS, 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 DETAILS**

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 Management, OEGS, 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 W1 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:*

<u>ITEM NUMBER</u>	<u>ITEM</u>	<u>PAYMENT UNIT</u>
8.01 W1	Removal, Treatment and Disposal/Discharge of Contaminated Water	Day

## ITEM 8.01 W2 SAMPLING AND TESTING OF CONTAMINATED WATER

### 8.01 W2.1 WORK TO INCLUDE

#### A. Description

The work 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, and in accordance with the DDC-approved SSP/FSP and the Investigation HASP, as specified in 8.01 C2. The quality of the data is the Contractor's responsibility. Any additional testing required by the Federal, State and/or disposal facilities 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:*

<u>ITEM NUMBER</u>	<u>ITEM</u>	<u>PAYMENT UNIT</u>
8.01 W2	Sampling and Testing of Contaminated Water	Set

**ATTACHMENT 1: NYCDEP 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 <sup>1</sup>	Daily Limit	Units	Sample Type	Monthly Limit
Non-polar material <sup>2</sup>	50	mg/l	Instantaneous	---
pH	5-11	SU's	Instantaneous	---
Temperature	< 150	Degree F	Instantaneous	---
Flash Point	> 140	Degree F	Instantaneous	---
Cadmium	2	mg/l	Instantaneous	---
	0.69	mg/l	Composite	--
Chromium (VI)	5	mg/l	Instantaneous	---
Copper	5	mg/l	Instantaneous	---
Lead	2	mg/l	Instantaneous	---
Mercury	0.05	mg/l	Instantaneous	---
Nickel	3	mg/l	Instantaneous	---
Zinc	5	mg/l	Instantaneous	---
Benzene	134	ppb	Instantaneous	57
Carbontetrachloride	---	---	Composite	---
Chloroform	---	---	Composite	---
1,4 Dichlorobenzene	---	---	Composite	---
Ethylbenzene	380	ppb	Instantaneous	142
MTBE (Methyl-Tert-Butyl-Ether)	50	ppb	Instantaneous	---
Naphthalene	47	ppb	Composite	19
Phenol	---	---	Composite	---
Tetrachloroethylene (Perc)	20	ppb	Instantaneous	---
Toluene	74	ppb	Instantaneous	28
1,2,4 Trichlorobenzene	---	---	Composite	---
1,1,1 Trichloroethane	---	---	Composite	---
Xylenes (Total)	74	ppb	Instantaneous	28
PCB's (Total) <sup>3</sup>	1	ppb	Composite	---
Total Suspended Solids (TSS)	350 <sup>4</sup>	mg/l	Instantaneous	---
CBOD <sup>5</sup>	---	---	Composite	---
Chloride <sup>5</sup>	---	---	Instantaneous	---
Total Nitrogen <sup>5</sup>	---	---	Composite	---
Total Solids <sup>5</sup>	---	---	Instantaneous	---



- 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 PCB=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 PCB=s must be done by EPA method 608 with MDL= $\leq$ 65 ppt. PCB's (total) is the sum of PCB-1242 (Arochlor 1242), PCB-1254 (Arochlor 1254), PCB-1221 (Arochlor 1221), PCB-1232 (Arochlor 1232), PCB-1248 (Arochlor 1248), PCB-1260 (Arochlor 1260) and PCB-1016 (Arochlor 1016).
- 4 For discharge  $\geq$  10,000 gpd, the TSS limit is 350 mg/l. For discharge < 10,000gpd, 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.

**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 SUBSURFACE CORRIDOR INVESTIGATION REPORT**

**-Final-**  
**Phase II Subsurface Corridor Investigation Report**  
**For**  
**Reconstruction of West Tremont Avenue Step Street**  
**West Tremont Avenue between Sedgwick Avenue and Fordham Place**  
**Bronx, New York**

DDC PROJECT NO. HWXS511  
WOL NO. 11462-LBA-4-10494  
CONTRACT REGISTRATION NO. 20151405733

Prepared for:



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June 10, 2016

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## EXECUTIVE SUMMARY

On behalf of the New York City Department of Design and Construction (NYCDDC), Louis Berger & Assoc., P.C. (Louis Berger) conducted a Phase II Subsurface Corridor Investigation (SCI) of the HWXS511 Corridor in preparation for replacement-in-kind of the step street, in an effort to maintain pedestrian safety and access. The Corridor location is identified on the Topographic Corridor Location Map on Figure 1. The Corridor consists of the West Tremont Avenue step street in the Morris Heights section of the Borough of Bronx, New York. It is approximately 90-foot long and comprised of the following street segment:

Street Segment	Length (feet)
West Tremont Avenue Step Street between Sedgwick Avenue and approximately 15 feet southeast of Fordham Place	90

The Phase II SCI was conducted to determine if the Corridor's environmental condition may potentially impact proposed construction activities. Based on the review of available information provided by the NYCDDC, the proposed depth of excavation for the reconstruction of West Tremont Avenue step street ranges from approximately 3 feet below grade (ftbg) for reconstruction of the stairs to a maximum of 13 ftbg for replacement of retaining walls. In order to adequately characterize material along the length of the Corridor, two (2) borings were proposed to assess soil to be excavated for waste characterization purposes.

Louis Berger prepared a Phase I Corridor Assessment Report (CAR) dated March 17, 2016, which presented the results of a survey conducted along the Corridor to assess the presence of potential sources of subsurface contamination within, and in the immediate vicinity of, the Corridor. The Phase I CAR identified two (2) final "High" risk sites and one (1) final "Moderate" risk site with respect to potential impact to the Corridor (soil and/or groundwater), and recommended the completion of a Phase II SCI. The Phase II SCI was conducted on May 11, 2016 and consisted of the following components:

### Scope of Work

- The advancement of two (2) soil borings (SB01 and SB02) utilizing a Geoprobe® direct push drill rig and a Vactron®, air-knife and a hand auger at both locations to a terminal depth of 15 ftbg. To ensure the clearance of sensitive subsurface utility lines and features, SB01 and SB02 were pre-cleared to a depth of 6 ftbg via evasive methods such as a Vactron®, air-knife and a hand auger;
- Field screening, classification and identification of soils from surface grade to the terminal depth of each boring. Soil samples were visually classified in the field using the Burmister Classification, Unified Soil Classification System (USCS), and Munsell Rock Color charts. Field screening of soils consisted of visual and olfactory indicators of impacts, as well as screening with a photoionization detector (PID);

- The collection of one (1) grab soil sample from each boring. The grab samples were analyzed for Target Compound List (TCL) Volatile Organic Compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260C. The grab soil samples were collected from the bottom 6-inch interval of borings (where recovery allowed) since groundwater was not encountered in any of the borings and evidence of contamination was not observed;
- The collection of one (1) composite waste characterization soil sample from each boring. The waste characterization sample was a composite from the entire soil column (ground surface to end of boring). The waste characterization sample was analyzed for Polycyclic Aromatic Hydrocarbons (PAHs) by USEPA Method 8270C, Total Petroleum Hydrocarbons (TPH-DRO/GRO) by USEPA 8015B, polychlorinated biphenyls (PCBs) by USEPA Method 8082A/608, TCLP Metals (RCRA 8) by USEPA Method 1311/6010B, and Resource Conservation and Recovery Act (RCRA) Characteristics, including ignitability reactivity and corrosivity, by USEPA Methods 9012B/9034, 1030/1010A, and 9045C, as well as Paint Filter Test by USEPA Method 9095B, for waste classification purposes; and,
- The preparation of this report, which includes tables summarizing the laboratory analytical results and figures depicting boring locations, significant site features and, if applicable, contamination occurrence and distribution.

In order to evaluate subsurface soil quality for waste characterization purposes, laboratory analytical results of grab and composite soil samples were compared with regulatory standards identified in: (1) New York State Department of Environmental Conservation (NYSDEC) Subpart 375-6: Remedial Program Unrestricted, Restricted-Residential, and Commercial Use (Track 1 and Track 2) Soil Cleanup Objectives (SCOs); (2) NYSDEC CP-51 Soil Cleanup Guidance Supplemental Soil Cleanup Objectives (SSCOs) to NYSDEC Subpart 375-6; and/or (3) Toxicity Characteristic Regulatory Levels for Hazardous Waste published in RCRA and 6 NYCRR Part 371.

Based on the evaluation of the field screening data and the laboratory analytical results, and a comparison to applicable regulatory standards, the following findings are presented:

### **Findings**

- No visual or olfactory evidence of contamination was observed in the soil and PID readings were not detected at any boring location;
- The Corridor was found to be underlain by soils comprised mostly of moderate brown medium to fine sand with little silt and little coarse to fine gravel. Anthropogenic fill material was encountered at both boring locations from grade surface to 10 ftbg in SB01 and from grade surface to 6 ftbg in SB02. The fill material was comprised of moderate brown medium to fine sand with little silt and little coarse to fine gravel. Construction debris in the form of brick and gravel was observed within the fill layer. Groundwater was not encountered at any of the boring locations. Bedrock was not encountered at any of the

boring locations; however, evidence of decomposed bedrock was observed in both borings from approximately 10 to 15 feet bgs;

- No VOCs were detected above the laboratory's reporting limits in any of the soil samples collected as part of this Phase II SCI;
- No PAHs were detected above the laboratory's reporting limits in any of soil samples collected as a part of this Phase II SCI;
- No PCBs were detected above the laboratory's reporting limits in any of the soil samples collected as part of this Phase II SCI;
- Waste characterization laboratory results indicate that TCLP barium was detected in soil samples SB01 and SB02, and TCLP lead was detected in soil sample SB01. These concentrations were observed to be below RCRA Hazardous Waste Levels; therefore, the soil samples collected from the Corridor do not exhibit evidence of the hazardous waste characteristic for toxicity;
- No TPHs were detected above the laboratory's reporting limits in any of the soil samples collected as part of this Phase II SCI; and,
- The analytical laboratory results of the soil samples show that none of the RCRA parameters (reactivity, ignitability, or corrosivity) were detected or exceeded. Therefore, results of these analyses indicate that the soil samples collected from the Corridor do not exhibit evidence of hazardous waste characteristics.

Based on the results of the field investigation and laboratory analytical results, the following conclusions and recommendations are provided:

### **Conclusions**

- The Corridor was observed to be underlain by anthropogenic fill material to approximately 10 ftbg at SB01 and to approximately 6 ftbg at SB02. However, it should be noted that PAHs, which are typically found in such fill material, were not detected above the lab's reporting limits in the soil samples collected beneath the Corridor; and,
- Laboratory results indicate that the soil samples collected beneath the Corridor do not exhibit evidence of hazardous waste characteristics.

### **Recommendations**

- The Contract documents should identify provisions for managing, handling, transporting and disposing of non-contaminated, non-hazardous soil. 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;

- 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 into the ambient environment as a direct result of construction activities;
- Groundwater was not encountered during the Phase II SCI activities. However, if dewatering is necessary, the contractor will be required to obtain a NYCDEP sewer discharge permit and perform sampling and laboratory analysis prior to discharge into the sanitary and combined sewers;
- In addition, if discharge into storm sewers, which ultimately discharge into a surface water body, is required during dewatering, it may be performed under the appropriate NYSDEC State Pollutant Discharge Elimination System (SPDES) permit. Additional sampling and laboratory analysis may be required to satisfy NYSDEC requirements prior to discharge into storm sewers; and
- Before beginning any excavation activity, the contractor should submit a site-specific health and safety plan (HASP) that will meet the requirements set forth by the Occupational, Safety and Health Administration (OSHA), the NYSDOH and any other applicable regulations. The HASP should identify the possible locations 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 metals).

## 1.0 INTRODUCTION

On behalf of the New York City Department of Design and Construction (NYCDDC), Louis Berger & Assoc., P.C. (Louis Berger) conducted a Phase II Subsurface Corridor Investigation (SCI) of the HWXS511 Corridor in preparation for replacement-in-kind of the step street, in an effort to maintain pedestrian safety and access. The Corridor location is identified on the Topographic Corridor Location Map on Figure 1. The Corridor consists of the West Tremont Avenue step street in the Morris Heights section of the Borough of Bronx, New York. It is approximately 90 feet long and comprised of the following street segment:

Street Segment	Length (feet)
West Tremont Avenue Step Street between Sedgwick Avenue and approximately 15 feet southeast of Fordham Place	90

The Phase II SCI was conducted to determine if the Corridor's environmental condition may potentially impact proposed construction activities. Based on the review of available information provided by the NYCDDC, the proposed depth of excavation for the reconstruction of the West Tremont Avenue step street ranges from approximately 3 feet below grade (ftbg) for the reconstruction of the stairs to a maximum of 13 ftbg for the replacement of retaining walls. In order to adequately characterize material along the length of the Corridor, two (2) borings were proposed to assess soil to be excavated for waste characterization purposes.

### 1.1 Summary of Previous Environmental Investigations

Louis Berger prepared a Phase I Corridor Assessment Report (CAR) for the Corridor on March 17, 2016. The Corridor Assessment process involved conducting Corridor reconnaissance to document current property use and conditions; a review of historical Sanborn Fire Insurance Maps to document historical property usage; and a review of a regulatory agency database report to identify Corridor properties and adjoining sites of potential environmental concern.

The sites identified from Corridor reconnaissance, historical map review and environmental database report evaluation were placed in a Risk Category of "High", "Moderate", or "Low", in accordance with NYCDDC Risk Criteria. Based on modifying information, such as sites with spills that have been closed by the NYSDEC, sites identified on one or more databases with no evidence or records of spills, or older sites that were redeveloped or restored such that they no longer posed significant risks, Louis Berger recommended that one (1) of the initial 41 "High" risk sites be reclassified as a "Moderate" risk site and 38 of the 41 initial "High" risk sites be reclassified as "Low" risk sites. Therefore, the final evaluation has identified two (2) final "High" risk sites and one (1) final "Moderate" risk site with respect to potential impact on the project Corridor.

The March 17, 2016 Phase I CAR identified two (2) final "High" risk sites and one (1) final "Moderate" risk site with respect to potential impact on the Corridor. The final "High" and "Moderate" risk sites are listed below:

**"High" Risk Sites:**

No.	Facility Name	Address	Map ID
1	Consolidated Edison of NY	1823 Sedgwick Avenue	H#1
2	Apartment Building (former garage)	1839 Sedgwick Avenue	H#2

**"Moderate" Risk Site:**

No.	Facility Name	Address	Map ID
1	W Tremont Sedgwick Houses (closed spills and active tank)	228 West Tremont Avenue	M#1

**1.2 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 Zebra Technical Services, LLC (Zebra) of Lynbrook, New York. Oversight of drilling activities was performed by Mr. Nevin Diehl, Environmental Technician of Louis Berger. Laboratory analyses were provided by Hampton-Clarke/Veritech (HC-V) of Fairfield, New Jersey which is a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified analytical laboratory (No. 11408). Field-derived Quality Assurance/Quality Control (QA/QC) samples (i.e., blind duplicates, equipment/rinsate blanks, and trip blanks) were not collected for this project. The field investigation was conducted on May 11, 2016 and consisted of the following components:

- The advancement of two (2) soil borings (SB01 and SB02) utilizing a Geoprobe® direct push drill rig and a Vactron®, air-knife and a hand auger at both locations to a terminal depth of 15 ftbg. To ensure the clearance of sensitive subsurface utility lines and features, SB01 and SB02 were pre-cleared to a depth of 6 ftbg via evasive methods such as a Vactron®, air-knife and a hand auger;
- Field screening, classification and identification of soils from the surface grade to terminal depth of each boring. Soil samples were visually classified in the field using the Burmister Classification, Unified Soil Classification System (USCS), and Munsell Rock Color charts. Field screening of soils consisted of visual and olfactory indicators of impacts, as well as screening with a photoionization detector (PID);
- The collection of one (1) grab soil sample from each boring. The grab samples were analyzed for Target Compound List (TCL) Volatile Organic Compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260C. The grab soil samples were collected from the bottom 6-inch interval of borings (where recovery allowed) since groundwater was not encountered in any of the borings and evidence of contamination was not observed;

- The collection of one (1) composite waste characterization soil sample from each boring. The waste characterization sample was a composite from the entire soil column (ground surface to end of boring) since groundwater was not encountered. The waste characterization sample was analyzed for Polycyclic Aromatic Hydrocarbons (PAHs) by USEPA Method 8270C, Total Petroleum Hydrocarbons (TPH-DRO/GRO) by USEPA 8015B, polychlorinated biphenyls (PCBs) by USEPA Method 8082A/608, TCLP Metals (RCRA 8) by USEPA Method 1311/6010B, and Resource Conservation and Recovery Act (RCRA) Characteristics, including ignitability reactivity and corrosivity, by USEPA Methods 9012B/9034, 1030/1010A, and 9045C, as well as Paint Filter Test by USEPA Method 9095B, for waste classification purposes; 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.

## 2.0 CORRIDOR INFORMATION

### 2.1 Corridor Location, Description and Use

The 90-foot long Corridor is located in the Morris Heights section of the Borough of Bronx, New York, and consists of the following street segment:

Street Segment	Length (feet)
West Tremont Avenue Step Street between Sedgwick Avenue and approximately 15 feet southeast of Fordham Place	90

A map of the Corridor area is presented as Figure 2.

The Corridor consists of concrete steps that is used for pedestrian traffic between Sedgwick Avenue and Fordham Place. The immediate area in the vicinity of the Corridor is developed with paved roadways and existing infrastructure systems, exhibits evidence of utilities, such as manholes, pavement scars, utility mark-outs, and valve covers throughout the roadway. This indicates the presence of buried utilities, including gas, sewer, water, electric and communication. Additionally, overhead electrical lines are present along the Corridor.

### 2.2 Description of Surrounding Properties

The Corridor is primarily surrounded by apartment buildings, institutional properties, public parks, and some commercial properties. Public School 230/Intermediate School 229 Dr. Roland N. Patterson and Public School 109 Sedgwick are located approximately 305 feet west-northwest of the western end of the Corridor, and approximately 320 feet south-southeast of the eastern end of the Corridor, respectively. Metro-North Railroad's Hudson Line runs north along the east shore of the Harlem River, with the Morris Heights Station is located approximately 360 feet northwest of the western end of the Corridor. The Roberto Clemente State Park is located between the Metro-North tracks and the Harlem River, approximately 440 feet northwest of the western end of the Corridor.

### 2.3 Corridor and Regional Topographic Setting

Based on review of the United States Geologic Survey (USGS) 7.5-minute Topographic Quadrangle Map for Central Park (1995), the Corridor exhibits a topographic elevation change of approximately 17 feet along its length. The approximate elevation of the Corridor ranges from 66 feet above mean sea level (msl) by West Tremont Avenue and Sedgwick Avenue, which represents the top of the step street, to 30 feet above msl by West Tremont Avenue and Fordham Place, which represents the bottom of the step street. Surface runoff is expected to follow the step street slope from West Tremont Avenue and Sedgwick Avenue to West Tremont Avenue and Fordham Place, as well as the slope of Sedgwick Avenue, which is higher in the northeast and lower in the southwest. However, storm runoff east of the Corridor along Sedgwick Avenue and west of the Corridor along Fordham Place are managed by storm drains.



## 2.4 Corridor and Regional Geology

Based on the *NYC Reconnaissance Soil Survey* (2005), surficial soil is expected to consist of the Pavement & Buildings-Chatfield-Greenbelt complex. Generally, this complex is found in moderately steep to very steep urbanized areas of bedrock-controlled hills and ridges modified by glacial action that have been substantially cut and filled, mostly for residential use. Impervious surfaces such as asphalt, concrete, and buildings account for approximately 50 to 80 percent of this complex.

According to the *Ground Water in Bronx, New York, and Richmond Counties with Summary Data on Kings and Queens Counties, New York City, New York* (Perlmutter and Arnow, 1953), surficial soils are underlain by alluvium of Recent age consisting of white to gray sand and gravel with layers of gray organic clay and silt, and unconsolidated deposits of Pleistocene-aged ground moraine consisting of unstratified clay, boulders, and sand, and range in depth from 2 to 35 feet. Underlying the unconsolidated Pleistocene and Recent age deposits is the Fordham Gneiss, described as black and white banded gneiss complex, with black bands composed of quartz, plagioclase and biotite, and white bands composed of garnet, quartz, plagioclase, muscovite and microcline (Baskerville, 1992).

During this Phase II SCI, the Corridor was found to be underlain by soils comprised mostly of moderate brown medium to fine sand with little silt and little coarse to fine gravel. Anthropogenic fill material was encountered at both boring locations from grade surface to 10 ftbg in SB01 and from grade surface to 6 ftbg in SB02. The fill material was comprised of moderate brown medium to fine sand with little silt and little coarse to fine gravel. Construction debris in the form of brick and gravel was observed within the fill layer. Groundwater was not encountered at any of the boring locations. Bedrock was not encountered at any of the boring locations; however, evidence of decomposed bedrock was observed in both borings from approximately 10 to 15 feet bgs. Based on the review of geotechnical Record of Borings provided by the NYCDDC dated January 31, 2016 for infrastructure project HWXS511, the top approximate 4 to 10-foot layer of sand with varying amounts of silt and gravel is identified as fill. Partially decomposed bedrock of the Fordham Gneiss was encountered at approximately 13 ftbg in B-1 and 17.5 ftbg in B-3. Auger refusal occurred in both borings between 32 ftbg and 21 ftbg, respectively. Following refusal, core drilling continued to a depth of 55 ftbg in B-1 and 51 ftbg in B-3, through partially decomposed bedrock of the Fordham Gneiss and Schistose Gneiss.

## 2.5 Corridor and Regional Hydrogeology

The nearest major water body is the Harlem River located approximately 770 feet northwest of the western end of the Corridor. Based on the review of the aforementioned geotechnical Record of Borings, groundwater was not encountered in any of the three (3) geotechnical borings advanced along and proximal to the Corridor. Boring B-1, located at the western extent of the Corridor and boring B-3, located at the eastern extent of the Corridor, were advanced to terminal depths of 55 ftbg and 51 ftbg, respectively. Under natural conditions, groundwater is anticipated to flow to the northwest towards the Harlem River. All references to groundwater flow direction/hydraulic gradient in this report are based upon this assumption. Groundwater flow

direction may also vary due to seasonal fluctuations in precipitation, local variation in geology, underground structures, or local dewatering operations.

Based on information supplied by the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory, there are no wetlands within the Corridor. According to the environmental database report provided by Environmental Data Resources, Inc. (EDR) of Shelton, CT (Appendix C), there are no State or Federal wetlands within proximity to the Corridor. The nearest wetlands are the Harlem River, which is classified as estuarine and marine deep-water (classification code E1UBL).

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panel 3604970081F (FEMA, 2007), the Corridor is located outside of the 100-year and 500-year flood zone.

### 3.0 CORRIDOR EVALUATION

Proposed construction activities within the Corridor include soil excavation, which, in turn, requires that soils at the site be characterized to identify material handling requirements, use of protective equipment and waste disposal requirements. Louis Berger advanced two (2) soil borings during the field investigation conducted on May 11, 2016. The field investigation was performed at designated areas in the vicinity of the planned excavation area. 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

Soil boring SB01 and SB02 were advanced to a terminal depth of 15 ftbg. Both borings were initially pre-cleared by evasive methods such as a vacuum device (i.e., Vactron®), air-knife, and hand tools (i.e., hand augers). SB01 and SB02 were pre-cleared to a depth of 6 ftbg. The borings were then advanced using a Geoprobe® direct push drill rig. Soil samples were collected using 5-foot long, 2-inch diameter Macro Core® stainless steel samplers equipped with acetate sleeves. Soil boring locations are depicted on Figure 2. The designations and sampling intervals for the samples that were submitted to the laboratory are included in Table 1. A map depicting each boring location is included in Appendix A. Boring logs are provided in Appendix B. The locations of each boring are described below:

- **SB01** – Located in the sidewalk along the south side of West Tremont Avenue, 164 feet and 6 inches southeast of the southeast corner of the intersection of West Tremont Avenue and Cedar Avenue, and 12 feet and 0 inches southwest of the curb along the north side of West Tremont Avenue.
- **SB02** – Located in the sidewalk along the south side of West Tremont Avenue, 16 feet and 6 inches northwest of the southwest corner of the intersection of West Tremont Avenue and Sedgwick Avenue, and 14 feet and 0 inches southwest of the curb along the north side of West Tremont Avenue.

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, TCLP metals, PCBs, TPH-DRO/GRO, RCRA characteristics, and conditions relative to waste disposal in each boring, composite soil samples were collected at each boring location. Each composite waste characterization soil sample was collected by mixing the entire soil column (all recovered material) in a decontaminated and dedicated stainless steel bowl.

In order to identify representative conditions relative to the presence of VOCs, grab soil samples were collected from the bottom 6-inch interval of borings (where recovery allowed) since groundwater was not encountered in any of the borings and evidence of contamination was not observed.

Soil classification information, including stratigraphy, is documented on the boring logs provided in Appendix B. All boring equipment was cleaned by rinsing with deionized water, scrubbed with Alconox®, and then rinsed with deionized water a second time between each sample location. Following the completion of each boring, the boreholes were backfilled with removed material and then sealed with ready mixed concrete.

### **3.2 Laboratory Analyses**

Soil samples were submitted to HC-V of Fairfield, New Jersey which is a NYSDOH ELAP-certified analytical laboratory (No. 11408). Field-derived Quality Assurance/Quality Control samples were not collected for this project. Laboratory analytical reports are included in Appendix C.

The grab soil samples SB01 and SB02 were analyzed for TCL VOCs using USEPA Method 8260C. The composite soil samples SB01 and SB02 were analyzed for PAHs by USEPA Method 8270C, TPH-DRO/GRO by USEPA 8015B, PCBs by USEPA Method 8082A/608, TCLP Metals (RCRA 8) by USEPA Method 1311/6010B, and RCRA Characteristics, including ignitability reactivity and corrosivity, by USEPA Methods 9012B/9034, 1030/1010A, and 9045C, as well as Paint Filter Test by USEPA Method 9095B, for waste classification purposes.

### **3.3 Data Evaluation**

In order to evaluate subsurface soil quality for waste characterization purposes, laboratory analytical results of grab and composite soil samples were compared with regulatory standards identified in: (1) New York State Department of Environmental Conservation (NYSDEC) Subpart 375-6: Remedial Program Unrestricted, Restricted-Residential, and Commercial Use (Track 1 and Track 2) Soil Cleanup Objectives (SCOs); (2) NYSDEC CP-51 Soil Cleanup Guidance Supplemental Soil Cleanup Objectives (SSCOs) to NYSDEC Subpart 375-6; and/or (3) Toxicity Characteristic Regulatory Levels for Hazardous Waste published in RCRA and 6 NYCRR Part 371.

## 4.0 FINDINGS

This section discusses the analytical data and findings for 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 consisted of identifying visual and olfactory indicators of potential impact, as well as screening soil for VOC vapors with a photo ionization detector (PID). No evidence of visual or olfactory contamination was observed and PID readings were not detected at any soil boring locations. Refer to Table 1 for a summary of environmental boring data.

### 4.2 Soil Laboratory Analytical Results

#### 4.2.1 *Target Compound List (TCL) Volatile Organic Compounds (VOCs) in Soil*

No VOCs were detected above the laboratory's reporting limits in any of the soil samples collected as part of this Phase II SCI. Refer to Table 2 for a summary of VOC results.

#### 4.2.2 *Polycyclic Aromatic Hydrocarbons (PAHs) in Soil*

No PAHs were detected above the laboratory's reporting limits in any of the soil samples collected as part of this Phase II SCI. Refer to Table 3 for a summary of PAH results.

#### 4.2.3 *Polychlorinated Biphenyls (PCBs) in Soil*

No PCBs were detected above the laboratory's reporting limits in any of the soil samples collected as part of this Phase II SCI. Refer to Table 4 for a summary of PCB results.

#### 4.2.4 *Waste Classification of Soil*

##### TCLP Metals

Waste characterization laboratory results indicate that TCLP barium was detected in soil samples SB01 and SB02, and TCLP lead was detected in soil sample SB01. These concentrations were observed to be below RCRA Hazardous Waste Levels. Refer to Table 5 for a summary of waste characterization parameters.

##### Total Petroleum Hydrocarbons (TPH)

No TPHs were detected above the laboratory's reporting limits in any of the soil samples collected as part of this Phase II SCI. Refer to Table 5 for a summary of waste characterization results.

##### RCRA Parameters (Reactivity, Corrosivity, Ignitability)

The analytical laboratory results of the soil samples show that none of the RCRA parameters (reactivity, ignitability, or corrosivity) were detected or exceeded. The pH of the samples were

found to be within the RCRA limits of 2 and 12.5. The flash point was greater than 140 degrees Fahrenheit in the soil beneath the Corridor; therefore, the RCRA characteristics for ignitability were negative. Reactive cyanide and reactive sulfide were not detected in any of the soil samples. Refer to Table 5 for a summary of RCRA parameters.

## 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 and recommendations are presented:

### Findings

- No visual or olfactory evidence of contamination was observed in the soil and PID readings were not detected at any boring location;
- The Corridor was found to be underlain by soils comprised mostly of moderate brown medium to fine sand with little silt and little coarse to fine gravel. Anthropogenic fill material was encountered at both boring locations from grade surface to 10 ftbg in SB01 and from grade surface to 6 ftbg in SB02. The fill material was comprised of moderate brown medium to fine sand with little silt and little coarse to fine gravel. Construction debris in the form of brick and gravel was observed within the fill layer. Groundwater was not encountered at any of the boring locations. Bedrock was not encountered at any of the boring locations; however, evidence of decomposed bedrock was observed in both borings from approximately 10 to 15 feet bgs;
- No VOCs were detected above the laboratory's reporting limits in any of the soil samples collected as part of this Phase II SCI;
- No PAHs were detected above the laboratory's reporting limits in any of soil samples collected as a part of this Phase II SCI;
- No PCBs were detected above the laboratory's reporting limits in any of the soil samples collected as part of this Phase II SCI;
- Waste characterization laboratory results indicate that TCLP barium was detected in soil samples SB01 and SB02, and TCLP lead was detected in soil sample SB01. These concentrations were observed to be below RCRA Hazardous Waste Levels; therefore, the soil samples collected from the Corridor do not exhibit evidence of the hazardous waste characteristic for toxicity;
- No TPHs were detected above the laboratory's reporting limits in any of the soil samples collected as part of this Phase II SCI; and,
- The analytical laboratory results of the soil samples show that none of the RCRA parameters (reactivity, ignitability, or corrosivity) were detected or exceeded. Therefore, results of these analyses indicate that the soil samples collected from the Corridor do not exhibit evidence of hazardous waste characteristics; and

Based on the results of the field investigation and laboratory analytical results, the following conclusions and recommendations are provided:

### **Conclusions**

- The Corridor was observed to be underlain by anthropogenic fill material to approximately 10 ftbg at SB01 and to approximately 6 ftbg at SB02. However, it should be noted that PAHs, which are typically found in such fill material, were not detected above the lab's reporting limits in the soil samples collected beneath the Corridor; and,
- Laboratory results indicate that the soil samples collected beneath the Corridor do not exhibit evidence of hazardous waste characteristics.

### **Recommendations**

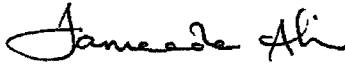
- The Contract documents should identify provisions for managing, handling, transporting and disposing of non-contaminated, non-hazardous soil. The Contractor should be required to submit a Material Handling Plan, to identify the specific protocol and procedures that will be employed to manage the waste in accordance with applicable regulations;
- 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 into the ambient environment as a direct result of construction activities;
- Groundwater was not encountered during the Phase II SCI activities. However, if dewatering is necessary, the contractor will be required to obtain a NYCDEP sewer discharge permit and perform sampling and laboratory analysis prior to discharge into the sanitary and combined sewers;
- In addition, if discharge into storm sewers, which ultimately discharge into a surface water body, is required during dewatering, it may be performed under the appropriate NYSDEC State Pollutant Discharge Elimination System (SPDES) permit. Additional sampling and laboratory analysis may be required to satisfy NYSDEC requirements prior to discharge into storm sewers; and
- Before beginning any excavation activity, the contractor should submit a site-specific health and safety plan (HASP) that will meet the requirements set forth by the Occupational, Safety and Health Administration (OSHA), the NYSDOH and any other applicable regulations. The HASP should identify the possible locations 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 metals).



## 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:



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Fameeda Ali, CHMM  
Project Manager

Report Reviewed By:



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Michael J. McCloskey, PG  
QA/QC Manager

## 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 Site with respect to the presence or absence in the environment of oil or hazardous materials and substances as defined in the applicable state and federal environmental laws and regulations and to gather information regarding current and past environmental conditions at the Site.

Louis Berger derived the data in this report primarily from visual inspections, examination of records in the public domain, interviews with individuals with information about the Site, and a limited number of subsurface explorations made on the dates indicated. The passage of time, manifestation of latent conditions or occurrence of future events may require further exploration at the Site, analysis of the data, and reevaluation of the findings, observations, and conclusions expressed in the report.

In preparing this report, Louis Berger has relied upon and presumed accurate certain information (or the absence thereof) about the Site and adjacent properties provided by governmental officials and agencies, the Client, and others identified herein. Except as otherwise stated in the report, Louis Berger has not attempted to verify the accuracy or completeness of any such information.

The data reported and the findings, observations, and conclusions expressed in the report are limited by the Scope of Services, including the extent of subsurface exploration and other tests. The Scope of Services was defined by the requests of the Client, the time and budgetary constraints imposed by the Client, and the availability of access to the Site.

Because of the limitations stated above, the findings, observations, and conclusions expressed by Louis Berger in this report are not, and should not be considered, an opinion concerning the compliance of any past or present owner or operator of the site with any federal, state or local law or regulation. No warranty or guarantee, whether express or implied, is made with respect to the data reported or findings, observations, and conclusions expressed in this report. Further, such data, findings, observations, and conclusions are based solely upon site conditions in existence at the time of investigation.

This report has been prepared on behalf of and for the exclusive use of the Client, and is subject to and issued in connection with the Agreement and the provisions thereof.

## **TABLES**

- TABLE 1 – SUMMARY OF ENVIRONMENTAL BORING DATA**
- 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 CLASSIFICATION RESULTS  
DETECTED IN SOIL**

**Table 1. Summary of Environmental Boring Data**  
**Phase II Subsurface Corridor Investigation For Reconstruction of West Tremont Avenue Step Street**  
**Bronx, New York**

Boring No.	Sample ID	High PID (ppm)	Sample Interval (ftbg)	Total VOCs (mg/kg)	Total PAHs (mg/kg)	TCLP Metals Exceed (Y/N) <sup>1</sup>	Depth to Water (ftbg)	Total Depth (ftbg)	Other Comments
SB01	SB01	<1	14.0 - 14.5	ND	--	N	NE	15.0	No visual/olfactory signs of contamination observed.
			0.4 - 15.0	--	ND				
SB02	SB02	<1	14.2 - 14.7	ND	--	N	NE	15.0	No visual/olfactory signs of contamination observed.
			0.4 - 15.0	--	ND				

**Notes:**

1. TCLP metal(s) exceeds RCRA Hazardous Waste Levels.

All soil samples were analyzed for Target Compound List (TCL) Volatile Organic Compounds, Polycyclic Aromatic Hydrocarbons (PAHs)

Polychlorinated Biphenyls (PCBs), Toxicity Characteristic Leaching Procedure (TCLP) Metals, Total Petroleum Hydrocarbons, and RCRA Characteristics.

PID = Photoionization detector

ND = Not Detected

NE = Not Encountered

ftbg = feet below grade

DDC Project Number: HWXS511

Work Order Letter No. 11462-LBA-4-10494

Table 2. Summary of Target Compound List (TCL) Volatile Organic Compounds (VOCs) Detected in Soil  
Phase II Subsurface Corridor Investigation For Reconstruction of West Tremont Avenue Step Street  
Bronx, New York

TCL VOCs	Unrestricted Use (Track 1) Soil Cleanup Objectives (SCOs)	Commercial Use (Track 2) Soil Cleanup Objectives (SCOs)	Restricted- Residential Use (Track 2) Soil Cleanup Objectives (SCOs)	CP-51/Soil Cleanup Guidance Residential Supplemental Soil Cleanup Objectives	Sample ID, Date Collected, and Depth	
					SB01	SB02
					5/11/2016	5/11/2016
					14.0 - 14.5	14.2 - 14.7
No VOCs were detected	NS	NS	NS	NS	ND	ND

**Notes:**

All concentrations are in parts per million or milligrams per kilogram (ppm or mg/kg)  
 ND = Compound not detected above method detection limit (see attached lab report for MDLs)  
 SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006)  
 CP51/Soil Cleanup Guidance = Supplemental Soil Cleanup Objectives, NYSDEC, October, 2010  
 NS = No Standard

DDC Project Number: HWXS511

Work Order Letter No. 11462-LBA-4-10494

**Table 3. Summary of Polycyclic Aromatic Hydrocarbons (PAHs) Detected in Soil**  
**Phase II Subsurface Corridor Investigation For Reconstruction of West Tremont Avenue Step Street**  
 Bronx, New York

PAHs	Unrestricted Use (Track 1) Soil Cleanup Objectives (SCOs)	Commercial Use (Track 2) Soil Cleanup Objectives (SCOs)	Restricted- Residential Use (Track 2) Soil Cleanup Objectives (SCOs)	CP-51/Soil Cleanup Guidance Residential Soil Cleanup Objectives	Sample ID, Date Collected, and Depth	
					SB01	SB02
No PAHs were detected	NS	NS	NS	NS	5/11/2016	5/11/2016
					0.4 -15.0	0.4 - 15.0
					ND	ND

**Notes:**

All concentrations are in parts per million or milligrams per kilogram (ppm or mg/kg)

ND = Compound not detected above method detection limit (see attached lab report for MDLs)

SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006)

CP51/Soil Cleanup Guidance = Supplemental Soil Cleanup Objectives, NYSDEC, October, 2010

NS = No Standard

DDC Project Number: HWXS511

Work Order Letter No. 11462-LBA-4-10494

Table 4. Summary of Polychlorinated Biphenyls Detected in Soil  
Phase II Subsurface Corridor Investigation For Reconstruction of West Tremont Avenue Step Street  
Bronx, New York

Polychlorinated Biphenyls (PCBs)*	Unrestricted Use (Track 1) Soil Cleanup Objectives (SCOs)	Commercial Use (Track 2) Soil Cleanup Objectives (SCOs)	Restricted- Residential Use (Track 2) Soil Cleanup Objectives (SCOs)	CP-51/Soil Cleanup Guidance Residential Supplemental Soil Cleanup Objectives	Sample ID, Date Collected, and Depth	
					SB01	SB02
					5/11/2016 0.4 - 15.0	5/11/2016 0.4 - 15.0
No PCBs were detected	NS	NS	NS	NS	ND	ND

Notes:

All concentrations are in parts per million or milligrams per kilogram (ppm or mg/kg)

ND = Compound not detected above method detection limit (see attached lab report for MDLs)

\* Refers to the total concentration of PCBs in the sample

SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006)

CP51/Soil Cleanup Guidance = Supplemental Soil Cleanup Objectives, NYSDEC, October, 2010

NS = No Standard

DDC Project Number: HWXS511

Work Order Letter No. 11462-LBA-4-10494

Table 5. Summary of Waste Classification Results in Soil  
Phase II Subsurface Corridor Investigation For Reconstruction of West Tremont Avenue Step Street  
Bronx, New York

Analyte	Resource Conservation and Recovery Act (RCRA) Hazardous Waste Levels	Sample ID, Date Collected, and Depth		
		SB01 COMP	SB02 COMP	
		5/11/2016	5/11/2016	
		0.4 - 15.0	0.4 - 15.0	
RCRA (Including TCLP Metals)				
pH	≤ 2 and ≥ 12.5*	9.2	8.0	
Ignitability	< 140 °F**	NEG	NEG	
Paint Filter Test	NS	NEG	NEG	
Reactive Cyanide (mg/kg)	NS	ND	ND	
Reactive Sulfide (mg/kg)	NS	ND	ND	
Arsenic (mg/L)	5	ND	ND	
Barium (mg/L)	100	0.6	0.45	
Cadmium (mg/L)	1	ND	ND	
Chromium (mg/L)	5	ND	ND	
Lead (mg/L)	5	0.058	ND	
Mercury (mg/L)	0.2	ND	ND	
Nickel (mg/L)	NS	ND	ND	
Selenium (mg/L)	1	ND	ND	
Silver (mg/L)	5	ND	ND	
TPH DRO/GRO (mg/kg)				
TPH - Gasoline Range Organics	NS	ND	ND	
TPH - Diesel Range Organics	NS	ND	ND	

**Notes:**

**BOLD** = Compound detected above the method detection limit (MDL)

TCLP = Toxicity Characteristic Leaching Procedure

NS = No Standard

ND = Compound not detected above method detection limit (see attached lab report for MDLs)

\*A solid waste exhibits the characteristic of corrosivity if it has a pH less than or equal to 2 or greater than or equal to 12.5.

\*\*A solid waste exhibits the characteristic of ignitability if it has flash point less than 140 °F

°F = Degrees Fahrenheit

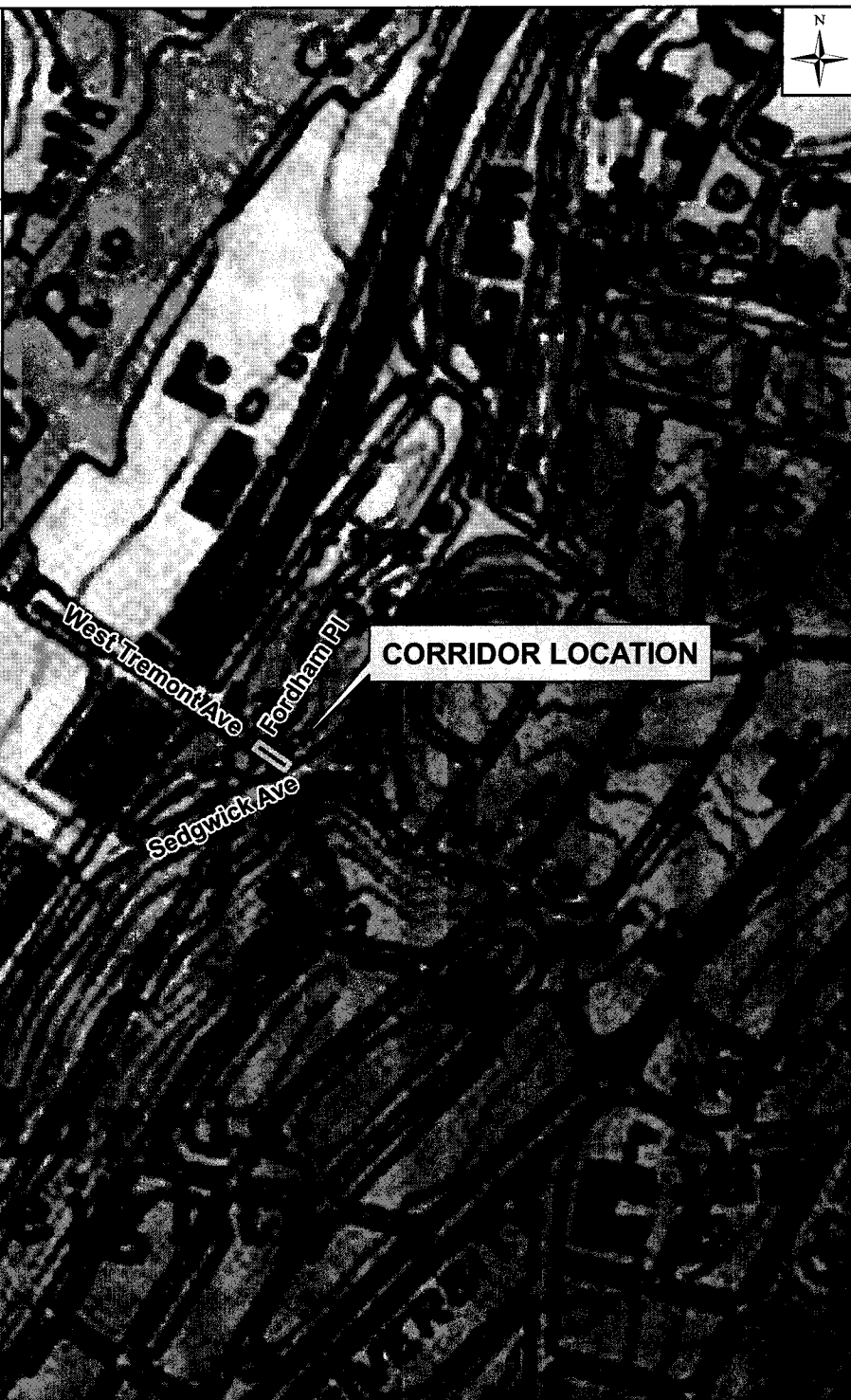
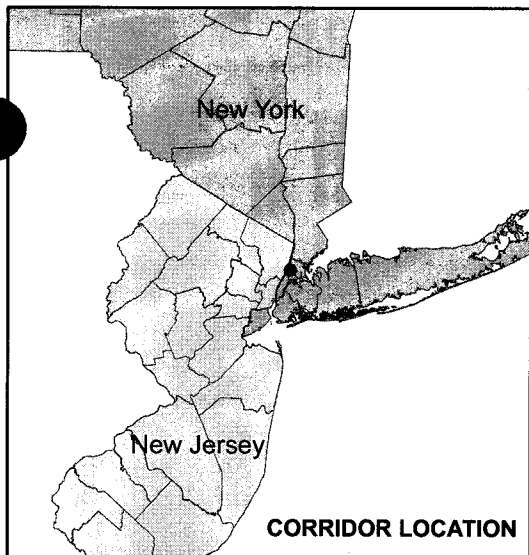
NEG = Negative (flash point was not detected below 140 °F) or Negative (Paint was not detected from Paint Filter Test)

DDC Project Number: HWXS511

Work Order Letter No. 11462-LBA-4-10494



**FIGURE 1 – TOPOGRAPHIC CORRIDOR LOCATION MAP**



**Department of  
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Construction**

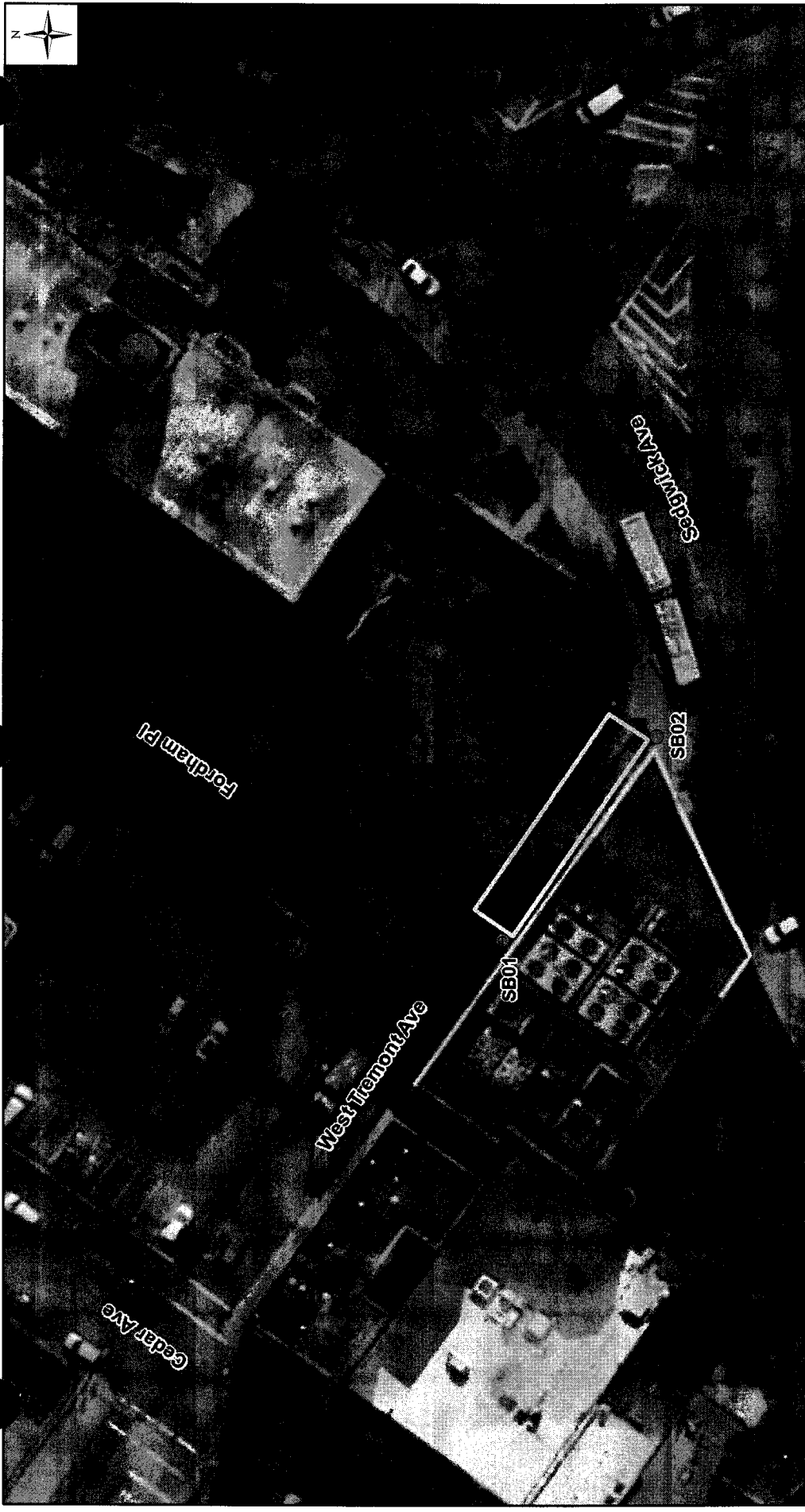


**Louis Berger**


DDC PROJECT NO. HWXS511 WOL NO.: 11462-LBA-4-10494

**TOPOGRAPHIC CORRIDOR LOCATION MAP  
PHASE II SUBSURFACE CORRIDOR INVESTIGATION  
FOR RECONSTRUCTION OF  
WEST TREMONT AVENUE STEP STREET  
WEST TREMONT AVENUE  
BETWEEN SEDGWICK AVENUE AND FORDHAM PLACE  
BRONX, NEW YORK**

**FIGURE 2 – SOIL BORING LOCATION PLAN**



**NYC DDC**  
Department of  
Design and  
Construction



 Louis Berger

DDC PROJECT NO. HWX5811 WOL NO.: 11462-LBA-4-10494

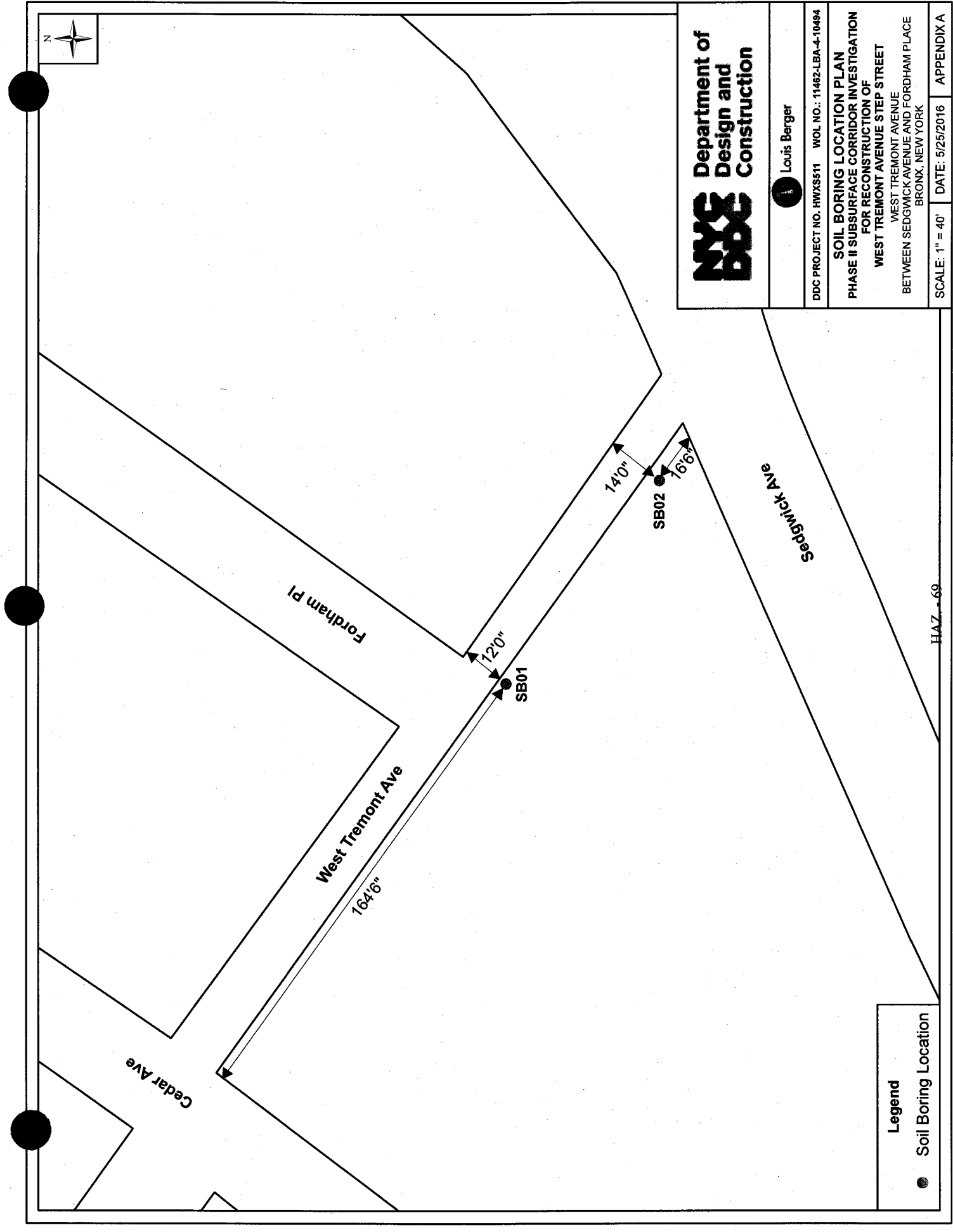
**SOIL BORING LOCATION PLAN**  
**PHASE II SUBSURFACE CORRIDOR INVESTIGATION**  
**FOR RECONSTRUCTION OF**  
**WEST TREMONT AVENUE STEP STREET**  
WEST TREMONT AVENUE  
BETWEEN SEDGWICK AVENUE AND FORDHAM PLACE  
BRONX, NEW YORK

SCALE: 1" = 50' DATE: 5/25/2016 FIGURE: 2

**Legend**

-  Soil Boring Location
-  Approximate Corridor Area

**APPENDIX A**  
**BORING LOCATION PLAN**



**NYC** Department of  
Design and  
Construction

**1** Louis Berger

DIC PROJECT NO. HWXS511 WOL NO.: 11462-LBA-4-10494


**SOIL BORING LOCATION PLAN**  
**PHASE II SUBSURFACE CORRIDOR INVESTIGATION**  
**FOR RECONSTRUCTION OF**  
**WEST TREMONT AVENUE STEP STREET**  
 WEST TREMONT AVENUE  
 BETWEEN SEDGWICK AVENUE AND FORDHAM PLACE  
 BRONX, NEW YORK

SCALE: 1" = 40' DATE: 5/25/2016 APPENDIX A


**Legend**


- Soil Boring Location


**APPENDIX B**  
**GEOLOGIC BORING LOGS**

 <b>Louis Berger</b>		<h1>Drilling Log</h1> <p>Page 1 of 2</p>		<b>BORING NO.: SB01</b>				
				<b>LOCATION: Bronx, NY</b>				
<b>CLIENT:</b> New York City Department of Design and Construction				<b>PROJECT NO.:</b> 3001040.104				
<b>PROJECT:</b> Phase II SCI for Reconstruction of West Tremont Avenue Step Street				<b>FMS ID#:</b> HWXS511				
<b>DRILLING CONTRACTOR:</b> Zebra Technical Services, LLC.				<b>WOL #:</b> 11462-LBA-4-10494				
<b>DRILLING METHOD:</b> Geoprobe				<b>DATE STARTED:</b> 5/11/2016				
<b>BOREHOLE DATA</b>		<b>WELL DATA</b>		<b>DATE FINISHED:</b> 5/11/2016				
<b>Diameter (in):</b> 2		<b>Well Diameter (in):</b> N/A		<b>DRILLER:</b> E. Moraitis				
<b>Total Depth (ft.):</b> 15		<b>Total Depth (ft.):</b> N/A		<b>LBA INSPECTOR:</b> N. Diehl				
<b>Depth to Refusal (ft):</b> N/A		<b>Screen Length (ft):</b> N/A		<b>NORTHING (ft):</b> 250070.77				
<b>Depth to Water (ft.):</b> N/A		<b>Depth to Water (ft.):</b> N/A		<b>EASTING (ft):</b> 1006636.56				
<b>Depth to Rock (ft.):</b> N/A		<b>Slot Size (in):</b> N/A		<b>SURFACE ELEVATION (ft):</b> N/A				
<b>NOTES:</b> Soil description based on Unified Soil Classification System (USCS), Burmister Classification and Munsell Rock Color Chart. Soil boring was pre-cleared to 6 ft bgs								
Well Construction	Depth (feet)	Lithology	USCS	Sample Interval	Sample Recovery	PID Reading (ppm)	Description and Stratigraphy	Remarks
		CONCRETE				<1	Very light grey (N8) CONCRETE; dry.	Concrete
		FILL				<1	Moderate brown (5YR 4/4) medium to fine SAND, trace Silt, little coarse to fine Gravel (60% fill material - bricks, concrete); moist.	Sand (Fill)
	2							
	4							
	6	FILL				<1	Moderate brown (5YR 4/4) to moderate brown (5YR 3/4) medium to fine SAND, little Silt, little coarse to fine Gravel (60% fill material - bricks, concrete); moist.	
	8							



 Louis Berger		<h1>Drilling Log</h1> <p>Page 2 of 2</p>		<b>BORING NO.:</b> SB01				
				<b>LOCATION:</b> Bronx, NY				
<b>CLIENT:</b> New York City Department of Design and Construction				<b>PROJECT NO.:</b> 3001040.104				
<b>PROJECT:</b> Phase II SCI for Reconstruction of West Tremont Avenue Step Street				<b>FMS ID#:</b> HWXS511				
<b>DRILLING CONTRACTOR:</b> Zebra Technical Services, LLC.				<b>WOL #:</b> 11462-LBA-4-10494				
<b>DRILLING METHOD:</b> Geoprobe				<b>DATE STARTED:</b> 5/11/2016				
<b>BOREHOLE DATA</b>		<b>WELL DATA</b>		<b>DATE FINISHED:</b> 5/11/2016				
<b>Diameter (in):</b> 2		<b>Well Diameter (in):</b> N/A		<b>DRILLER:</b> E. Moraitis				
<b>Total Depth (ft.):</b> 15		<b>Total Depth (ft.):</b> N/A		<b>LBA INSPECTOR:</b> N. Diehl				
<b>Depth to Refusal (ft):</b> N/A		<b>Screen Length (ft):</b> N/A		<b>NORTHING (ft):</b> 250070.77				
<b>Depth to Water (ft.):</b> N/A		<b>Depth to Water (ft.):</b> N/A		<b>EASTING (ft):</b> 1006636.56				
<b>Depth to Rock (ft.):</b> N/A		<b>Slot Size (in):</b> N/A		<b>SURFACE ELEVATION (ft):</b> N/A				
<b>NOTES:</b> Soil description based on Unified Soil Classification System (USCS), Burmister Classification and Munsell Rock Color Chart. Soil boring was pre-cleared to 6 ft bgs								
Well Construction	Depth (feet)	Lithology	USCS	Sample Interval	Sample Recovery	PID Reading (ppm)	Description and Stratigraphy	Remarks
			FILL			<1	Moderate brown (5YR 4/4) to moderate brown (5YR 3/4) medium to fine SAND, little Silt, little coarse to fine Gravel (60% fill material - bricks, concrete); moist.	
	10		SP			<1	Moderate brown (5YR 4/4) to moderate brown (5YR 3/4) medium to fine SAND, trace Silt, little coarse to fine Gravel; moist.	Sand (Decomposed Bedrock), Collected grab sample SB01 from 14.0 to 14.5 ft bgs and composite sample SB01 COMP from 0.4 to 15.0 ft bgs
	12							
	14							
	16						Total Depth of Boring 15 feet.	

 <b>Louis Berger</b>		<h2 style="margin: 0;">Drilling Log</h2> <p style="margin: 0;">Page 1 of 2</p>		<b>BORING NO.: SB02</b>				
				<b>LOCATION: Bronx, NY</b>				
<b>CLIENT:</b> New York City Department of Design and Construction				<b>PROJECT NO.:</b> 3001040.104				
<b>PROJECT:</b> Phase II SCI for Reconstruction of West Tremont Avenue Step Street				<b>FMS ID#:</b> HWXS511				
<b>DRILLING CONTRACTOR:</b> Zebra Technical Services, LLC.				<b>WOL #:</b> 11462-LBA-4-10494				
<b>DRILLING METHOD:</b> Geoprobe				<b>DATE STARTED:</b> 5/11/2016				
<b>BOREHOLE DATA</b>		<b>WELL DATA</b>		<b>DATE FINISHED:</b> 5/11/2016				
<b>Diameter (in):</b>	2	<b>Well Diameter (in):</b>	N/A	<b>DRILLER:</b> E. Moraitis				
<b>Total Depth (ft.):</b>	15	<b>Total Depth (ft.):</b>	N/A	<b>LBA INSPECTOR:</b> N. Diehl				
<b>Depth to Refusal (ft.):</b>	N/A	<b>Screen Length (ft.):</b>	N/A	<b>NORTHING (ft):</b> 250018.47				
<b>Depth to Water (ft.):</b>	N/A	<b>Depth to Water (ft.):</b>	N/A	<b>EASTING (ft):</b> 1006705.85				
<b>Depth to Rock (ft.):</b>	N/A	<b>Slot Size (in):</b>	N/A	<b>SURFACE ELEVATION (ft):</b> N/A				
<b>NOTES:</b> Soil description based on Unified Soil Classification System (USCS), Burmister Classification and Munsell Rock Color Chart. Soil boring was pre-cleared to 5.7 ft bgs								
Well Construction	Depth (feet)	Lithology	USCS	Sample Interval	Sample Recovery	PID Reading (ppm)	Description and Stratigraphy	Remarks
		CONCRETE				<1	Very light grey (N8) CONCRETE; dry.	Concrete
		FILL				<1	Moderate brown (5YR 3/4) medium to fine SAND, little Silt, little coarse to fine Gravel (60% fill material - bricks, concrete); dry.	Sand (Fill)
	2							
	4							
	6		SP			<1	Moderate brown (5YR 4/4) to moderate brown (5YR 3/4) medium to fine SAND, little Silt, little coarse to fine Gravel; moist.	Sand
	8							

 <b>Louis Berger</b>		<h1 style="text-align: center;">Drilling Log</h1> <p style="text-align: center;">Page 2 of 2</p>		<b>BORING NO.: SB02</b>				
				<b>LOCATION: Bronx, NY</b>				
<b>CLIENT:</b> New York City Department of Design and Construction				<b>PROJECT NO.:</b> 3001040.104				
<b>PROJECT:</b> Phase II SCI for Reconstruction of West Tremont Avenue Step Street				<b>FMS ID#:</b> HWXS511				
<b>DRILLING CONTRACTOR:</b> Zebra Technical Services, LLC.				<b>WOL #:</b> 11462-LBA-4-10494				
<b>DRILLING METHOD:</b> Geoprobe				<b>DATE STARTED:</b> 5/11/2016				
<b>BOREHOLE DATA</b>		<b>WELL DATA</b>		<b>DATE FINISHED:</b> 5/11/2016				
<b>Diameter (in):</b> 2		<b>Well Diameter (in):</b> N/A		<b>DRILLER:</b> E. Moraitis				
<b>Total Depth (ft.):</b> 15		<b>Total Depth (ft.):</b> N/A		<b>LBA INSPECTOR:</b> N. Diehl				
<b>Depth to Refusal (ft):</b> N/A		<b>Screen Length (ft):</b> N/A		<b>NORTHING (ft):</b> 250018.47				
<b>Depth to Water (ft.):</b> N/A		<b>Depth to Water (ft.):</b> N/A		<b>EASTING (ft):</b> 1006705.85				
<b>Depth to Rock (ft.):</b> N/A		<b>Slot Size (in):</b> N/A		<b>SURFACE ELEVATION (ft):</b> N/A				
<b>NOTES:</b> Soil description based on Unified Soil Classification System (USCS), Burmister Classification and Munsell Rock Color Chart. Soil boring was pre-cleared to 5.7 ft bgs								
Well Construction	Depth (feet)	Lithology	USCS	Sample Interval	Sample Recovery	PID Reading (ppm)	Description and Stratigraphy	Remarks
			SP			<1	Moderate brown (5YR 4/4) to moderate brown (5YR 3/4) medium to fine SAND, little Silt, little coarse to fine Gravel; moist.	Sand
	10		SP			<1	Moderate brown (5YR 4/4) to moderate brown (5YR 3/4) medium to fine SAND, little Silt, little coarse to fine Gravel; moist.	Collected grab sample SB02 from 14.2 to 14.7 ft bgs and composite sample SB02 COMP from 0.4 to 15.0 ft bgs
	12		SP			<1	Moderate brown (5YR 3/4) to light gray (N7) medium to fine SAND, little Silt, little coarse to fine Gravel; moist.	Sand (Decomposed Bedrock)
	14							
	16						Total Depth of Boring 15 feet.	

**APPENDIX C**  
**LABORATORY ANALYTICAL RESULTS**

## Project: West Tremont Ave

**Client PO:** 3001040.104

**Report To:** Louis Berger & Associates  
48 Wall Street  
16th Floor  
New York, NY 10005

Attn: Breanna Gribble

**Received Date:** 5/11/2016

**Report Date:** 5/27/2016

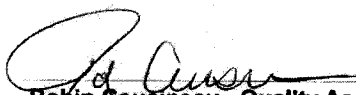
**Deliverables:** NYDOH-R

**Lab ID:** AC91273

**Lab Project No:** 6051104

This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAC Institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Hampton-Clarke to all parties shall not exceed Hampton-Clarke's total fee for analytical services rendered.



Robin Cousineau - Quality Assurance Director

OR

Jean Revolus - Laboratory Director

NJ (07071)  
PA (68-00463)

NY (ELAP11408)  
KY (90124)

CT (PH-0671)

HAZ. - 76



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# Sample Summary

**Client:** Louis Berger & Associates

**HC Project #:** 6051104

**Project:** West Tremont Ave

<b>Lab#</b>	<b>SampleID</b>	<b>Matrix</b>	<b>Collection Date</b>	<b>Receipt Date</b>
AC91273-001	SB02	Soil	5/11/2016	5/11/2016
AC91273-002	SB02 COMP	Soil	5/11/2016	5/11/2016
AC91273-003	SB01	Soil	5/11/2016	5/11/2016
AC91273-004	SB01 COMP	Soil	5/11/2016	5/11/2016



## HC Case Narrative

Client: Louis Berger & Associates  
Project: West Tremont Ave.

HC Project: 6051104

*This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.*

### **Volatile Organic Analysis:**

The VO soil samples were not collected as encores. Any reported sample concentrations below 200 ug/kg may be biased low due to the samples not being collected according to 5035A low-level specifications.

The Method Blank Spike for batches 53447 and 53464 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

The MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for batch 53464 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

### **Base Neutral/Acid Extractable Analysis:**

The Method Blank Spike for batch 50105 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

The MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for batch 50105 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

### **PCB Analysis:**

QC Sample AC91280-002MS has a surrogate recovery outside QC limits due to matrix interference. Please refer to the applicable Form 2 for the recoveries.

### **Total Petroleum Hydrocarbon Analysis:**

Data conforms to method requirements.

### **Gasoline Range Organics Analysis:**

Data conforms to method requirements.

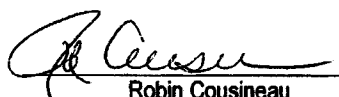
### **TCLP Metals Analysis:**

Data conforms to method requirements.

### **Wet Chemistry Analysis:**

The Matrix Spike and/or Matrix Spike Duplicate for Reactive CN, batch 916, was recovered outside QC limits. Please refer to the QC section for the recoveries.

Sample AC91273-001 and -002 were analyzed for Reactivity using SW-846 7.3. SW-846 7.3 is not a NELAP accredited parameter.

  
Robin Cousineau  
Quality Assurance Director

Or

\_\_\_\_\_  
Jean Revolus  
Laboratory Director

5/27/2014  
\_\_\_\_\_  
Date

# HC Executive Summary

Client: Louis Berger &amp; Associates

HC Project #: 6051104

Project: West Tremont Ave

Lab#: AC91273-002

Sample ID: SB02 COMP

Analyte	Units	RL	Result	Analytical Method
pH	ph		8	9040C/9045D
Burning Rate (mm/sec)			NA	EPA 1030
Flame Propagation (POS/NEG)			NA	EPA 1030
Ignitability Screen (POS/NEG)			NEG	EPA 1030
Barium	mg/l	0.25	0.45	EPA 6010C
Paint Filter Test			NEG	EPA 9095A

Lab#: AC91273-004

Sample ID: SB01 COMP

Analyte	Units	RL	Result	Analytical Method
pH	ph		9.2	9040C/9045D
Burning Rate (mm/sec)			NA	EPA 1030
Flame Propagation (POS/NEG)			NA	EPA 1030
Ignitability Screen (POS/NEG)			NEG	EPA 1030
Barium	mg/l	0.25	0.60	EPA 6010C
Lead	mg/l	0.050	0.058	EPA 6010C
Paint Filter Test			NEG	EPA 9095A

# HC Report of Analysis

Client: Louis Berger & Associates  
Project: West Tremont Ave

HC Project #: 6051104

Sample ID: SB02  
Lab#: AC91273-001  
Matrix: Soil

Collection Date: 5/11/2016

Receipt Date: 5/11/2016

## % Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		90

## Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.984	mg/kg	0.0022	ND
1,1,2,2-Tetrachloroethane	0.984	mg/kg	0.0022	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.984	mg/kg	0.0022	ND
1,1,2-Trichloroethane	0.984	mg/kg	0.0022	ND
1,1-Dichloroethane	0.984	mg/kg	0.0022	ND
1,1-Dichloroethene	0.984	mg/kg	0.0022	ND
1,2,3-Trichlorobenzene	0.984	mg/kg	0.0022	ND
1,2,4-Trichlorobenzene	0.984	mg/kg	0.0022	ND
1,2-Dibromo-3-chloropropane	0.984	mg/kg	0.0022	ND
1,2-Dibromoethane	0.984	mg/kg	0.0022	ND
1,2-Dichlorobenzene	0.984	mg/kg	0.0022	ND
1,2-Dichloroethane	0.984	mg/kg	0.0022	ND
1,2-Dichloropropane	0.984	mg/kg	0.0022	ND
1,3-Dichlorobenzene	0.984	mg/kg	0.0022	ND
1,4-Dichlorobenzene	0.984	mg/kg	0.0022	ND
1,4-Dioxane	0.984	mg/kg	0.11	ND
2-Butanone	0.984	mg/kg	0.0022	ND
2-Hexanone	0.984	mg/kg	0.0022	ND
4-Methyl-2-pentanone	0.984	mg/kg	0.0022	ND
Acetone	0.984	mg/kg	0.011	ND
Benzene	0.984	mg/kg	0.0011	ND
Bromochloromethane	0.984	mg/kg	0.0022	ND
Bromodichloromethane	0.984	mg/kg	0.0022	ND
Bromoform	0.984	mg/kg	0.0022	ND
Bromomethane	0.984	mg/kg	0.0022	ND
Carbon disulfide	0.984	mg/kg	0.0022	ND
Carbon tetrachloride	0.984	mg/kg	0.0022	ND
Chlorobenzene	0.984	mg/kg	0.0022	ND
Chloroethane	0.984	mg/kg	0.0022	ND
Chloroform	0.984	mg/kg	0.0022	ND
Chloromethane	0.984	mg/kg	0.0022	ND
cis-1,2-Dichloroethene	0.984	mg/kg	0.0022	ND
cis-1,3-Dichloropropene	0.984	mg/kg	0.0022	ND
Cyclohexane	0.984	mg/kg	0.0022	ND
Dibromochloromethane	0.984	mg/kg	0.0022	ND
Dichlorodifluoromethane	0.984	mg/kg	0.0022	ND
Ethylbenzene	0.984	mg/kg	0.0011	ND
Isopropylbenzene	0.984	mg/kg	0.0011	ND
m&p-Xylenes	0.984	mg/kg	0.0011	ND
Methyl Acetate	0.984	mg/kg	0.0022	ND
Methylcyclohexane	0.984	mg/kg	0.0022	ND
Methylene chloride	0.984	mg/kg	0.0022	ND
Methyl-t-butyl ether	0.984	mg/kg	0.0011	ND
o-Xylene	0.984	mg/kg	0.0011	ND

HAZ: 982

NOTE: Soil Results are reported to Dry Weight

Project #: 6051104

Page 1 of 8

Sample ID: SB02  
Lab#: AC91273-001  
Matrix: Soil

Collection Date: 5/11/2016  
Receipt Date: 5/11/2016

Styrene	0.984	mg/kg	0.0022	ND
Tetrachloroethene	0.984	mg/kg	0.0022	ND
Toluene	0.984	mg/kg	0.0011	ND
trans-1,2-Dichloroethene	0.984	mg/kg	0.0022	ND
trans-1,3-Dichloropropene	0.984	mg/kg	0.0022	ND
Trichloroethene	0.984	mg/kg	0.0022	ND
Trichlorofluoromethane	0.984	mg/kg	0.0022	ND
Vinyl chloride	0.984	mg/kg	0.0022	ND
Xylenes (Total)	0.984	mg/kg	0.0011	ND

Sample ID: SB02 COMP  
 Lab#: AC91273-002  
 Matrix: Soil

Collection Date: 5/11/2016  
 Receipt Date: 5/11/2016

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		88

**Gasoline range organics 8015D(C6-C10)**

Analyte	DF	Units	RL	Result
Gasoline Range Organics	96.7	mg/kg	27	ND

**Ignitability (EPA 1030)**

Analyte	DF	Units	RL	Result
Burning Rate (mm/sec)	1			NA
Flame Propagation (POS/NEG)	1			NA
Ignitability Screen (POS/NEG)	1			NEG

**Mercury (TCLP) 7470A**

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00070	ND

**PAH Compounds 8270**

Analyte	DF	Units	RL	Result
2-Methylnaphthalene	1	mg/kg	0.038	ND
Acenaphthene	1	mg/kg	0.038	ND
Acenaphthylene	1	mg/kg	0.038	ND
Anthracene	1	mg/kg	0.038	ND
Benzo[a]anthracene	1	mg/kg	0.038	ND
Benzo[a]pyrene	1	mg/kg	0.038	ND
Benzo[b]fluoranthene	1	mg/kg	0.038	ND
Benzo[g,h,i]perylene	1	mg/kg	0.038	ND
Benzo[k]fluoranthene	1	mg/kg	0.038	ND
Chrysene	1	mg/kg	0.038	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.038	ND
Fluoranthene	1	mg/kg	0.038	ND
Fluorene	1	mg/kg	0.038	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.038	ND
Naphthalene	1	mg/kg	0.0095	ND
Phenanthrene	1	mg/kg	0.038	ND
Pyrene	1	mg/kg	0.038	ND

**Paint Filter Test 9095A**

Analyte	DF	Units	RL	Result
Paint Filter Test	1			NEG

**PCB 8082**

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.028	ND
Aroclor-1016	1	mg/kg	0.028	ND
Aroclor-1221	1	mg/kg	0.028	ND
Aroclor-1232	1	mg/kg	0.028	ND
Aroclor-1242	1	mg/kg	0.028	ND
Aroclor-1248	1	mg/kg	0.028	ND
Aroclor-1254	1	mg/kg	0.028	ND
Aroclor-1260	1	mg/kg	0.028	ND
Aroclor-1262	1	mg/kg	0.028	ND
Aroclor-1268	1	mg/kg	0.028	ND

**pH 9040C/9045D**

Analyte	DF	Units	RL	Result
pH	HAZ <sup>1</sup> - 84	pH		8

Sample ID: SB02 COMP  
 Lab#: AC91273-002  
 Matrix: Soil

Collection Date: 5/11/2016  
 Receipt Date: 5/11/2016

**Reactive Cyanide**

Analyte	DF	Units	RL	Result
Cyanide (Reactive)	1	mg/kg	0.50	ND

**Reactive Sulfide**

Analyte	DF	Units	RL	Result
Sulfide (Reactive)	1	mg/kg	100	ND

**TCLP Metals 6010**

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	0.45
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	1	mg/l	0.10	ND
Silver	1	mg/l	0.050	ND

**Total Petroleum Hydrocarbons 8015D (C8-C40)**

Analyte	DF	Units	RL	Result
Total Petroleum Hydrocarbons	1	mg/kg	68	ND

Sample ID: SB01  
 Lab#: AC91273-003  
 Matrix: Soil

Collection Date: 5/11/2016  
 Receipt Date: 5/11/2016

## % Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		88

## Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.956	mg/kg	0.0022	ND
1,1,2,2-Tetrachloroethane	0.956	mg/kg	0.0022	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.956	mg/kg	0.0022	ND
1,1,2-Trichloroethane	0.956	mg/kg	0.0022	ND
1,1-Dichloroethane	0.956	mg/kg	0.0022	ND
1,1-Dichloroethene	0.956	mg/kg	0.0022	ND
1,2,3-Trichlorobenzene	0.956	mg/kg	0.0022	ND
1,2,4-Trichlorobenzene	0.956	mg/kg	0.0022	ND
1,2-Dibromo-3-chloropropane	0.956	mg/kg	0.0022	ND
1,2-Dibromoethane	0.956	mg/kg	0.0022	ND
1,2-Dichlorobenzene	0.956	mg/kg	0.0022	ND
1,2-Dichloroethane	0.956	mg/kg	0.0022	ND
1,2-Dichloropropane	0.956	mg/kg	0.0022	ND
1,3-Dichlorobenzene	0.956	mg/kg	0.0022	ND
1,4-Dichlorobenzene	0.956	mg/kg	0.0022	ND
1,4-Dioxane	0.956	mg/kg	0.11	ND
2-Butanone	0.956	mg/kg	0.0022	ND
2-Hexanone	0.956	mg/kg	0.0022	ND
4-Methyl-2-pentanone	0.956	mg/kg	0.0022	ND
Acetone	0.956	mg/kg	0.011	ND
Benzene	0.956	mg/kg	0.0011	ND
Bromochloromethane	0.956	mg/kg	0.0022	ND
Bromodichloromethane	0.956	mg/kg	0.0022	ND
Bromoform	0.956	mg/kg	0.0022	ND
Bromomethane	0.956	mg/kg	0.0022	ND
Carbon disulfide	0.956	mg/kg	0.0022	ND
Carbon tetrachloride	0.956	mg/kg	0.0022	ND
Chlorobenzene	0.956	mg/kg	0.0022	ND
Chloroethane	0.956	mg/kg	0.0022	ND
Chloroform	0.956	mg/kg	0.0022	ND
Chloromethane	0.956	mg/kg	0.0022	ND
cis-1,2-Dichloroethene	0.956	mg/kg	0.0022	ND
cis-1,3-Dichloropropene	0.956	mg/kg	0.0022	ND
Cyclohexane	0.956	mg/kg	0.0022	ND
Dibromochloromethane	0.956	mg/kg	0.0022	ND
Dichlorodifluoromethane	0.956	mg/kg	0.0022	ND
Ethylbenzene	0.956	mg/kg	0.0011	ND
Isopropylbenzene	0.956	mg/kg	0.0011	ND
m&p-Xylenes	0.956	mg/kg	0.0011	ND
Methyl Acetate	0.956	mg/kg	0.0022	ND
Methylcyclohexane	0.956	mg/kg	0.0022	ND
Methylene chloride	0.956	mg/kg	0.0022	ND
Methyl-t-butyl ether	0.956	mg/kg	0.0011	ND
o-Xylene	0.956	mg/kg	0.0011	ND
Styrene	0.956	mg/kg	0.0022	ND
Tetrachloroethene	0.956	mg/kg	0.0022	ND
Toluene	0.956	mg/kg	0.0011	ND
trans-1,2-Dichloroethene	0.956	mg/kg	0.0022	ND
trans-1,3-Dichloropropene	0.956	mg/kg	0.0022	ND
Trichloroethene	0.956	mg/kg	0.0022	ND

HAZ. - 86

Sample ID: SB01

Lab#: AC91273-003

Matrix: Soil

Collection Date: 5/11/2016

Receipt Date: 5/11/2016

Trichlorofluoromethane	0.956	mg/kg	0.0022	ND
Vinyl chloride	0.956	mg/kg	0.0022	ND
Xylenes (Total)	0.956	mg/kg	0.0011	ND



Sample ID: SB01 COMP  
 Lab#: AC91273-004  
 Matrix: Soil

Collection Date: 5/11/2016  
 Receipt Date: 5/11/2016

**% Solids SM2540G**

Analyte	DF	Units	RL	Result
% Solids	1	percent		90

**Gasoline range organics 8015D(C6-C10)**

Analyte	DF	Units	RL	Result
Gasoline Range Organics	95.1	mg/kg	26	ND

**Ignitability (EPA 1030)**

Analyte	DF	Units	RL	Result
Burning Rate (mm/sec)	1			NA
Flame Propagation (POS/NEG)	1			NA
Ignitability Screen (POS/NEG)	1			NEG

**Mercury (TCLP) 7470A**

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00070	ND

**PAH Compounds 8270**

Analyte	DF	Units	RL	Result
2-Methylnaphthalene	1	mg/kg	0.037	ND
Acenaphthene	1	mg/kg	0.037	ND
Acenaphthylene	1	mg/kg	0.037	ND
Anthracene	1	mg/kg	0.037	ND
Benzo[a]anthracene	1	mg/kg	0.037	ND
Benzo[a]pyrene	1	mg/kg	0.037	ND
Benzo[b]fluoranthene	1	mg/kg	0.037	ND
Benzo[g,h,i]perylene	1	mg/kg	0.037	ND
Benzo[k]fluoranthene	1	mg/kg	0.037	ND
Chrysene	1	mg/kg	0.037	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.037	ND
Fluoranthene	1	mg/kg	0.037	ND
Fluorene	1	mg/kg	0.037	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.037	ND
Naphthalene	1	mg/kg	0.0093	ND
Phenanthrene	1	mg/kg	0.037	ND
Pyrene	1	mg/kg	0.037	ND

**Paint Filter Test 9095A**

Analyte	DF	Units	RL	Result
Paint Filter Test	1			NEG

**PCB 8082**

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.028	ND
Aroclor-1016	1	mg/kg	0.028	ND
Aroclor-1221	1	mg/kg	0.028	ND
Aroclor-1232	1	mg/kg	0.028	ND
Aroclor-1242	1	mg/kg	0.028	ND
Aroclor-1248	1	mg/kg	0.028	ND
Aroclor-1254	1	mg/kg	0.028	ND
Aroclor-1260	1	mg/kg	0.028	ND
Aroclor-1262	1	mg/kg	0.028	ND
Aroclor-1268	1	mg/kg	0.028	ND

**pH 9040C/9045D**

Analyte	DF	Units	RL	Result
pH	HAZ1- 88	ph		9.2

Sample ID: SB01 COMP  
Lab#: AC91273-004  
Matrix: Soil

Collection Date: 5/11/2016  
Receipt Date: 5/11/2016

**Reactive Cyanide**

Analyte	DF	Units	RL	Result
Cyanide (Reactive)	1	mg/kg	0.50	ND

**Reactive Sulfide**

Analyte	DF	Units	RL	Result
Sulfide (Reactive)	1	mg/kg	100	ND

**TCLP Metals 6010**

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/l	0.25	0.80
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	0.058
Nickel	1	mg/l	0.10	ND
Selenium	1	mg/l	0.10	ND
Silver	1	mg/l	0.050	ND

**Total Petroleum Hydrocarbons 8015D (C8-C40)**

Analyte	DF	Units	RL	Result
Total Petroleum Hydrocarbons	1	mg/kg	67	ND

## HC Reporting Limit Definitions/Data Qualifiers

### REPORTING DEFINITIONS

DF = Dilution Factor

MDL = Method Detection Limit

RL\* = Reporting Limit

ND = Not Detected

RT = Retention Time

NA = Not Applicable

*\*Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

### DATA QUALIFIERS

- A- Indicates that the Tentatively Identified Compound (TIC) is suspected to be an aldol-condensation product. These compounds are by-products of acetone and methylene chloride used in the extraction process.
- B- Indicates analyte was present in the Method Blank and sample.
- d- For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.
- E- Indicates the concentration exceeded the upper calibration range of the instrument.
- J- Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.
- R- Retention Time is out.
- Y- Indicates a contaminant found in the blank at less than 10% of the concentration of a contaminant found in the sample.

# Laboratory Chronicle

6051104 0013

Client: Louis Berger & Associates

HC Project #: 6051104

Project: West Tremont Ave

Lab#: AC91273-001

Sample ID: SB02

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	5/12/16 00:00	BEENA
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260C	5/13/16 15:00	SG

Lab#: AC91273-002

Sample ID: SB02 COMP

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	5/12/16 00:00	BEENA
Gasoline range organics 8015D(C6-C10)	EPA5030/5035			EPA 8015D	5/13/16 12:25	SG
Ignitability (EPA 1030)		05/12/16	SDL	EPA 1030	5/12/16 00:00	SDL
Mercury (TCLP) 7470A	EPA 7470A	05/13/16	carmela	EPA 7470A	5/16/16 15:23	CJA
PAH Compounds 8270	3510C/3550C	05/13/16	marie	EPA 8270D	5/13/16 18:54	AH/JB
Paint Filter Test 9095A				EPA 9095A	5/12/16 00:00	SDL
PCB 8082	3510C/3550C	05/12/16	JKR	EPA 8082A	5/12/16 18:19	MAS/ZM/MLC
pH 9040C/9045D				9040C/9045D	5/12/16 11:20	SDL
Reactive Cyanide	SW846 7.3.3	05/13/16	beena	SW846 7.3.3	5/13/16 16:34	ND
Reactive Sulfide	SW846 7.3.4	05/13/16	BCT	SW846 7.3.4	5/13/16 00:00	BCT
TCLP Metals 6010	3005&10/3050	05/13/16	carmela	EPA 6010C	5/14/16 00:45	OA
TCLP Metals Extraction 1311	EPA 1311	05/12/16	Ramos		5/13/16 00:00	Ramos
Total PetroleumHydrocarbons8015D(C8-C40)	Mod. Shaker	05/12/16	lynda	EPA 8015D	5/12/16 18:48	ABM/KD

Lab#: AC91273-003

Sample ID: SB01

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	5/12/16 00:00	BEENA
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260C	5/13/16 15:17	SG

# Laboratory Chronicle

6051104 0014

Client: Louis Berger &amp; Associates

HC Project #: 6051104

Project: West Tremont Ave

Lab#: AC91273-004

Sample ID: SB01 COMP

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	5/12/16 00:00	BEENA
Gasoline range organics 8015D(C6-C10)	EPA5030/5035			EPA 8015D	5/13/16 12:44	SG
Ignitability (EPA 1030)		05/12/16	SDL	EPA 1030	5/12/16 00:00	SDL
Mercury (TCLP) 7470A	EPA 7470A	05/13/16	carmela	EPA 7470A	5/16/16 15:28	CJA
PAH Compounds 8270	3510C/3550C	05/13/16	marie	EPA 8270D	5/13/16 19:17	AH/JB
Paint Filter Test 9095A				EPA 9095A	5/12/16 00:00	SDL
PCB 8082	3510C/3550C	05/12/16	JKR	EPA 8082A	5/12/16 18:35	MAS/ZM/MLC
pH 9040C/9045D				9040C/9045D	5/12/16 11:20	SDL
Reactive Cyanide	SW846 7.3.3	05/13/16	beena	SW846 7.3.3	5/13/16 16:36	ND
Reactive Sulfide	SW846 7.3.4	05/13/16	BCT	SW846 7.3.4	5/13/16 00:00	BCT
TCLP Metals 6010	3005&10/3050	05/13/16	carmela	EPA 6010C	5/14/16 01:13	OA
TCLP Metals Extraction 1311	EPA 1311	05/12/16	Ramos		5/13/16 00:00	Ramos
Total PetroleumHydrocarbons8015D(C8-C40)	Mod. Shaker	05/12/16	lynda	EPA 8015D	5/12/16 19:14	ABM/KD

## **Chain of Custody**

<b>Hampton-Clarke, Inc. (WBE/DBE/SBE)</b> 175 West and 2 Madison Road, Fairfield, New Jersey 07004 Ph: 856-780-6052   973-244-9770 Fax: 973-244-9787   973-439-1458 Service Center: 137-D Gailher Drive, Mount Laurel, New Jersey 08054 Ph (Service Center): 856-780-6057 Fax: 856-780-6056 NEACINJ 807671   PA #88-00463   NY #11408   CT #PH-0671   KY #90124   DE HSCA Approved		 <b>AIN OF CUSTODY RECORD</b>		Project # (Lab Use Only) <u>6051104</u> Page <u>1</u>	
<b>Customer Information</b> 1a) Customer: <u>Louis Berger</u> Address: <u>48 Wall Street 11th Floor</u> <u>New York, NY</u> Email/Ce/fax/Ph: <u>bag.ber@louisberger.com</u> 1b) Send Invoice to: <u>B. G. bly</u> 1c) Send Report to: <u>B. G. bly</u> 1d) Send Report to: <u>B. G. bly</u>		<b>Project Information</b> 2a) Project: <u>West Treatment Area</u> 2b) Project Mgr: <u>Step Street</u> <u>Brenner-Crabb</u> 2c) Project Location (City/State): <u>Brooklyn, NY</u> 2d) Quote/PO # (If Applicable): <u>300610.104</u>		<b>Reporting Requirements (Please Circle)</b> Turnaround When Available: 1 Business Day (100%)* 2 Business Days (75%)* 3 Business Days (50%)* 4 Business Days (35%)* 5 Business Days (25%)* 10 Business Days (Stand.) Other: _____ * Expedited TAT Not Always Available. Please Check with Lab.	
<b>FOR LAB USE ONLY</b> Batch # <u>AC91213</u> Matrix Codes: DW - Drinking Water S - Soil A - Air GW - Ground Water SL - Sludge WW - Waste Water OL - Oil OT - Other (Please specify under Item 9, Comments)		<b>7) Analysis (specify methods &amp; parameter lists)</b> Sample Type: <u>Grab (G)</u> Composite (C): <u>2260 VOC</u> <u>PAH 8270C</u> <u>TPH - DRG/600</u> <u>PCB 8082A/608</u> <u>TCMP Metals</u> <u>RCRA Characteristics (Ignitability, reactivity, corrosivity)</u> <u>Point Filter</u>		<b>8) # of Bottles</b> None <input type="checkbox"/> MeOH <input type="checkbox"/> En Core <input type="checkbox"/> NaOH <input type="checkbox"/> HCl <input type="checkbox"/> H2SO4 <input type="checkbox"/> HNO3 <input type="checkbox"/> Other: _____	
<b>FOR LAB USE ONLY</b> Lab Sample # <u>001</u> 4) Customer Sample ID <u>SB02</u> 5) Matrix <u>S</u> 6) Sample Date <u>5-11-14</u> Time <u>140</u> <u>002</u> <u>SB02Camp</u> <u>I</u> <u>I</u> <u>1145</u> <u>X</u> <u>003</u> <u>SB01</u> <u>I</u> <u>I</u> <u>1320</u> <u>X</u> <u>004</u> <u>SB01Camp</u> <u>I</u> <u>I</u> <u>1325</u> <u>X</u>		<b>9) Comments</b> HAZ. - 94		<b>Comments, Notes, Special Requirements, HAZARDS</b> Indicate if low-level methods required to meet current groundwater standards (SPLP for soil): BN or BNA (8270D SIM) <input type="checkbox"/> VOC (8260C SIM or 8011) <input type="checkbox"/> SPLP (BN, BNA, Metals) <input type="checkbox"/> Check if applicable: Project-Specific Reporting Limits High Contaminant Concentrations NJ LSRP Project (also check boxes above/right) 11) Sampler (print name): <u>N.O.R.L.</u> Please note <b>NUMBERED</b> items. If not completed your analytical work may be delayed. A fee of \$5/sample will be assessed for storage should sample not be activated for any analysis.	
10) Relinquished by: <u>[Signature]</u> Accepted by: <u>[Signature]</u> Date <u>5-11-14</u> Time <u>1445</u>		Cooler Temperature <u>2.6</u>		Date: <u>5-11-14</u>	

Additional Notes

## CONDITION UPON RECEIPT

Batch Number AC91273

Entered By: Ricardo

Date Entered 5/11/2016 2:50:00 PM

- 
- 1 Yes Is there a corresponding COC included with the samples?
- 2 Yes Are the samples in a container such as a cooler or ice chest?
- 3 NO Are the COC seals intact?
- 4 ID <--- Thermometer ID. Please specify the Temperature inside the container (in degC).  
2.6
- 5 Yes Are the samples refrigerated (where required)/have they arrived on ice?
- 6 Yes Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
- 7 Yes Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
- 8 Yes Are all of the sample labels or numbers legible? If no specify:
- 9 Yes Do the contents match the COC? If no, specify
- 10 Yes Is there enough sample sent for the analyses listed on the COC? If no, specify:
- 11 Yes Are samples preserved correctly?
- 12 Yes Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
- 13 NA Other comments ...Specify
- 14 NA Corrective actions (Specify item number and corrective action taken).



## Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/ M	Analysis
AC91273-001	05/11/16 14:45	RICAR	0	M	Received
AC91273-001	05/11/16 14:50	RICAR	0	M	Login
AC91273-001	05/11/16 17:32	R12	1	A	NONE
AC91273-001	05/11/16 21:17	R12	1	A	NONE
AC91273-001	05/11/16 21:17	PA	1	A	mix
AC91273-001	05/12/16 08:14	BCT	1	A	% SOLIDS
AC91273-001	05/12/16 11:27	R12	1	A	NONE
AC91273-001	05/12/16 07:45	R30	2	A	NONE
AC91273-001	05/12/16 14:03	SG	2	A	VOA
AC91273-001	05/12/16 15:41	R30	2	A	NONE
AC91273-001	05/13/16 12:19	JS	3	A	VOA
AC91273-001	05/20/16 09:33	JS	4	A	F19
AC91273-001	05/20/16 09:33	JS	5	A	F19
AC91273-002	05/11/16 14:45	RICAR	0	M	Received
AC91273-002	05/11/16 14:50	RICAR	0	M	Login
AC91273-002	05/11/16 17:32	R12	1	A	NONE
AC91273-002	05/11/16 21:17	PA	1	A	mix
AC91273-002	05/11/16 21:17	R12	1	A	NONE
AC91273-002	05/12/16 08:13	JKR	1	A	P/P
AC91273-002	05/12/16 06:14	R12	1	A	NONE
AC91273-002	05/12/16 08:55	SDL	1	M	IGNIT-1030/PAINT FILTER/PH
AC91273-002	05/12/16 10:54	LV	1	A	TPH
AC91273-002	05/12/16 10:55	R12	1	A	NONE
AC91273-002	05/12/16 14:31	RAMO	1	M	TCLP
AC91273-002	05/13/16 06:26	MSL	1	A	bn
AC91273-002	05/13/16 06:28	R12	1	A	NONE
AC91273-002	05/13/16 10:46	BCT	1	A	RCN/RS
AC91273-002	05/13/16 14:32	R12	1	A	NONE
AC91273-002	05/12/16 07:45	R30	2	A	NONE
AC91273-002	05/12/16 14:10	SG	2	A	GRO
AC91273-002	05/12/16 15:41	R30	2	A	NONE
AC91273-002	05/12/16 15:41	R31	3	A	NONE
AC91273-002	05/13/16 11:14	JS	3	A	GRO
AC91273-002	05/13/16 11:14	R31	3	A	NONE
AC91273-003	05/11/16 14:45	RICAR	0	M	Received
AC91273-003	05/11/16 14:50	RICAR	0	M	Login
AC91273-003	05/11/16 17:32	R12	1	A	NONE
AC91273-003	05/11/16 21:17	R12	1	A	NONE
AC91273-003	05/11/16 21:17	PA	1	A	mix
AC91273-003	05/12/16 08:14	BCT	1	A	% SOLIDS
AC91273-003	05/12/16 11:27	R12	1	A	NONE
AC91273-003	05/12/16 07:45	R30	2	A	NONE
AC91273-003	05/12/16 14:03	SG	2	A	VOA
AC91273-003	05/12/16 15:41	R30	2	A	NONE
AC91273-003	05/13/16 12:19	JS	3	A	VOA
AC91273-004	05/11/16 14:45	RICAR	0	M	Received
AC91273-004	05/11/16 14:50	RICAR	0	M	Login
AC91273-004	05/11/16 17:32	R12	1	A	NONE
AC91273-004	05/11/16 21:17	R12	1	A	NONE
AC91273-004	05/11/16 21:17	PA	1	A	mix
AC91273-004	05/12/16 06:13	JKR	1	A	P/P
AC91273-004	05/12/16 06:14	R12	1	A	NONE
AC91273-004	05/12/16 08:55	SDL	1	M	IGNIT-1030/PAINT FILTER/PH
AC91273-004	05/12/16 10:54	LV	1	A	TPH
AC91273-004	05/12/16 10:55	R12	1	A	NONE
AC91273-004	05/12/16 14:31	RAMO	1	M	TCLP
AC91273-004	05/13/16 06:26	MSL	1	A	bn
AC91273-004	05/13/16 06:28	R12	1	A	NONE
AC91273-004	05/13/16 10:46	BCT	1	A	RCN/RS
AC91273-004	05/13/16 14:32	R12	1	A	NONE
AC91273-004	05/12/16 07:45	R30	2	A	NONE
AC91273-004	05/12/16 14:10	SG	2	A	GRO
AC91273-004	05/12/16 15:41	R30	2	A	NONE
AC91273-004	05/12/16 15:41	R31	3	A	NONE
AC91273-004	05/13/16 11:14	JS	3	A	GRO
AC91273-004	05/13/16 11:14	R31	3	A	NONE

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: AC91273-001

Client Id: SB02

Data File: 6M39098.D

Analysis Date: 05/13/16 15:00

Date Rec/Extracted: 05/11/16-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Soil

Initial Vol: 5.08g

Final Vol: NA

Dilution: 0.984

Solids: 90

## Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0022	U	56-23-5	Carbon Tetrachloride	0.0022	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0022	U	108-90-7	Chlorobenzene	0.0022	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0022	U	75-00-3	Chloroethane	0.0022	U
79-00-5	1,1,2-Trichloroethane	0.0022	U	67-66-3	Chloroform	0.0022	U
75-34-3	1,1-Dichloroethane	0.0022	U	74-87-3	Chloromethane	0.0022	U
75-35-4	1,1-Dichloroethene	0.0022	U	156-59-2	cis-1,2-Dichloroethene	0.0022	U
87-61-6	1,2,3-Trichlorobenzene	0.0022	U	10061-01-5	cis-1,3-Dichloropropene	0.0022	U
120-82-1	1,2,4-Trichlorobenzene	0.0022	U	110-82-7	Cyclohexane	0.0022	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0022	U	124-48-1	Dibromochloromethane	0.0022	U
106-93-4	1,2-Dibromoethane	0.0022	U	75-71-8	Dichlorodifluoromethane	0.0022	U
95-50-1	1,2-Dichlorobenzene	0.0022	U	100-41-4	Ethylbenzene	0.0011	U
107-06-2	1,2-Dichloroethane	0.0022	U	98-82-8	Isopropylbenzene	0.0011	U
78-87-5	1,2-Dichloropropane	0.0022	U	79601-23-1	m&p-Xylenes	0.0011	U
541-73-1	1,3-Dichlorobenzene	0.0022	U	79-20-9	Methyl Acetate	0.0022	U
106-46-7	1,4-Dichlorobenzene	0.0022	U	108-87-2	Methylcyclohexane	0.0022	U
123-91-1	1,4-Dioxane	0.11	U	75-09-2	Methylene Chloride	0.0022	U
78-93-3	2-Butanone	0.0022	U	1634-04-4	Methyl-t-butyl ether	0.0011	U
591-78-6	2-Hexanone	0.0022	U	95-47-6	o-Xylene	0.0011	U
108-10-1	4-Methyl-2-Pentanone	0.0022	U	100-42-5	Styrene	0.0022	U
67-64-1	Acetone	0.011	U	127-18-4	Tetrachloroethene	0.0022	U
71-43-2	Benzene	0.0011	U	108-88-3	Toluene	0.0011	U
74-97-5	Bromochloromethane	0.0022	U	156-60-5	trans-1,2-Dichloroethene	0.0022	U
75-27-4	Bromodichloromethane	0.0022	U	10061-02-6	trans-1,3-Dichloropropene	0.0022	U
75-25-2	Bromoform	0.0022	U	79-01-6	Trichloroethene	0.0022	U
74-83-9	Bromomethane	0.0022	U	75-69-4	Trichlorofluoromethane	0.0022	U
75-15-0	Carbon Disulfide	0.0022	U	75-01-4	Vinyl Chloride	0.0022	U
1330-20-7	Xylenes (Total)	0.0011	U				

Worksheet #: 383784

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration uses

Chlordane (Total) is sum of  $\alpha$ -Chlordane and  $\gamma$ -Chlordane.

SampleID : AC91273-001  
Data File: 6M39098.D  
Acq On : 05/13/16 15:00

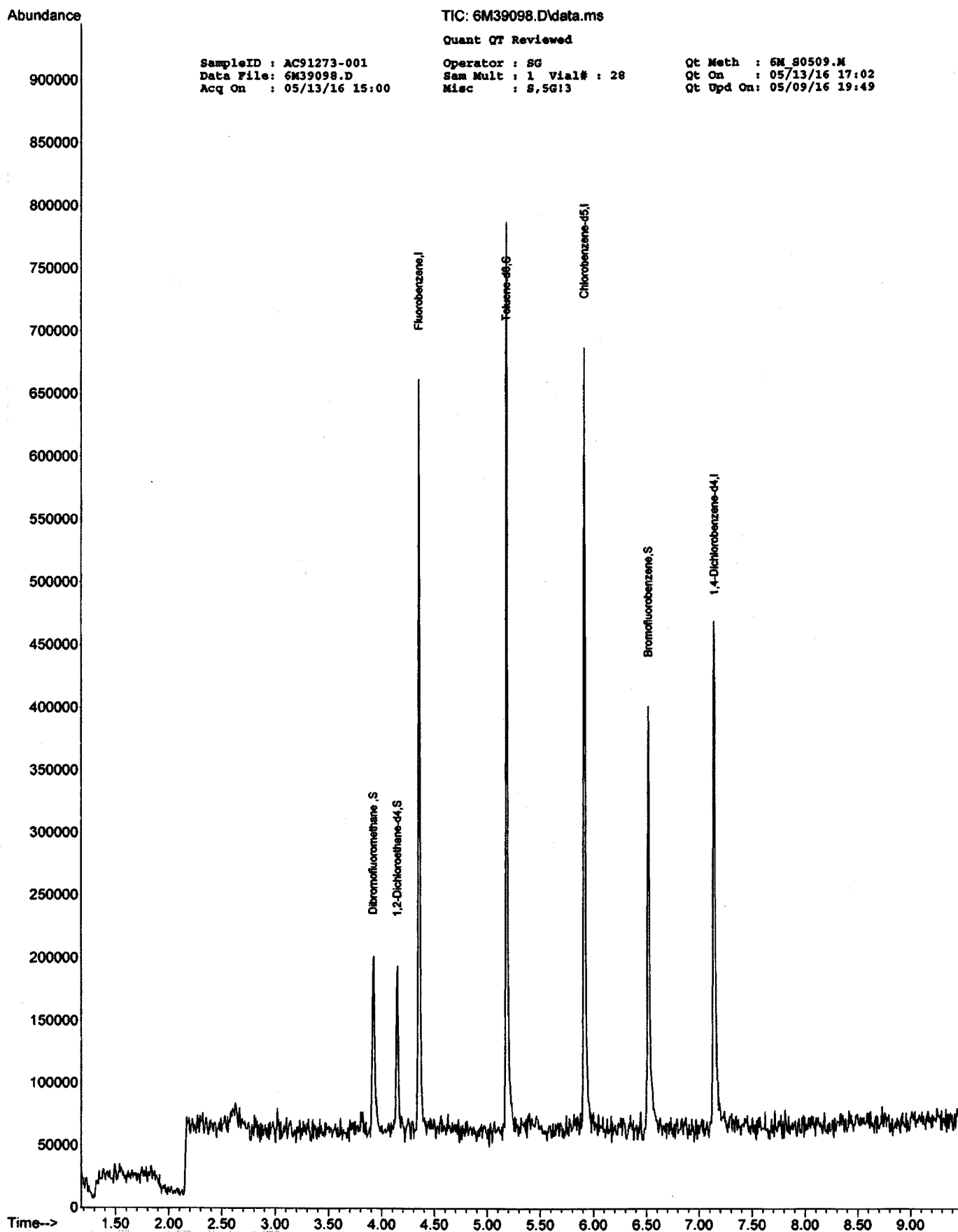
Operator : SG  
Sam Mult : 1 Vial# : 28  
Misc : S,5G13

Qt Meth : 6M\_S0509.M  
Qt On : 05/13/16 17:02  
Qt Upd On: 05/09/16 19:49

Data Path : G:\GcMsData\2016\GCMS\_6\Data\05-13-16\  
Qt Path : G:\GcMsData\2016\GCMS\_6\MethodQt\  
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
4) Fluorobenzene	4.350	96	333556	30.00	ug/l	0.00
52) Chlorobenzene-d5	5.913	117	215898	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.139	152	104252	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	3.917	111	75434	30.42	ug/l	0.00
Spiked Amount	30.000		Recovery	=	101.40%	
39) 1,2-Dichloroethane-d4	4.146	67	30328	29.12	ug/l	0.01
Spiked Amount	30.000		Recovery	=	97.07%	
66) Toluene-d8	5.180	98	297611	28.67	ug/l	0.00
Spiked Amount	30.000		Recovery	=	95.57%	
76) Bromofluorobenzene	6.514	174	74723	26.29	ug/l	0.00
Spiked Amount	30.000		Recovery	=	87.63%	
Target Compounds						Qvalue
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed



# Form1

## ORGANICS VOLATILE REPORT

Sample Number: AC91273-003

Client Id: SB01

Data File: 6M39099.D

Analysis Date: 05/13/16 15:17

Date Rec/Extracted: 05/11/16-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Soil

Initial Vol: 5.23g

Final Vol: NA

Dilution: 0.956

Solids: 88

## Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0022	U	56-23-5	Carbon Tetrachloride	0.0022	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0022	U	108-90-7	Chlorobenzene	0.0022	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0022	U	75-00-3	Chloroethane	0.0022	U
79-00-5	1,1,2-Trichloroethane	0.0022	U	67-66-3	Chloroform	0.0022	U
75-34-3	1,1-Dichloroethane	0.0022	U	74-87-3	Chloromethane	0.0022	U
75-35-4	1,1-Dichloroethene	0.0022	U	156-59-2	cis-1,2-Dichloroethene	0.0022	U
87-61-6	1,2,3-Trichlorobenzene	0.0022	U	10061-01-5	cis-1,3-Dichloropropene	0.0022	U
120-82-1	1,2,4-Trichlorobenzene	0.0022	U	110-82-7	Cyclohexane	0.0022	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0022	U	124-48-1	Dibromochloromethane	0.0022	U
106-93-4	1,2-Dibromoethane	0.0022	U	75-71-8	Dichlorodifluoromethane	0.0022	U
95-50-1	1,2-Dichlorobenzene	0.0022	U	100-41-4	Ethylbenzene	0.0011	U
107-06-2	1,2-Dichloroethane	0.0022	U	98-82-8	Isopropylbenzene	0.0011	U
78-87-5	1,2-Dichloropropane	0.0022	U	79601-23-1	m&p-Xylenes	0.0011	U
541-73-1	1,3-Dichlorobenzene	0.0022	U	79-20-9	Methyl Acetate	0.0022	U
106-46-7	1,4-Dichlorobenzene	0.0022	U	108-87-2	Methylcyclohexane	0.0022	U
123-91-1	1,4-Dioxane	0.11	U	75-09-2	Methylene Chloride	0.0022	U
78-93-3	2-Butanone	0.0022	U	1634-04-4	Methyl-t-butyl ether	0.0011	U
591-78-6	2-Hexanone	0.0022	U	95-47-6	o-Xylene	0.0011	U
108-10-1	4-Methyl-2-Pentanone	0.0022	U	100-42-5	Styrene	0.0022	U
67-64-1	Acetone	0.011	U	127-18-4	Tetrachloroethene	0.0022	U
71-43-2	Benzene	0.0011	U	108-88-3	Toluene	0.0011	U
74-97-5	Bromochloromethane	0.0022	U	156-60-5	trans-1,2-Dichloroethene	0.0022	U
75-27-4	Bromodichloromethane	0.0022	U	10061-02-6	trans-1,3-Dichloropropene	0.0022	U
75-25-2	Bromoform	0.0022	U	79-01-6	Trichloroethene	0.0022	U
74-83-9	Bromomethane	0.0022	U	75-69-4	Trichlorofluoromethane	0.0022	U
75-15-0	Carbon Disulfide	0.0022	U	75-01-4	Vinyl Chloride	0.0022	U
1330-20-7	Xylenes (Total)	0.0011	U				

Worksheet #: 383784

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

Indicates the compound was analyzed but not detected.  
 Indicates the analyte was found in the blank as well as in the sample.  
 Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out  
 J - Indicates an estimated value when a compound is detected at less than the specified detection limit.  
 d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

SampleID : AC91273-003  
Data File: 6M39099.D  
Acq On : 05/13/16 15:17

Operator : SG  
Sam Mult : 1 Vial# : 29  
Misc : S,5G!3

Qt Meth : 6M\_S0509.M  
Qt On : 05/13/16 17:02  
Qt Upd On: 05/09/16 19:49

Data Path : G:\GcMsData\2016\GCMS\_6\Data\05-13-16\  
Qt Path : G:\GcMsData\2016\GCMS\_6\MethodQt\  
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
4) Fluorobenzene	4.361	96	351413	30.00	ug/l	0.01
52) Chlorobenzene-d5	5.924	117	228180	30.00	ug/l	0.02
70) 1,4-Dichlorobenzene-d4	7.144	152	102465	30.00	ug/l	0.01
System Monitoring Compounds						
37) Dibromofluoromethane	3.928	111	79423	30.40	ug/l	0.02
Spiked Amount 30.000			Recovery	=	101.33%	
39) 1,2-Dichloroethane-d4	4.150	67	32011	29.18	ug/l	0.02
Spiked Amount 30.000			Recovery	=	97.27%	
66) Toluene-d8	5.190	98	335113	30.54	ug/l	0.01
Spiked Amount 30.000			Recovery	=	101.80%	
76) Bromofluorobenzene	6.525	174	85231	30.51	ug/l	0.01
Spiked Amount 30.000			Recovery	=	101.70%	
Target Compounds						
						Qvalue
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

*ke*

Abundance

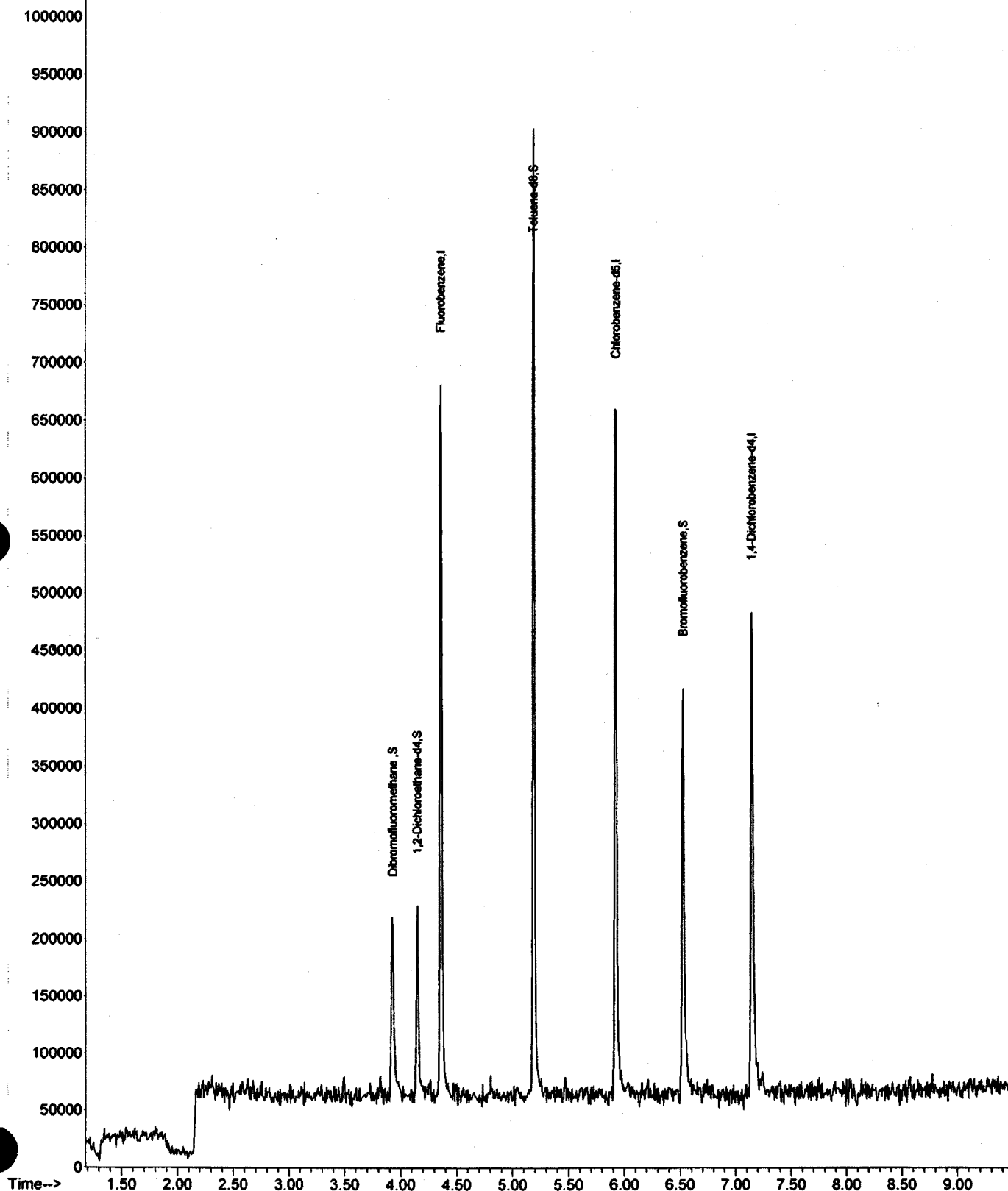
TIC: 6M39099.D\data.ms

Quant QT Reviewed

SampleID : AC91273-003  
Data File: 6M39099.D  
Acq On : 05/13/16 15:17

Operator : SG  
Sam Mult : 1 Vial# : 29  
Misc : S,5G13

Qt Meth : 6M\_80509.M  
Qt On : 05/13/16 17:02  
Qt Upd On: 05/09/16 19:49



**Form1**  
ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK

Client Id:

Data File: 6M39080.D

Analysis Date: 05/13/16 10:00

Date Rec/Extracted:

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Soil

Initial Vol: 5g

Final Vol: NA

Dilution: 1.00

Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0020	U	56-23-5	Carbon Tetrachloride	0.0020	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0020	U	108-90-7	Chlorobenzene	0.0020	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0020	U	75-00-3	Chloroethane	0.0020	U
79-00-5	1,1,2-Trichloroethane	0.0020	U	67-66-3	Chloroform	0.0020	U
75-34-3	1,1-Dichloroethane	0.0020	U	74-87-3	Chloromethane	0.0020	U
75-35-4	1,1-Dichloroethene	0.0020	U	156-59-2	cis-1,2-Dichloroethene	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	0.0020	U	10061-01-5	cis-1,3-Dichloropropene	0.0020	U
120-82-1	1,2,4-Trichlorobenzene	0.0020	U	110-82-7	Cyclohexane	0.0020	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0020	U	124-48-1	Dibromochloromethane	0.0020	U
106-93-4	1,2-Dibromoethane	0.0020	U	75-71-8	Dichlorodifluoromethane	0.0020	U
95-50-1	1,2-Dichlorobenzene	0.0020	U	100-41-4	Ethylbenzene	0.0010	U
107-06-2	1,2-Dichloroethane	0.0020	U	98-82-8	Isopropylbenzene	0.0010	U
78-87-5	1,2-Dichloropropane	0.0020	U	79601-23-1	m&p-Xylenes	0.0010	U
541-73-1	1,3-Dichlorobenzene	0.0020	U	79-20-9	Methyl Acetate	0.0020	U
106-46-7	1,4-Dichlorobenzene	0.0020	U	108-87-2	Methylcyclohexane	0.0020	U
123-91-1	1,4-Dioxane	0.10	U	75-09-2	Methylene Chloride	0.0020	U
78-93-3	2-Butanone	0.0020	U	1634-04-4	Methyl-t-butyl ether	0.0010	U
591-78-6	2-Hexanone	0.0020	U	95-47-6	o-Xylene	0.0010	U
108-10-1	4-Methyl-2-Pentanone	0.0020	U	100-42-5	Styrene	0.0020	U
67-64-1	Acetone	0.010	U	127-18-4	Tetrachloroethene	0.0020	U
71-43-2	Benzene	0.0010	U	108-88-3	Toluene	0.0010	U
74-97-5	Bromochloromethane	0.0020	U	156-60-5	trans-1,2-Dichloroethene	0.0020	U
75-27-4	Bromodichloromethane	0.0020	U	10061-02-6	trans-1,3-Dichloropropene	0.0020	U
75-25-2	Bromoform	0.0020	U	79-01-6	Trichloroethene	0.0020	U
74-83-9	Bromomethane	0.0020	U	75-69-4	Trichlorofluoromethane	0.0020	U
75-15-0	Carbon Disulfide	0.0020	U	75-01-4	Vinyl Chloride	0.0020	U

Worksheet #: 383784

**Total Target Concentration 0**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of  $\alpha$ -Chlordane and  $\gamma$ -Chlordane.



SampleID : DAILY BLANK  
Data File: 6M39080.D  
Acq On : 05/13/16 10:00

Operator : SG  
Sam Mult : 1 Vial# : 12  
Misc : S.5G

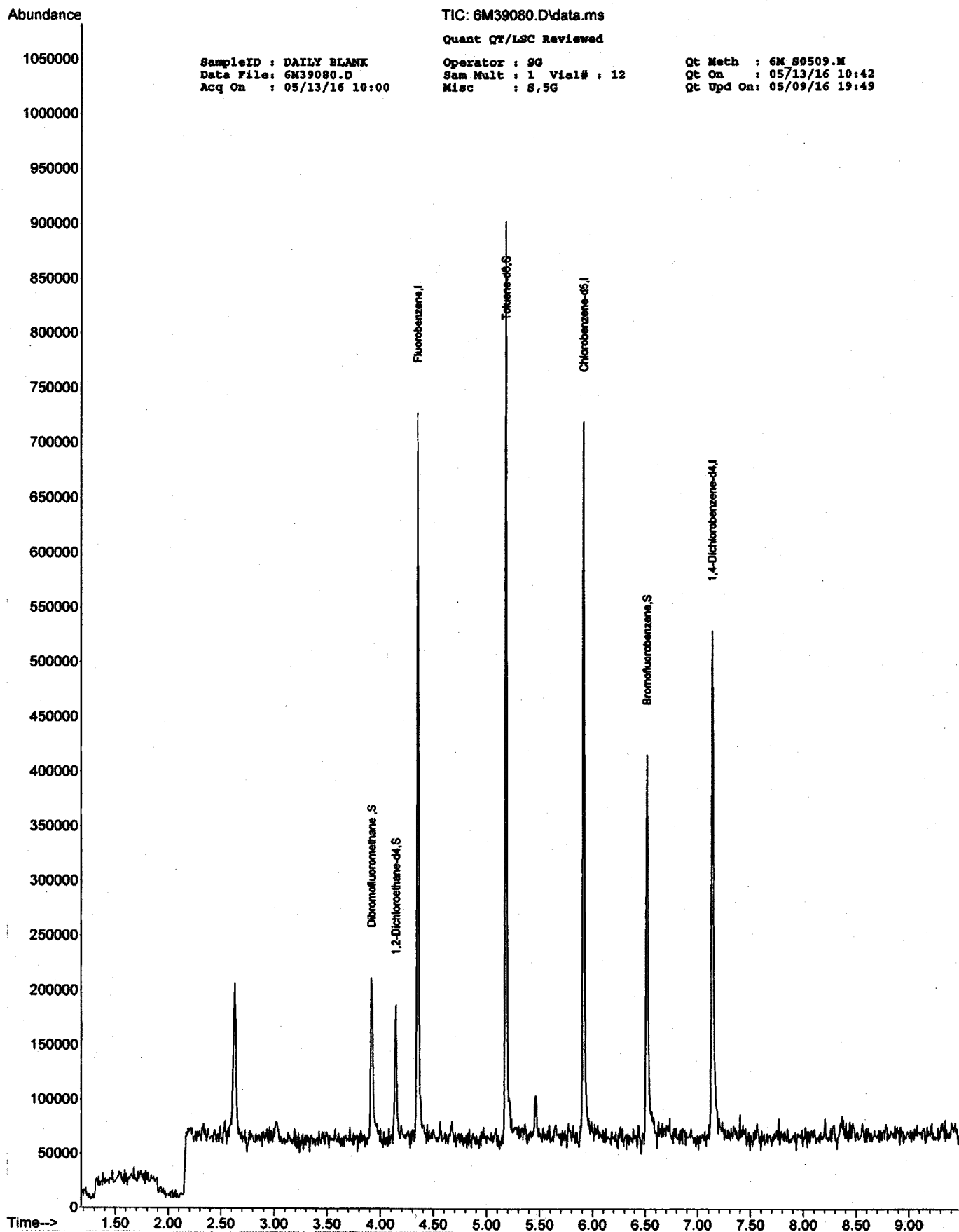
Qt Meth : 6M S0509.M  
Qt On : 05/13/16 10:42  
Qt Upd On: 05/09/16 19:49

Data Path : G:\GcMsData\2016\GCMS\_6\Data\05-13-16\  
Qt Path : G:\GcMsData\2016\GCMS\_6\MethodQt\  
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.349	96	363584	30.00	ug/l	0.00
52) Chlorobenzene-d5	5.912	117	224234	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.132	152	106707	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	3.916	111	69577	25.74	ug/l	0.00
Spiked Amount	30.000		Recovery	=	85.80%	
39) 1,2-Dichloroethane-d4	4.145	67	35045	30.87	ug/l	0.01
Spiked Amount	30.000		Recovery	=	102.90%	
66) Toluene-d8	5.179	98	336841	31.24	ug/l	0.00
Spiked Amount	30.000		Recovery	=	104.13%	
76) Bromofluorobenzene	6.513	174	74184	25.50	ug/l	0.00
Spiked Amount	30.000		Recovery	=	85.00%	
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

*Handwritten signature*



## FORM2

## Surrogate Recovery

Method: EPA 8260C

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
6M39022.D	DAILY BLANK	S	05/12/16 09:09	1		109	114	102	106		
6M39080.D	DAILY BLANK	S	05/13/16 10:00	1		86	103	104	85		
6M39098.D	DAC91273-001	S	05/13/16 15:00	1		101	97	96	88		
6M39099.D	DAC91273-003	S	05/13/16 15:17	1		101	97	102	102		
6M39025.D	DAC91283-002	S	05/12/16 09:59	1		98	99	93	103		
6M39027.D	DMBS53447	S	05/12/16 10:32	1		91	95	100	106		
6M39088.D	DMBS53464	S	05/13/16 12:14	1		78	102	105	98		
6M39101.D	DAC91283-002(MS)	S	05/13/16 15:51	1		92	86	106	93		
6M39102.D	DAC91283-002(MSD)	S	05/13/16 16:07	1		90	84	106	99		

Flags: SD=Surrogate diluted out

\*=Surrogate out

Method: EPA 8260C

## Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=Dibromofluoromethane	30	63-140
S2=1,2-Dichloroethane-d4	30	63-143
S3=Toluene-d8	30	68-122
S4=Bromofluorobenzene	30	64-129

**Form3**  
**Recovery Data Laboratory Limits**  
**QC Batch: MBS53447**

Data File		Sample ID:		Analysis Date			
Spike or Dup: 6M39027.D		MBS53447		5/12/2016 10:32:00 AM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 8260C		Matrix: Soil		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	51.1259	0	50	102	20	130
Dichlorodifluoromethane	1	44.4648	0	50	89	20	130
Chloromethane	1	49.2067	0	50	98	20	130
Bromomethane	1	41.1173	0	50	82	20	130
Vinyl Chloride	1	50.4164	0	50	101	20	130
Chloroethane	1	46.9921	0	50	94	20	130
Trichlorofluoromethane	1	52.4376	0	50	105	20	130
Ethyl ether	1	38.2807	0	50	77	50	130
Furan	1	53.7472	0	50	107	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	49.318	0	50	99	50	130
Methylene Chloride	1	46.3632	0	50	93	50	130
Acrolein	1	263.1521	0	200	132*	20	130
Acrylonitrile	1	43.24	0	50	86	20	130
Iodomethane	1	59.0407	0	50	118	50	130
Acetone	1	222.3169	0	200	111	20	130
Carbon Disulfide	1	66.5028	0	50	133*	50	130
t-Butyl Alcohol	1	257.5062	0	200	129	20	130
n-Hexane	1	63.3165	0	50	127	50	130
Di-isopropyl-ether	1	63.373	0	50	127	50	130
1,1-Dichloroethene	1	47.3421	0	50	95	50	130
Methyl Acetate	1	56.056	0	50	112	50	130
Methyl-t-butyl ether	1	55.1137	0	50	110	50	130
1,1-Dichloroethane	1	51.8215	0	50	104	50	130
trans-1,2-Dichloroethene	1	53.0908	0	50	106	50	130
Ethyl-t-butyl ether	1	59.855	0	50	120	50	130
cis-1,2-Dichloroethene	1	53.5263	0	50	107	50	130
Bromochloromethane	1	38.2082	0	50	76	50	130
2,2-Dichloropropane	1	49.3063	0	50	99	50	130
Ethyl acetate	1	57.5016	0	50	115	50	130
1,4-Dioxane	1	2590.159	0	2500	104	50	130
1,1-Dichloropropene	1	55.6866	0	50	111	50	130
Chloroform	1	47.291	0	50	95	50	130
Cyclohexane	1	63.5546	0	50	127	50	130
1,2-Dichloroethane	1	50.9864	0	50	102	50	130
2-Butanone	1	44.9232	0	50	90	20	130
1,1,1-Trichloroethane	1	55.6649	0	50	111	50	130
Carbon Tetrachloride	1	52.2611	0	50	105	50	130
Vinyl Acetate	1	52.003	0	50	104	50	130
Bromodichloromethane	1	49.8077	0	50	100	50	130
Methylcyclohexane	1	59.6566	0	50	119	50	130
Dibromomethane	1	43.5435	0	50	87	50	130
1,2-Dichloropropane	1	58.1686	0	50	116	50	130
Trichloroethene	1	55.4438	0	50	111	50	130
Benzene	1	56.6221	0	50	113	50	130
tert-Amyl methyl ether	1	51.7788	0	50	104	50	130
Iso-propylacetate	1	47.0973	0	50	94	50	130
Methyl methacrylate	1	53.8345	0	50	108	50	130
Dibromochloromethane	1	48.6617	0	50	97	50	130
2-Chloroethylvinylether	1	44.104	0	50	88	50	130
cis-1,3-Dichloropropene	1	45.112	0	50	90	50	130
trans-1,3-Dichloropropene	1	44.3801	0	50	89	50	130
Ethyl methacrylate	1	50.3057	0	50	101	50	130
1,1,2-Trichloroethane	1	46.6305	0	50	93	50	130
1,2-Dibromoethane	1	42.372	0	50	85	50	130
1,3-Dichloropropane	1	46.2593	0	50	93	50	130
4-Methyl-2-Pentanone	1	46.3882	0	50	93	20	130
2-Hexanone	1	57.8963	0	50	116	20	130
Tetrachloroethene	1	49.9454	0	50	100	50	130
Toluene	1	50.0154	0	50	100	50	130
1,1,1,2-Tetrachloroethane	1	48.5984	0	50	97	50	130
Chlorobenzene	1	49.032	0	50	98	50	130

\* - Indicates outside of limits

# - Indicates outside of standard limits but within method exceedance limits

# Form3

## Recovery Data Laboratory Limits

QC Batch: MBS53447

n-Butyl acrylate	1	56.8548	0	50	114	50	130
n-Amyl acetate	1	68.8595	0	50	138*	50	130
Bromoform	1	43.5451	0	50	87	20	130
Ethylbenzene	1	61.4446	0	50	123	50	130
1,1,2,2-Tetrachloroethane	1	44.7887	0	50	90	50	130
Styrene	1	59.9295	0	50	120	50	130
m&p-Xylenes	1	118.4893	0	100	118	50	130
o-Xylene	1	58.6	0	50	117	50	130
trans-1,4-Dichloro-2-butene	1	62.9311	0	50	126	20	130
1,3-Dichlorobenzene	1	53.6421	0	50	107	50	130
1,4-Dichlorobenzene	1	49.5696	0	50	99	50	130
1,2-Dichlorobenzene	1	50.1018	0	50	100	50	130
Isopropylbenzene	1	62.602	0	50	125	50	130
Cyclohexanone	1	556.3423	0	250	223*	50	130
Camphene	1	62.5126	0	50	125	50	130
1,2,3-Trichloropropane	1	53.1545	0	50	106	50	130
2-Chlorotoluene	1	61.9975	0	50	124	50	130
p-Ethyltoluene	1	64.4471	0	50	129	50	130
4-Chlorotoluene	1	62.0811	0	50	124	50	130
n-Propylbenzene	1	63.1368	0	50	126	50	130
Bromobenzene	1	56.6398	0	50	113	50	130
1,3,5-Trimethylbenzene	1	60.9672	0	50	122	50	130
Butyl methacrylate	1	96.9521	0	50	194*	50	130
t-Butylbenzene	1	62.6735	0	50	125	50	130
1,2,4-Trimethylbenzene	1	65.7272	0	50	131*	50	130
sec-Butylbenzene	1	65.7791	0	50	132*	50	130
4-Isopropyltoluene	1	60.9176	0	50	122	50	130
n-Butylbenzene	1	67.2688	0	50	135*	50	130
p-Diethylbenzene	1	67.4147	0	50	135*	50	130
1,2,4,5-Tetramethylbenzene	1	68.9386	0	50	138*	50	130
1,2-Dibromo-3-Chloropropane	1	43.8592	0	50	88	50	130
Camphor	1	704.9105	0	500	141*	50	130
Hexachlorobutadiene	1	54.9645	0	50	110	50	130
1,2,4-Trichlorobenzene	1	51.714	0	50	103	50	130
1,2,3-Trichlorobenzene	1	53.2181	0	50	106	50	130
Naphthalene	1	62.5619	0	50	125	50	130

\* - Indicates outside of limits

# - Indicates outside of standard limits but within method exceedance limits

**Form3**  
**Recovery Data Laboratory Limits**  
**QC Batch: MBS53464**

Data File		Sample ID:		Analysis Date			
Spike or Dup: 6M39088.D		MBS53464		5/13/2016 12:14:00 PM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 8260C		Matrix: Soil		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	49.6244	0	50	99	20	130
Dichlorodifluoromethane	1	46.7637	0	50	94	20	130
Chloromethane	1	50.3862	0	50	101	20	130
Bromomethane	1	42.8718	0	50	86	20	130
Vinyl Chloride	1	51.8348	0	50	104	20	130
Chloroethane	1	46.4702	0	50	93	20	130
Trichlorofluoromethane	1	46.8623	0	50	94	20	130
Ethyl ether	1	46.1853	0	50	92	50	130
Furan	1	62.2456	0	50	124	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	45.8408	0	50	92	50	130
Methylene Chloride	1	47.0546	0	50	94	50	130
Acrolein	1	271.7847	0	200	136*	20	130
Acrylonitrile	1	45.539	0	50	91	20	130
Iodomethane	1	53.4543	0	50	107	50	130
Acetone	1	234.2306	0	200	117	20	130
Carbon Disulfide	1	59.7019	0	50	119	50	130
t-Butyl Alcohol	1	229.8876	0	200	115	20	130
n-Hexane	1	56.7414	0	50	113	50	130
Di-isopropyl-ether	1	56.4816	0	50	113	50	130
1,1-Dichloroethene	1	44.5304	0	50	89	50	130
Methyl Acetate	1	59.9996	0	50	120	50	130
Methyl-t-butyl ether	1	48.5108	0	50	97	50	130
1,1-Dichloroethane	1	51.2442	0	50	102	50	130
trans-1,2-Dichloroethene	1	51.5838	0	50	103	50	130
Ethyl-t-butyl ether	1	48.4459	0	50	97	50	130
cis-1,2-Dichloroethene	1	52.5429	0	50	105	50	130
Bromochloromethane	1	51.2701	0	50	103	50	130
2,2-Dichloropropane	1	48.1718	0	50	96	50	130
Ethyl acetate	1	44.3816	0	50	89	50	130
1,4-Dioxane	1	2306.79	0	2500	92	50	130
1,1-Dichloropropene	1	50.0044	0	50	100	50	130
Chloroform	1	49.544	0	50	99	50	130
Cyclohexane	1	60.0694	0	50	120	50	130
1,2-Dichloroethane	1	50.6901	0	50	101	50	130
2-Butanone	1	49.2996	0	50	99	20	130
1,1,1-Trichloroethane	1	48.7464	0	50	97	50	130
Carbon Tetrachloride	1	49.705	0	50	99	50	130
Vinyl Acetate	1	47.2142	0	50	94	50	130
Bromodichloromethane	1	48.3003	0	50	97	50	130
Methylcyclohexane	1	51.7901	0	50	104	50	130
Dibromomethane	1	36.6895	0	50	73	50	130
1,2-Dichloropropane	1	56.5624	0	50	113	50	130
Trichloroethene	1	45.888	0	50	92	50	130
Benzene	1	51.183	0	50	102	50	130
tert-Amyl methyl ether	1	43.8799	0	50	88	50	130
Iso-propylacetate	1	45.5783	0	50	91	50	130
Methyl methacrylate	1	54.4502	0	50	109	50	130
Dibromochloromethane	1	48.5728	0	50	97	50	130
2-Chloroethylvinylether	1	42.5518	0	50	85	50	130
cis-1,3-Dichloropropene	1	50.1121	0	50	100	50	130
trans-1,3-Dichloropropene	1	49.9492	0	50	100	50	130
Ethyl methacrylate	1	48.3576	0	50	97	50	130
1,1,2-Trichloroethane	1	53.7815	0	50	108	50	130
1,2-Dibromoethane	1	45.4397	0	50	91	50	130
1,3-Dichloropropane	1	52.8224	0	50	106	50	130
4-Methyl-2-Pentanone	1	49.0591	0	50	98	20	130
2-Hexanone	1	49.4581	0	50	99	20	130
Tetrachloroethene	1	47.4476	0	50	95	50	130
Toluene	1	54.1559	0	50	108	50	130
1,1,1,2-Tetrachloroethane	1	50.0837	0	50	100	50	130
Chlorobenzene	1	50.136	0	50	100	50	130

\* - Indicates outside of limits

# - Indicates outside of standard limits but within method exceedance limits

## Form3

## Recovery Data Laboratory Limits

QC Batch: MBS53464

n-Butyl acrylate	1	49.8593	0	50	100	50	130
n-Amyl acetate	1	48.4122	0	50	97	50	130
Bromoform	1	45.6758	0	50	91	20	130
Ethylbenzene	1	65.258	0	50	131*	50	130
1,1,2,2-Tetrachloroethane	1	49.7051	0	50	99	50	130
Styrene	1	60.8737	0	50	122	50	130
m&p-Xylenes	1	121.3013	0	100	121	50	130
o-Xylene	1	61.0072	0	50	122	50	130
trans-1,4-Dichloro-2-butene	1	63.7945	0	50	128	20	130
1,3-Dichlorobenzene	1	54.369	0	50	109	50	130
1,4-Dichlorobenzene	1	48.0986	0	50	96	50	130
1,2-Dichlorobenzene	1	50.7703	0	50	102	50	130
Isopropylbenzene	1	63.4895	0	50	127	50	130
Cyclohexanone	1	297.538	0	250	119	50	130
Camphene	1	60.2989	0	50	121	50	130
1,2,3-Trichloropropane	1	61.7739	0	50	124	50	130
2-Chlorotoluene	1	59.1795	0	50	118	50	130
p-Ethyltoluene	1	63.2344	0	50	126	50	130
4-Chlorotoluene	1	59.1083	0	50	118	50	130
n-Propylbenzene	1	65.2709	0	50	131*	50	130
Bromobenzene	1	59.4334	0	50	119	50	130
1,3,5-Trimethylbenzene	1	62.7141	0	50	125	50	130
Butyl methacrylate	1	62.9241	0	50	126	50	130
t-Butylbenzene	1	62.8074	0	50	126	50	130
1,2,4-Trimethylbenzene	1	66.3454	0	50	133*	50	130
sec-Butylbenzene	1	61.7769	0	50	124	50	130
4-Isopropyltoluene	1	60.6781	0	50	121	50	130
n-Butylbenzene	1	66.1211	0	50	132*	50	130
p-Diethylbenzene	1	60.9323	0	50	122	50	130
1,2,4,5-Tetramethylbenzene	1	52.9339	0	50	106	50	130
1,2-Dibromo-3-Chloropropane	1	41.7437	0	50	83	50	130
Camphor	1	400.0298	0	500	80	50	130
Hexachlorobutadiene	1	42.4744	0	50	85	50	130
1,2,4-Trichlorobenzene	1	46.5384	0	50	93	50	130
1,2,3-Trichlorobenzene	1	44.2736	0	50	89	50	130
Naphthalene	1	54.7118	0	50	109	50	130

\* - Indicates outside of limits

# - Indicates outside of standard limits but within method exceedance limits

**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: MBS53464

Data File		Sample ID:		Analysis Date			
Spike or Dup: 6M39101.D		AC91283-002(MS)		5/13/2016 3:51:00 PM			
Non Spike(If applicable): 6M39025.D		AC91283-002		5/12/2016 9:59:00 AM			
Inst Blank(If applicable):							
Method: 8260C		Matrix: Soil		QC Type: MS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	73.027	0	50	146 *	20	130
Dichlorodifluoromethane	1	53.3968	0	50	107	20	130
Chloromethane	1	52.3848	0	50	105	20	130
Bromomethane	1	47.169	0	50	94	20	130
Vinyl Chloride	1	53.1973	0	50	106	20	130
Chloroethane	1	51.0385	0	50	102	20	130
Trichlorofluoromethane	1	52.2302	0	50	104	20	130
Ethyl ether	1	38.6266	0	50	77	50	130
Furan	1	73.7419	0	50	147 *	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	49.6595	0	50	99	50	130
Methylene Chloride	1	52.2309	0	50	104	50	130
Acrolein	1	277.2141	0	200	139 *	20	130
Acrylonitrile	1	58.8003	0	50	118	20	130
Iodomethane	1	57.4587	0	50	115	50	130
Acetone	1	312.5966	0	200	156 *	20	130
Carbon Disulfide	1	67.1756	0	50	134 *	50	130
t-Butyl Alcohol	1	292.2635	0	200	146 *	20	130
n-Hexane	1	63.6488	0	50	127	50	130
Di-isopropyl-ether	1	66.1095	0	50	132 *	50	130
1,1-Dichloroethene	1	55.9973	0	50	112	50	130
Methyl Acetate	1	46.919	0	50	94	50	130
Methyl-t-butyl ether	1	49.8259	0	50	100	50	130
1,1-Dichloroethane	1	55.9922	0	50	112	50	130
trans-1,2-Dichloroethene	1	56.0202	0	50	112	50	130
Ethyl-t-butyl ether	1	54.504	0	50	109	50	130
cis-1,2-Dichloroethene	1	57.2755	0	50	115	50	130
Bromochloromethane	1	54.7057	0	50	109	50	130
2,2-Dichloropropane	1	49.1917	0	50	98	50	130
Ethyl acetate	1	55.8232	0	50	112	50	130
1,4-Dioxane	1	3183.432	0	2500	127	50	130
1,1-Dichloropropene	1	57.2833	0	50	115	50	130
Chloroform	1	52.7287	0	50	105	50	130
Cyclohexane	1	66.7132	0	50	133 *	50	130
1,2-Dichloroethane	1	58.3503	0	50	117	50	130
2-Butanone	1	58.375	0	50	117	20	130
1,1,1-Trichloroethane	1	53.3773	0	50	107	50	130
Carbon Tetrachloride	1	55.0191	0	50	110	50	130
Vinyl Acetate	1	55.925	0	50	112	50	130
Bromodichloromethane	1	55.8368	0	50	112	50	130
Methylcyclohexane	1	59.1106	0	50	118	50	130
Dibromomethane	1	43.5217	0	50	87	50	130
1,2-Dichloropropane	1	65.0642	0	50	130	50	130
Trichloroethene	1	57.9919	0	50	116	50	130
Benzene	1	60.4033	0	50	121	50	130
tert-Amyl methyl ether	1	47.6567	0	50	95	50	130
Iso-propylacetate	1	56.2465	0	50	112	50	130
Methyl methacrylate	1	50.7668	0	50	102	50	130
Dibromochloromethane	1	53.8213	0	50	108	50	130
2-Chloroethylvinylether	1	48.1984	0	50	96	50	130
cis-1,3-Dichloropropene	1	55.912	0	50	112	50	130
trans-1,3-Dichloropropene	1	51.6071	0	50	103	50	130
Ethyl methacrylate	1	54.7013	0	50	109	50	130
1,1,2-Trichloroethane	1	55.188	0	50	110	50	130
1,2-Dibromoethane	1	49.2222	0	50	98	50	130
1,3-Dichloropropane	1	56.9081	0	50	114	50	130
4-Methyl-2-Pentanone	1	57.5757	0	50	115	20	130
2-Hexanone	1	61.2729	0	50	123	20	130
Tetrachloroethene	1	51.1812	0	50	102	50	130
Toluene	1	60.1399	0	50	120	50	130
1,1,1,2-Tetrachloroethane	1	52.4636	0	50	105	50	130
Chlorobenzene	1	54.052	0	50	108	50	130

\* - Indicates outside of limits

# - Indicates outside of standard limits but within method exceedance limits



# Form3 Recovery Data Laboratory Limits

QC Batch: MBS53464

n-Butyl acrylate	1	53.4695	0	50	107	50	130
n-Amyl acetate	1	55.7807	0	50	112	50	130
Bromoform	1	46.7073	0	50	93	20	130
Ethylbenzene	1	63.2	0	50	126	50	130
1,1,2,2-Tetrachloroethane	1	54.8406	0	50	110	50	130
Styrene	1	65.0341	0	50	130	50	130
m&p-Xylenes	1	131.3189	0	100	131*	50	130
o-Xylene	1	63.812	0	50	128	50	130
trans-1,4-Dichloro-2-butene	1	65.5161	0	50	131*	20	130
1,3-Dichlorobenzene	1	55.5465	0	50	111	50	130
1,4-Dichlorobenzene	1	51.6272	0	50	103	50	130
1,2-Dichlorobenzene	1	51.8758	0	50	104	50	130
Isopropylbenzene	1	68.717	0	50	137*	50	130
Cyclohexanone	1	514.6219	0	250	206*	50	130
Camphene	1	65.9639	0	50	132*	50	130
1,2,3-Trichloropropane	1	58.8437	0	50	117	50	130
2-Chlorotoluene	1	60.2185	0	50	120	50	130
p-Ethyltoluene	1	67.9065	0	50	136*	50	130
4-Chlorotoluene	1	62.4831	0	50	125	50	130
n-Propylbenzene	1	68.2663	0	50	137*	50	130
Bromobenzene	1	62.5444	0	50	125	50	130
1,3,5-Trimethylbenzene	1	66.9172	0	50	134*	50	130
Butyl methacrylate	1	68.2192	0	50	136*	50	130
t-Butylbenzene	1	66.955	0	50	134*	50	130
1,2,4-Trimethylbenzene	1	71.6358	0	50	143*	50	130
sec-Butylbenzene	1	69.3209	0	50	139*	50	130
4-Isopropyltoluene	1	62.7856	0	50	126	50	130
n-Butylbenzene	1	69.2228	0	50	138*	50	130
p-Diethylbenzene	1	70.8985	0	50	142*	50	130
1,2,4,5-Tetramethylbenzene	1	65.5106	0	50	131*	50	130
1,2-Dibromo-3-Chloropropane	1	51.1099	0	50	102	50	130
Camphor	1	419.1624	0	500	84	50	130
Hexachlorobutadiene	1	43.8679	0	50	88	50	130
1,2,4-Trichlorobenzene	1	50.7153	0	50	101	50	130
1,2,3-Trichlorobenzene	1	53.1496	0	50	106	50	130
Naphthalene	1	60.6834	0	50	121	50	130

\* - Indicates outside of limits

# - Indicates outside of standard limits but within method exceedance limits

**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: MBS53464

<b>Data File</b>	<b>Sample ID:</b>	<b>Analysis Date</b>
Spike or Dup: 6M39102.D	AC91283-002(MSD)	5/13/2016 4:07:00 PM
Non Spike(if applicable): 6M39025.D	AC91283-002	5/12/2016 9:59:00 AM
Inst Blank(if applicable):		
<b>Method: 8260C</b>	<b>Matrix: Soil</b>	<b>QC Type: MSD</b>

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	60.3053	0	50	121	20	130
Dichlorodifluoromethane	1	42.3724	0	50	85	20	130
Chloromethane	1	50.3276	0	50	101	20	130
Bromomethane	1	42.9941	0	50	86	20	130
Vinyl Chloride	1	50.5853	0	50	101	20	130
Chloroethane	1	45.9472	0	50	92	20	130
Trichlorofluoromethane	1	45.878	0	50	92	20	130
Ethyl ether	1	38.4674	0	50	77	50	130
Furan	1	68.3941	0	50	137*	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	46.4164	0	50	93	50	130
Methylene Chloride	1	49.7188	0	50	99	50	130
Acrolein	1	184.6686	0	200	92	20	130
Acrylonitrile	1	45.6089	0	50	91	20	130
Iodomethane	1	52.5944	0	50	105	50	130
Acetone	1	281.2787	0	200	141*	20	130
Carbon Disulfide	1	64.0791	0	50	128	50	130
t-Butyl Alcohol	1	277.2711	0	200	139*	20	130
n-Hexane	1	56.9747	0	50	114	50	130
Di-isopropyl-ether	1	57.7342	0	50	115	50	130
1,1-Dichloroethene	1	51.8353	0	50	104	50	130
Methyl Acetate	1	60.2305	0	50	120	50	130
Methyl-t-butyl ether	1	45.9562	0	50	92	50	130
1,1-Dichloroethane	1	52.6121	0	50	105	50	130
trans-1,2-Dichloroethene	1	52.435	0	50	105	50	130
Ethyl-t-butyl ether	1	48.8609	0	50	98	50	130
cis-1,2-Dichloroethene	1	52.5874	0	50	105	50	130
Bromochloromethane	1	51.1477	0	50	102	50	130
2,2-Dichloropropane	1	44.7805	0	50	90	50	130
Ethyl acetate	1	57.0955	0	50	114	50	130
1,4-Dioxane	1	2311.091	0	2500	92	50	130
1,1-Dichloropropene	1	52.9001	0	50	106	50	130
Chloroform	1	49.6138	0	50	99	50	130
Cyclohexane	1	57.5812	0	50	115	50	130
1,2-Dichloroethane	1	52.2519	0	50	105	50	130
2-Butanone	1	56.8291	0	50	114	20	130
1,1,1-Trichloroethane	1	50.3511	0	50	101	50	130
Carbon Tetrachloride	1	50.2398	0	50	100	50	130
Vinyl Acetate	1	49.6943	0	50	99	50	130
Bromodichloromethane	1	52.2795	0	50	105	50	130
Methylcyclohexane	1	54.3865	0	50	109	50	130
Dibromomethane	1	41.19	0	50	82	50	130
1,2-Dichloropropane	1	55.4869	0	50	111	50	130
Trichloroethene	1	51.91	0	50	104	50	130
Benzene	1	55.3756	0	50	111	50	130
tert-Amyl methyl ether	1	42.2973	0	50	85	50	130
Iso-propylacetate	1	43.4074	0	50	87	50	130
Methyl methacrylate	1	57.2734	0	50	115	50	130
Dibromochloromethane	1	48.7263	0	50	97	50	130
2-Chloroethylvinylether	1	50.4557	0	50	101	50	130
cis-1,3-Dichloropropene	1	49.3905	0	50	99	50	130
trans-1,3-Dichloropropene	1	47.9164	0	50	96	50	130
Ethyl methacrylate	1	50.2278	0	50	100	50	130
1,1,2-Trichloroethane	1	48.2583	0	50	97	50	130
1,2-Dibromoethane	1	43.18	0	50	86	50	130
1,3-Dichloropropane	1	49.1022	0	50	98	50	130
4-Methyl-2-Pentanone	1	45.5769	0	50	91	20	130
2-Hexanone	1	44.2794	0	50	89	20	130
Tetrachloroethene	1	45.2882	0	50	91	50	130
Toluene	1	53.3445	0	50	107	50	130
1,1,1,2-Tetrachloroethane	1	48.0536	0	50	96	50	130
Chlorobenzene	1	47.4609	0	50	95	50	130

\* - Indicates outside of limits

# - Indicates outside of standard limits but within method exceedance limits

# Form3

## Recovery Data Laboratory Limits

QC Batch: MBS53464

n-Butyl acrylate	1	45.4422	0	50	91	50	130
n-Amyl acetate	1	41.4801	0	50	83	50	130
Bromofom	1	42.3	0	50	85	20	130
Ethylbenzene	1	57.5101	0	50	115	50	130
1,1,2,2-Tetrachloroethane	1	49.7546	0	50	100	50	130
Styrene	1	60.7701	0	50	122	50	130
m&p-Xylenes	1	119.7891	0	100	120	50	130
o-Xylene	1	58.6077	0	50	117	50	130
trans-1,4-Dichloro-2-butene	1	59.7938	0	50	120	20	130
1,3-Dichlorobenzene	1	52.5233	0	50	105	50	130
1,4-Dichlorobenzene	1	46.5884	0	50	93	50	130
1,2-Dichlorobenzene	1	49.9291	0	50	100	50	130
Isopropylbenzene	1	61.3073	0	50	123	50	130
Cyclohexanone	1	359.9329	0	250	144 *	50	130
Camphene	1	59.5468	0	50	119	50	130
1,2,3-Trichloropropane	1	52.4371	0	50	105	50	130
2-Chlorotoluene	1	56.6976	0	50	113	50	130
p-Ethyltoluene	1	64.2778	0	50	129	50	130
4-Chlorotoluene	1	62.5253	0	50	125	50	130
n-Propylbenzene	1	62.2132	0	50	124	50	130
Bromobenzene	1	54.7533	0	50	110	50	130
1,3,5-Trimethylbenzene	1	58.6935	0	50	117	50	130
Butyl methacrylate	1	65.3378	0	50	131 *	50	130
t-Butylbenzene	1	61.4131	0	50	123	50	130
1,2,4-Trimethylbenzene	1	67.0036	0	50	134 *	50	130
sec-Butylbenzene	1	60.1635	0	50	120	50	130
4-Isopropyltoluene	1	57.7687	0	50	116	50	130
n-Butylbenzene	1	62.693	0	50	125	50	130
p-Diethylbenzene	1	60.548	0	50	121	50	130
1,2,4,5-Tetramethylbenzene	1	58.317	0	50	117	50	130
1,2-Dibromo-3-Chloropropane	1	39.1877	0	50	78	50	130
Camphor	1	419.3697	0	500	84	50	130
Hexachlorobutadiene	1	41.023	0	50	82	50	130
1,2,4-Trichlorobenzene	1	44.5319	0	50	89	50	130
1,2,3-Trichlorobenzene	1	43.9045	0	50	88	50	130
Naphthalene	1	61.2785	0	50	123	50	130

\* - Indicates outside of limits

# - Indicates outside of standard limits but within method exceedance limits

# Form3

## RPD Data Laboratory Limits

QC Batch: MBS53464

Data File	Sample ID:	Analysis Date
Spike or Dup: 6M39102.D	AC91283-002(MSD)	5/13/2016 4:07:00 PM
Duplicate(if applicable): 6M39101.D	AC91283-002(MS)	5/13/2016 3:51:00 PM
Inst Blank(if applicable):		
Method: 8260C	Matrix: Soil	QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	60.3053	73.027	19	30
Dichlorodifluoromethane	1	42.3724	53.3968	23	30
Chloromethane	1	50.3276	52.3848	4	30
Bromomethane	1	42.9941	47.169	9.3	30
Vinyl Chloride	1	50.5853	53.1973	5	40
Chloroethane	1	45.9472	51.0385	10	30
Trichlorofluoromethane	1	45.878	52.2302	13	30
Ethyl ether	1	38.4674	38.6266	0.41	30
Furan	1	68.3941	73.7419	7.5	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1	46.4164	49.6595	6.8	30
Methylene Chloride	1	49.7188	52.2309	4.9	30
Acrolein	1	184.6686	277.2141	40*	30
Acrylonitrile	1	45.6089	58.8003	25	30
Iodomethane	1	52.5944	57.4587	8.8	30
Acetone	1	281.2787	312.5966	11	30
Carbon Disulfide	1	64.0791	67.1756	4.7	30
t-Butyl Alcohol	1	277.2711	292.2635	5.3	30
n-Hexane	1	56.9747	63.6488	11	30
Di-isopropyl-ether	1	57.7342	66.1095	14	30
1,1-Dichloroethene	1	51.8353	55.9973	7.7	40
Methyl Acetate	1	60.2305	46.919	25	30
Methyl-t-butyl ether	1	45.9562	49.8259	8.1	30
1,1-Dichloroethane	1	52.6121	55.9922	6.2	40
trans-1,2-Dichloroethene	1	52.435	56.0202	6.6	30
Ethyl-t-butyl ether	1	48.8609	54.504	11	30
cis-1,2-Dichloroethene	1	52.5874	57.2755	8.5	30
Bromochloromethane	1	51.1477	54.7057	6.7	30
2,2-Dichloropropane	1	44.7805	49.1917	9.4	30
Ethyl acetate	1	57.0955	55.8232	2.3	30
1,4-Dioxane	1	2311.091	3183.432	32*	30
1,1-Dichloropropene	1	52.9001	57.2833	8	30
Chloroform	1	49.6138	52.7287	6.1	40
Cyclohexane	1	57.5812	66.7132	15	30
1,2-Dichloroethane	1	52.2519	58.3503	11	40
2-Butanone	1	56.8291	58.375	2.7	40
1,1,1-Trichloroethane	1	50.3511	53.3773	5.8	30
Carbon Tetrachloride	1	50.2398	55.0191	9.1	40
Vinyl Acetate	1	49.6943	55.925	12	30
Bromodichloromethane	1	52.2795	55.8368	6.6	30
Methylcyclohexane	1	54.3865	59.1106	8.3	30
Dibromomethane	1	41.19	43.5217	5.5	30
1,2-Dichloropropane	1	55.4869	65.0642	16	30
Trichloroethene	1	51.91	57.9919	11	40
Benzene	1	55.3756	60.4033	8.7	40
tert-Amyl methyl ether	1	42.2973	47.6567	12	30
Iso-propylacetate	1	43.4074	56.2465	26	30
Methyl methacrylate	1	57.2734	50.7668	12	30
Dibromochloromethane	1	48.7263	53.8213	9.9	30
2-Chloroethylvinylether	1	50.4557	48.1984	4.6	30
cis-1,3-Dichloropropene	1	49.3905	55.912	12	30
trans-1,3-Dichloropropene	1	47.9164	51.6071	7.4	30
Ethyl methacrylate	1	50.2278	54.7013	8.5	30
1,1,2-Trichloroethane	1	48.2583	55.188	13	30
1,2-Dibromoethane	1	43.18	49.2222	13	30
1,3-Dichloropropane	1	49.1022	56.9081	15	30
4-Methyl-2-Pentanone	1	45.5769	57.5757	23	30
2-Hexanone	1	44.2794	61.2729	32*	30
Tetrachloroethene	1	45.2882	51.1812	12	40
Toluene	1	53.3445	60.1399	12	40
1,1,1,2-Tetrachloroethane	1	48.0536	52.4636	8.8	30
Chlorobenzene	1	47.4609	54.052	13	40
n-Butyl acrylate	1	45.4422	53.4695	16	30
n-Amyl acetate	1	41.4801	55.7807	29	30

# Form3

## RPD Data Laboratory Limits

QC Batch: MBS53464

Bromoform	1	42.3	46.7073	9.9	30
Ethylbenzene	1	57.5101	63.2	9.4	30
1,1,2,2-Tetrachloroethane	1	49.7546	54.8406	9.7	30
Styrene	1	60.7701	65.0341	6.8	30
m&p-Xylenes	1	119.7891	131.3189	9.2	30
o-Xylene	1	58.6077	63.812	8.5	30
trans-1,4-Dichloro-2-butene	1	59.7938	65.5161	9.1	30
1,3-Dichlorobenzene	1	52.5233	55.5465	5.6	30
1,4-Dichlorobenzene	1	46.5884	51.6272	10	40
1,2-Dichlorobenzene	1	49.9291	51.8758	3.8	40
Isopropylbenzene	1	61.3073	68.717	11	30
Cyclohexanone	1	359.9329	514.6219	35*	30
Camphene	1	59.5468	65.9639	10	30
1,2,3-Trichloropropane	1	52.4371	58.6437	11	30
2-Chlorotoluene	1	56.6976	60.2185	6	30
p-Ethyltoluene	1	64.2778	67.9065	5.5	30
4-Chlorotoluene	1	62.5253	62.4831	0.07	30
n-Propylbenzene	1	62.2132	68.2663	9.3	40
Bromobenzene	1	54.7533	62.5444	13	30
1,3,5-Trimethylbenzene	1	58.6935	66.9172	13	30
Butyl methacrylate	1	65.3378	68.2192	4.3	30
t-Butylbenzene	1	61.4131	66.955	8.6	30
1,2,4-Trimethylbenzene	1	67.0036	71.6358	6.7	30
sec-Butylbenzene	1	60.1635	69.3209	14	40
4-Isopropyltoluene	1	57.7687	62.7856	8.3	30
n-Butylbenzene	1	62.693	69.2228	9.9	30
p-Diethylbenzene	1	60.548	70.8985	16	30
1,2,4,5-Tetramethylbenzene	1	58.317	65.5106	12	30
1,2-Dibromo-3-Chloropropane	1	39.1877	51.1099	26	30
Camphor	1	419.3697	419.1624	0.05	30
Hexachlorobutadiene	1	41.023	43.8679	6.7	30
1,2,4-Trichlorobenzene	1	44.5319	50.7153	13	30
1,2,3-Trichlorobenzene	1	43.9045	53.1496	19	30
Naphthalene	1	61.2785	60.6834	0.98	30

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

**FORM 4**  
Blank Summary

Blank Number: DAILY BLANK  
Blank Data File: 6M39022.D  
Matrix: Soil

Blank Analysis Date: 05/12/16 09:09  
Blank Extraction Date: NA  
(If Applicable)  
Method: EPA 8260C

Sample Number	Data File	Analysis Date
MBS53447	6M39027.D	05/12/16 10:32
AC91283-002	6M39025.D	05/12/16 09:59

**FORM 4**  
Blank Summary

Blank Number: DAILY BLANK  
Blank Data File: 6M39080.D  
Matrix: Soil

Blank Analysis Date: 05/13/16 10:00  
Blank Extraction Date: NA  
(If Applicable)  
Method: EPA 8260C

Sample Number	Data File	Analysis Date
AC91273-001	6M39098.D	05/13/16 15:00
AC91273-003	6M39099.D	05/13/16 15:17
AC91283-002(MSD)	6M39102.D	05/13/16 16:07
AC91283-002(MS)	6M39101.D	05/13/16 15:51
MBS53464	6M39088.D	05/13/16 12:14

## Form 5

Tune Name: BFB TUNE

Data File: 6M38852.D

Instrument: GCMS 6

Analysis Date: 05/09/16 13:47

Method: EPA 8260C

Tune Scan/Time Range: Average of 3.724 to 3.753 min

Tgt	Rel	Lo	Hi	Rel	Raw	Pass/
Mass	Mass	Lim	Lim	Abund	Abund	Fail
50	95	15	40	25.7	18511	PASS
75	95	30	60	49.2	35495	PASS
95	95	100	100	100.0	72076	PASS
96	95	5	9	6.5	4666	PASS
173	174	0.00	2	0.5	347	PASS
174	95	50	100	99.9	72028	PASS
175	174	5	9	6.5	4710	PASS
176	174	95	101	100.9	72666	PASS
177	176	5	9	7.7	5575	PASS

Data File	Sample Number	Analysis Date:
6M38855.D	50 PPB	05/09/16 14:20
6M38858.D	CAL @ 0.5 PPB	05/09/16 15:10
6M38859.D	CAL @ 1 PPB	05/09/16 15:27
6M38860.D	CAL @ 2 PPB	05/09/16 15:43
6M38861.D	CAL @ 5 PPB	05/09/16 16:00
6M38862.D	CAL @ 20 PPB	05/09/16 16:16
6M38863.D	CAL @ 50 PPB	05/09/16 16:33
6M38864.D	CAL @ 500 PPB	05/09/16 16:50
6M38866.D	CAL @ 250 PPB	05/09/16 17:23
6M38868.D	CAL @ 100 PPB	05/09/16 17:56
6M38870.D	ICV	05/09/16 18:30
6M38871.D	ICV	05/09/16 18:46
6M38872.D	BLK	05/09/16 19:03
6M38873.D	BLK	05/09/16 19:20
6M38874.D	DAILY BLANK	05/09/16 19:36
6M38875.D	AC91224-010	05/09/16 19:53
6M38876.D	MBS53022	05/09/16 20:09
6M38877.D	BLK	05/09/16 20:26
6M38878.D	AC91166-003	05/09/16 20:42
6M38879.D	AC91166-001	05/09/16 20:59
6M38880.D	AC91233-001	05/09/16 21:16
6M38881.D	AC91233-003	05/09/16 21:32
6M38882.D	AC91233-004	05/09/16 21:49
6M38883.D	AC91233-005	05/09/16 22:05
6M38884.D	AC91228-002	05/09/16 22:19
6M38885.D	AC91228-006	05/09/16 22:36
6M38886.D	AC91228-003/MS:	05/09/16 22:53
6M38887.D	AC91228-004/MSD	05/09/16 23:12
6M38888.D	BLK	05/09/16 23:29
6M38889.D	AC91233-002(5X)	05/09/16 23:45
6M38890.D	AC91224-006(5X)	05/10/16 00:02
6M38891.D	AC91224-002(5X)	05/10/16 00:19
6M38892.D	AC91228-001(5X)	05/10/16 00:35
6M38893.D	AC91224-003(5X)	05/10/16 00:52
6M38894.D	AC91228-005(5X)	05/10/16 01:08
6M38895.D	BLK	05/10/16 01:25
6M38896.D	BLK	05/10/16 01:42
6M38897.D	BLK	05/10/16 01:58
6M38898.D	BLK	05/10/16 02:15
6M38899.D	BLK	05/10/16 02:32



**Form1**  
ORGANICS REPORT

Sample Number: DAILY BLANK  
Client Id:  
Data File: 13M02181.D  
Analysis Date: 05/13/16 11:29  
Date Rec/Extracted:  
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8015D  
Matrix: Methanol  
Initial Vol: 5g:10ml  
Final Vol: NA  
Dilution: 100  
Solids: 100

Cas #	Compound	RL	Conc	Units: mg/Kg	Cas #	Compound	RL	Conc
phcg	Gasoline Range Organics	25	U					

Worksheet #: 383783

**Total Target Concentration 0**

ColumnID: (^) Indicates results from 2nd column

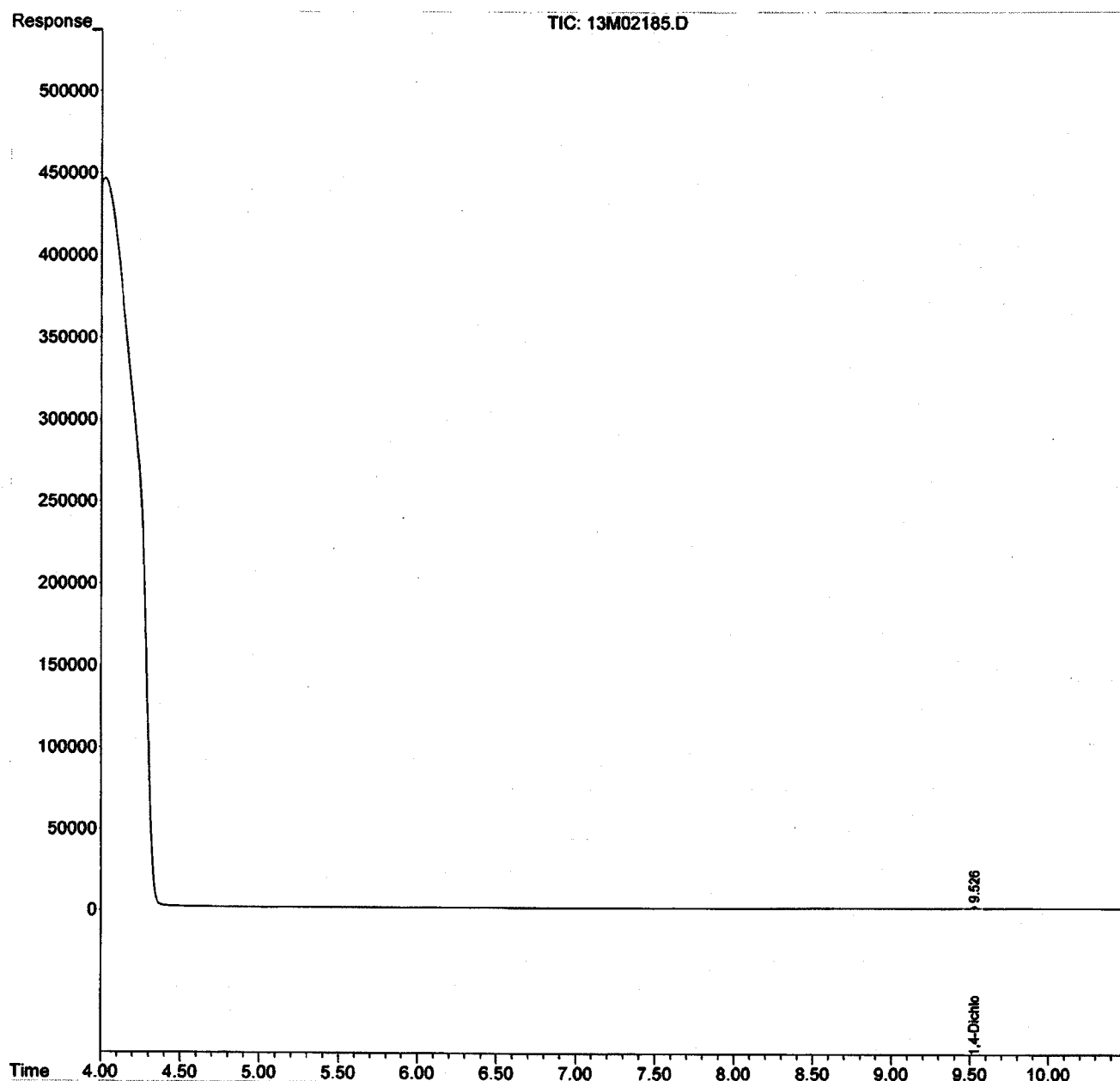
Indicates the compound was analyzed but not detected.  
Indicates the analyte was found in the blank as well as in the sample.  
Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out  
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.  
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses

Data Path : G:\GcMsData\2016\GC\_13\Data\05-13-16\  
Data File : 13M02185.D  
Signal(s) : FID1A.CH  
Acq On : 13 May 2016 12:44  
Operator : SG  
Sample : AC91273-004  
Misc : M,MEXT!3  
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e  
Quant Time: May 13 13:33:48 2016  
Quant Method : G:\GcMsData\2016\GC\_13\MethodQt\13M\_G0421.M  
Quant Title : @GC\_13,ug,8015  
QLast Update : Thu Apr 21 14:02:29 2016  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. :  
Signal Phase :  
Signal Info :



Data Path : G:\GcMsData\2016\GC\_13\Data\05-13-16\  
Data File : 13M02185.D  
Signal(s) : FID1A.CH  
Acq On : 13 May 2016 12:44  
Operator : SG  
Sample : AC91273-004  
Misc : M,MEXT13  
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e  
Quant Time: May 13 13:33:48 2016  
Quant Method : G:\GcMsData\2016\GC\_13\MethodQt\13M\_G0421.M  
Quant Title : @GC\_13,ug,8015  
QLast Update : Thu Apr 21 14:02:29 2016  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. :  
Signal Phase :  
Signal Info :

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
1)S 1,4-Dichlorobenzene-d4	9.527	25953	26.803
Target Compounds			
-----			

(f)=RT Delta > 1/2 Window

(m)=manual int.

*h*

**Form1**  
ORGANICS REPORT

Sample Number: AC91273-004  
Client Id: SB01 COMP  
Data File: 13M02185.D  
Analysis Date: 05/13/16 12:44  
Date Rec/Extracted: 05/11/16-NA  
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8015D  
Matrix: Methanol  
Initial Vol: 5.26g:10ml  
Final Vol: NA  
Dilution: 95.1  
Solids: 90

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
phcg	Gasoline Range Organics	26	U				

Worksheet #: 383783

**Total Target Concentration** 0

ColumnID: (^) Indicates results from 2nd column

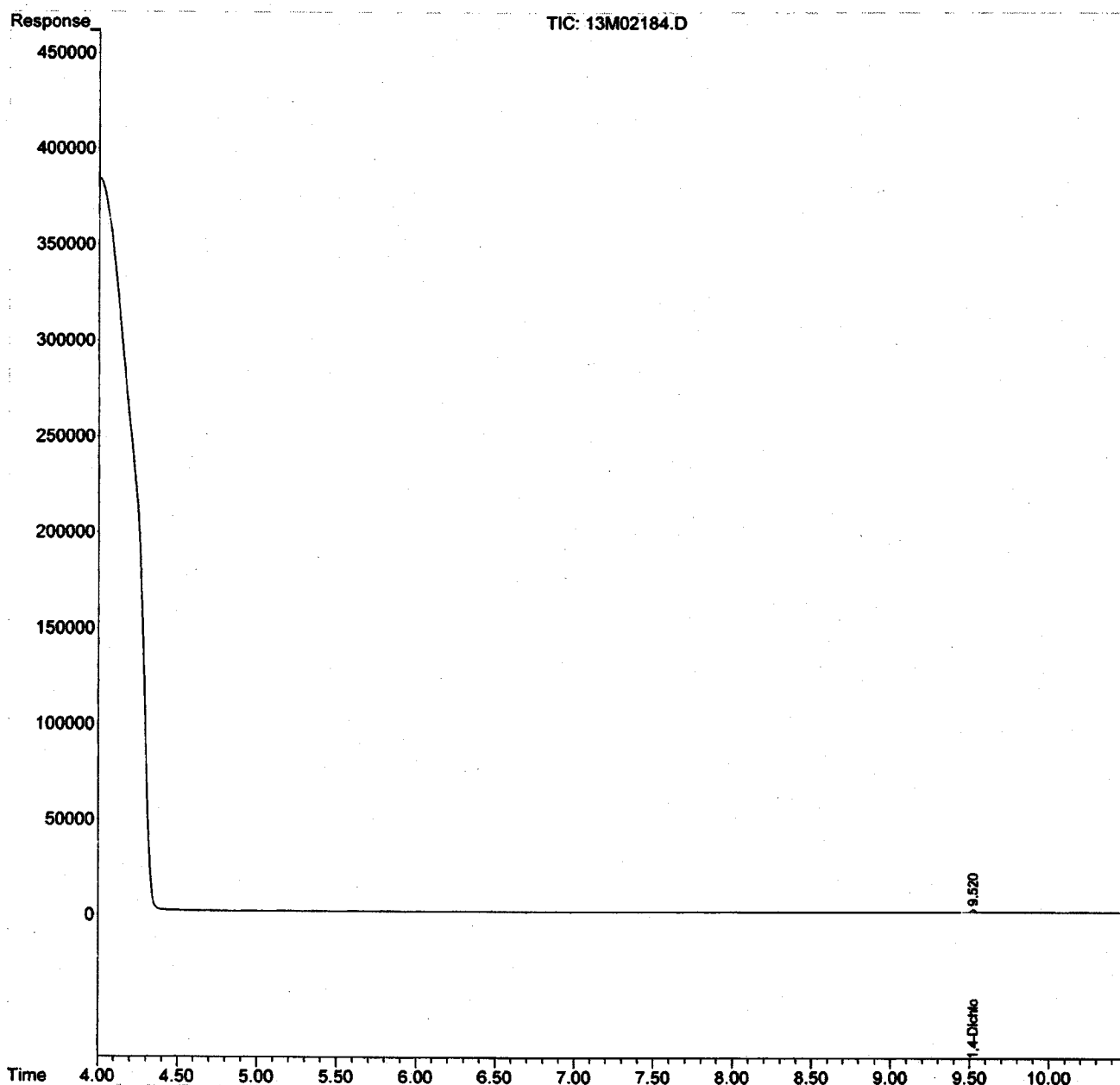
U - Indicates the compound was analyzed but not detected.  
B - Indicates the analyte was found in the blank as well as in the sample.  
E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out  
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.  
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses

Data Path : G:\GcMsData\2016\GC\_13\Data\05-13-16\  
Data File : 13M02184.D  
Signal(s) : FID1A.CH  
Acq On : 13 May 2016 12:25  
Operator : SG  
Sample : AC91273-002  
Misc : M,MEXT13  
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e  
Quant Time: May 13 13:33:38 2016  
Quant Method : G:\GcMsData\2016\GC\_13\MethodQt\13M\_G0421.M  
Quant Title : @GC\_13,ug,8015  
QLast Update : Thu Apr 21 14:02:29 2016  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. :  
Signal Phase :  
Signal Info :



Data Path : G:\GcMsData\2016\GC\_13\Data\05-13-16\  
Data File : 13M02184.D  
Signal(s) : FID1A.CH  
Acq On : 13 May 2016 12:25  
Operator : SG  
Sample : AC91273-002  
Misc : M,MEXT!3  
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e  
Quant Time: May 13 13:33:38 2016  
Quant Method : G:\GcMsData\2016\GC\_13\MethodQt\13M\_G0421.M  
Quant Title : @GC\_13,ug,8015  
QLast Update : Thu Apr 21 14:02:29 2016  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. :  
Signal Phase :  
Signal Info :

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
1)S 1,4-Dichlorobenzene-d4	9.520	25006	25.825
Target Compounds			
-----			

(f)=RT Delta > 1/2 Window

(m)=manual int.

*Ke*

**Form1**  
ORGANICS REPORT

Sample Number: AC91273-002  
Client Id: SB02 COMP  
Data File: 13M02184.D  
Analysis Date: 05/13/16 12:25  
Date Rec/Extracted: 05/11/16-NA  
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8015D  
Matrix: Methanol  
Initial Vol: 5.17g:10ml  
Final Vol: NA  
Dilution: 96.7  
Solids: 88

		Units: mg/Kg					
Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
phcg	Gasoline Range Organics	27	U				

Worksheet #: 383783

**Total Target Concentration** 0

ColumnID: (^) Indicates results from 2nd column

\* Indicates the compound was analyzed but not detected.  
\* Indicates the analyte was found in the blank as well as in the sample.  
\* Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out  
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.  
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses

**Form7**  
 RtWindow Summary

Method: EPA 8015D

 Data File:  
 Calibration Name:  
 Calibration Date/Time

Compound	Col	Mr	Cal RT		Limit		Cal RT		Limit		Cal RT		Limit		Cal RT		Limit	
			Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
C8	1	0																
C9	1	0																
C10	1	0																
C12	1	0																
C14	1	0																
C16	1	0																
C17	1	0																
Pristane	1	0																
C18	1	0																
Phytane	1	0																
C20	1	0																
C22	1	0																
C24	1	0																
C26	1	0																
C28	1	0																
C30	1	0																
C32	1	0																
C34	1	0																
C36	1	0																
C40	1	0																
Chlorobenzene	1	0																
O-Terphenyl	1	0	8.42	(8.38 - 8.46)	8.40	(8.36 - 8.44)												
Diesel Range Organic	1	0																
Total Petroleum Hydro	1	0																
Ext. Petroleum Hydro	1	0																
Mineral Spirits	1	0																
Stoddard Solvent	1	0																



## Form7

Continuing Calibration

Method: EPA 8015D

Data File:  
Method:  
Calibration Name:  
Calibration Date/Time

7G41190.D  
8015  
CAL TPH@20PPM  
05/12/16 20:31

Compound	Limit	Col	Mr	Conc			Conc			Conc			Conc			Conc		
				Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff
C8	20	1	0	21.17	20	5.9												
C9	20	1	0	21.69	20	8.5												
C10	20	1	0	22.02	20	10.1												
C12	20	1	0	22.51	20	12.6												
C14	20	1	0	22.5	20	12.5												
C16	20	1	0	22.22	20	11.1												
C17	20	1	0	20.66	20	3.3												
Pristane	20	1	0	23.78	20	18.9												
C18	20	1	0	21.95	20	9.8												
Phytane	20	1	0	21.86	20	9.3												
C20	20	1	0	22.27	20	11.4												
C22	20	1	0	22.24	20	11.2												
C24	20	1	0	22.51	20	12.6												
C26	20	1	0	22.62	20	13.1												
C28	20	1	0	22.91	20	14.6												
C30	20	1	0	22.83	20	14.2												
C32	20	1	0	22.45	20	12.3												
C34	20	1	0	21.04	20	5.2												
C36	20	1	0	19.77	20	1.1												
C40	20	1	0	17.99	20	10.1												
Chlorobenzene	20	1	0	22.54	20	12.7												
O-Terphenyl	20	1	0	23.55	20	17.8												
Average Difference	20	1	0			10.8												

Flags/Notes:

\* - Values outside of limits for this column/run

HAZ. - 209

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Calibration Level Concentrations														
								Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8							
1	7G41179.D	CAL TPH@5PPM	05/12/16 12:07	2	7G41178.D	CAL TPH@10PPM	05/12/16 11:41															
3	7G41177.D	CAL TPH@20PPM	05/12/16 11:16	4	7G41176.D	CAL TPH@40PPM	05/12/16 10:50															
5	7G41175.D	CAL TPH@100PPM	05/12/16 10:24	6	7G41174.D	CAL TPH@500PPM	05/12/16 09:59															
Compound	Col	Mr	Ft1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRt	RT	Corr1	Corr2	%Rsd							
US8	1	0	Avg	0.3939	0.3810	0.4311	0.4084	0.4273	0.4231	---	0.4112	3.39	1.00	1.00	4.9	5.00	10.00					
C9	1	0	Avg	0.4208	0.4317	0.5101	0.4802	0.4737	0.4775	---	0.4663	3.06	1.00	1.00	7.2	5.00	10.00					
C10	1	0	Avg	0.4874	0.4953	0.5363	0.5042	0.5305	0.5317	---	0.5143	3.74	1.00	1.00	4.1	5.00	10.00					
C12	1	0	Avg	0.4826	0.5271	0.5709	0.5500	0.5781	0.5678	---	0.5484	4.99	1.00	1.00	6.0	5.00	10.00					
C14	1	0	Avg	0.5591	0.5934	0.6349	0.6123	0.6407	0.6222	---	0.6106	6.10	1.00	1.00	5.0	5.00	10.00					
C16	1	0	Avg	0.6052	0.6304	0.6703	0.6431	0.6663	0.6401	---	0.6437	7.09	1.00	1.00	3.7	5.00	10.00					
C17	1	0	Avg	0.5863	0.6423	0.6703	0.6541	0.7163	0.8838	---	0.6862	7.55	0.999	1.00	15	5.00	10.00					
Pristane	1	0	Avg	0.6673	0.6709	0.6797	0.6270	0.6103	0.3987	---	0.6697	7.56	0.990	1.00	17	5.00	10.00					
C18	1	0	Avg	0.6416	0.6665	0.7033	0.6775	0.6968	0.7285	---	0.6867	7.98	1.00	1.00	4.4	5.00	10.00					
Phytane	1	0	Avg	0.6260	0.6296	0.6542	0.6272	0.6426	0.5309	---	0.6188	8.01	0.998	1.00	7.2	5.00	10.00					
C20	1	0	Avg	0.6806	0.7022	0.7351	0.7097	0.7253	0.6891	---	0.7078	8.78	1.00	1.00	2.9	5.00	10.00					
C22	1	0	Avg	0.6842	0.7009	0.7284	0.7045	0.7187	0.6817	---	0.7039	9.52	1.00	1.00	2.6	5.00	10.00					
C24	1	0	Avg	0.7112	0.7212	0.7516	0.7283	0.7448	0.7113	---	0.7281	10.21	1.00	1.00	2.3	5.00	10.00					
C26	1	0	Avg	0.7227	0.7279	0.7543	0.7335	0.7492	0.7086	---	0.7331	10.87	1.00	1.00	2.3	5.00	10.00					
C28	1	0	Avg	0.7227	0.7269	0.7547	0.7391	0.7562	0.7215	---	0.7371	11.51	1.00	1.00	2.1	5.00	10.00					
C30	1	0	Avg	0.7323	0.7272	0.7483	0.7415	0.7600	0.7263	---	0.7391	12.13	1.00	1.00	1.8	5.00	10.00					
C32	1	0	Avg	0.7575	0.7508	0.7527	0.7661	0.7881	0.7566	---	0.7621	12.73	1.00	1.00	1.8	5.00	10.00					
C34	1	0	Avg	0.7562	0.7448	0.7118	0.7486	0.7709	0.7368	---	0.7451	13.32	1.00	1.00	2.7	5.00	10.00					
C36	1	0	Avg	0.7765	0.7700	0.6945	0.7639	0.7845	0.7354	---	0.7541	13.94	1.00	1.00	4.5	5.00	10.00					
C40	1	0	Avg	0.7184	0.7440	0.6315	0.7492	0.7674	0.6867	---	0.7171	15.72	0.998	0.999	7.0	5.00	10.00					
Chlorobenzene	1	0	Avg	0.3017	0.2905	0.3239	0.3085	0.3078	0.3275	---	0.3102	2.73	1.00	1.00	4.5	5.00	10.00					
O-Terphenyl	1	0	Avg	0.7084	0.7152	0.7479	0.7181	0.7366	0.7663	---	0.7328	8.41	1.00	1.00	3.0	5.00	10.00					
Diesel Range Organics(TO	1	0	Avg	0.6298	0.6488	0.6803	0.6547	0.6751	0.6475	---	0.6566	3.74	1.00	1.00	2.9	65.00	130.0					
Total Petroleum Hydrocarb	1	0	Avg	0.6371	0.6492	0.6662	0.6584	0.6774	0.6481	---	0.6562	3.39	1.00	1.00	2.2	100.0	200.0					
Ext. Petroleum Hydrocarb	1	0	Avg	0.6461	0.6588	0.6812	0.6673	0.6863	0.6583	---	0.6663	3.06	1.00	1.00	2.3	90.00	180.0					
Mineral Spirits(TOTAL)	1	0	Avg	0.4707	0.4857	0.5367	0.5110	0.5301	0.5245	---	0.5103	3.83	1.00	1.00	5.2	25.00	50.00					
Standard Solvent(TOTAL)	1	0	Avg	0.4707	0.4857	0.5367	0.5110	0.5301	0.5245	---	0.5103	3.83	1.00	1.00	5.2	25.00	50.00					

HAZ. - 208

HAZ. - 208

## Flags

c - failed the initial calibration  
criteria(if applicable)

## Notes:

Col = Column Number  
Mr = Molar Mass  
Ft = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.  
Corr 1 = Correlation Coefficient for linear Fit.  
Corr 2 = Correlation Coefficient for quad Fit.

All Response Factors = Response Factors / 10000  
Initial Calibration Criteria: either %RSD <= 20 or Corr >= .995  
Columns: Signal #1 db-1701 : Signal #2 db-608

\*Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Avg Rsd Col 1: 5.11

Avg Rsd Col 2: -1.00

## Form 5

Method: EPA 8015D  
Instrument: GC\_7

Column: DB-5MS 30M 0.250mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
7G41173.D	INST BLK	05/12/16 09:33	Soil					
7G41174.D	CAL TPH@500PPM	05/12/16 09:59	Soil	7G41179.	8.4591	0.6678		
7G41175.D	CAL TPH@100PPM	05/12/16 10:24	Soil	7G41179.	8.4223	0.2318		
7G41176.D	CAL TPH@40PPM	05/12/16 10:50	Soil	7G41179.	8.4125	0.1154		
7G41177.D	CAL TPH@20PPM	05/12/16 11:16	Soil	7G41179.	8.4072	0.0524		
7G41178.D	CAL TPH@10PPM	05/12/16 11:41	Soil	7G41179.	8.4039	0.0131		
7G41179.D	CAL TPH@5PPM	05/12/16 12:07	Soil	7G41179.	8.4028	0		
7G41180.D	ICV@20PPM	05/12/16 12:33	Soil	7G41179.	8.4065	0.044		
7G41181.D	INST BLK	05/12/16 12:59	Soil	7G41179.	0.0000	200		
7G41182.D	SMB50091	05/12/16 16:40	Soil	7G41179.	8.4117	0.1059		
7G41183.D	SMB50091(MBS)	05/12/16 17:05	Soil	7G41179.	8.4093	0.0773		
7G41184.D	AC91260-001(MS)	05/12/16 17:31	Soil	7G41179.	8.4096	0.0809		
7G41185.D	AC91260-001(MSD)	05/12/16 17:57	Soil	7G41179.	8.4083	0.0654		
7G41186.D	AC91260-001	05/12/16 18:22	Soil	7G41179.	8.4046	0.0214		
7G41187.D	AC91273-002	05/12/16 18:48	Soil	7G41179.	8.4042	0.0167		
7G41188.D	AC91273-004	05/12/16 19:14	Soil	7G41179.	8.4045	0.0202		
7G41189.D	AC91280-002	05/12/16 19:40	Soil	7G41179.	8.4070	0.05		
7G41190.D	CAL TPH@20PPM	05/12/16 20:31	Soil	7G41179.	8.4086	0.069		
7G41191.D	20PPM	05/12/16 21:23	Soil	7G41190.	8.4080	0.0071		

**FORM 4**  
Blank Summary

Blank Number: SMB50091  
Blank Data File: 7G41182.D  
Matrix: Soil

Blank Analysis Date: 05/12/16 16:40  
Blank Extraction Date: 05/12/16  
(If Applicable)  
Method: EPA 8015D

Sample Number	Data File	Analysis Date
AC91273-002	7G41187.D	05/12/16 18:48
AC91273-004	7G41188.D	05/12/16 19:14
AC91260-001	7G41186.D	05/12/16 18:22
AC91260-001(MSD)	7G41185.D	05/12/16 17:57
AC91260-001(MS)	7G41184.D	05/12/16 17:31
SMB50091(MBS)	7G41183.D	05/12/16 17:05

Form3  
RPD Data

QC Batch: SMB50091

Data File	Sample ID:	Analysis Date
Spike or Dup: 7G41185.D	AC91260-001(MSD)	5/12/2016 5:57:00 PM
Duplicate(If applicable): 7G41184.D	AC91260-001(MS)	5/12/2016 5:31:00 PM
Inst Blank(If applicable): 7G41181.D	INST BLK	5/12/2016 12:59:00 PM
Method: 8015	Matrix: Soil	QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Diesel Range Organics	1	1960.36	2175.68	10	40
* - Indicates outside of limits		NA - Both concentrations=0... no result can be calculated			

**Form3**  
**Recovery Data**  
**QC Batch: SMB50091**

<b>Data File</b>	<b>Sample ID:</b>	<b>Analysis Date</b>
Spike or Dup: 7G41184.D	AC91260-001(MS)	5/12/2016 5:31:00 PM
Non Spike(If applicable): 7G41186.D	AC91260-001	5/12/2016 6:22:00 PM
Inst Blank(If applicable): 7G41181.D	INST BLK	5/12/2016 12:59:00 PM
<b>Method: 8015</b>	<b>Matrix: Soil</b>	<b>QC Type: MS</b>

<b>Analyte:</b>	<b>Col</b>	<b>Spike Conc</b>	<b>Sample Conc</b>	<b>Expected Conc</b>	<b>Recovery</b>	<b>Lower Limit</b>	<b>Upper Limit</b>
Diesel Range Organics	1	2175.68	0	3000	73	40	130

<b>Data File</b>	<b>Sample ID:</b>	<b>Analysis Date</b>
Spike or Dup: 7G41185.D	AC91260-001(MSD)	5/12/2016 5:57:00 PM
Non Spike(If applicable): 7G41186.D	AC91260-001	5/12/2016 6:22:00 PM
Inst Blank(If applicable): 7G41181.D	INST BLK	5/12/2016 12:59:00 PM
<b>Method: 8015</b>	<b>Matrix: Soil</b>	<b>QC Type: MSD</b>

<b>Analyte:</b>	<b>Col</b>	<b>Spike Conc</b>	<b>Sample Conc</b>	<b>Expected Conc</b>	<b>Recovery</b>	<b>Lower Limit</b>	<b>Upper Limit</b>
Diesel Range Organics	1	1960.36	0	3000	65	40	130

\* - Indicates outside of limits

# - Indicates outside of standard limits but within method exceedance limits

Form3  
Recovery Data  
QC Batch: SMB50091

Data File	Sample ID:	Analysis Date
Spike or Dup: 7G41183.D	SMB50091(MBS)	5/12/2016 5:05:00 PM
Non Spike(if applicable):		
Inst Blank(if applicable): 7G41181.D	INST BLK	5/12/2016 12:59:00 PM
Method: 8015	Matrix: Soil	QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Diesel Range Organics	1	1853.6	0	3000	62	40	130

## FORM2

## Surrogate Recovery

Method: EPA 8015D

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column0 S3 Recov	Column0 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
7G41182.D	SMB50091	S	05/12/16 16:40	1		53	59				
7G41187.D	DAC91273-002	S	05/12/16 18:48	1		48	65				
7G41188.D	DAC91273-004	S	05/12/16 19:14	1		63	68				
7G41183.D	SMB50091(MBS)	S	05/12/16 17:05	1		54	70				
7G41184.D	DAC91260-001(MS)	S	05/12/16 17:31	1		68	74				
7G41185.D	DAC91260-001(MSD)	S	05/12/16 17:57	1		52	73				
7G41186.D	DAC91260-001	S	05/12/16 18:22	1		52	61				

Flags: SD=Surrogate diluted out

\*=Surrogate out

Method: EPA 8015D

## Soil DKQP Limits

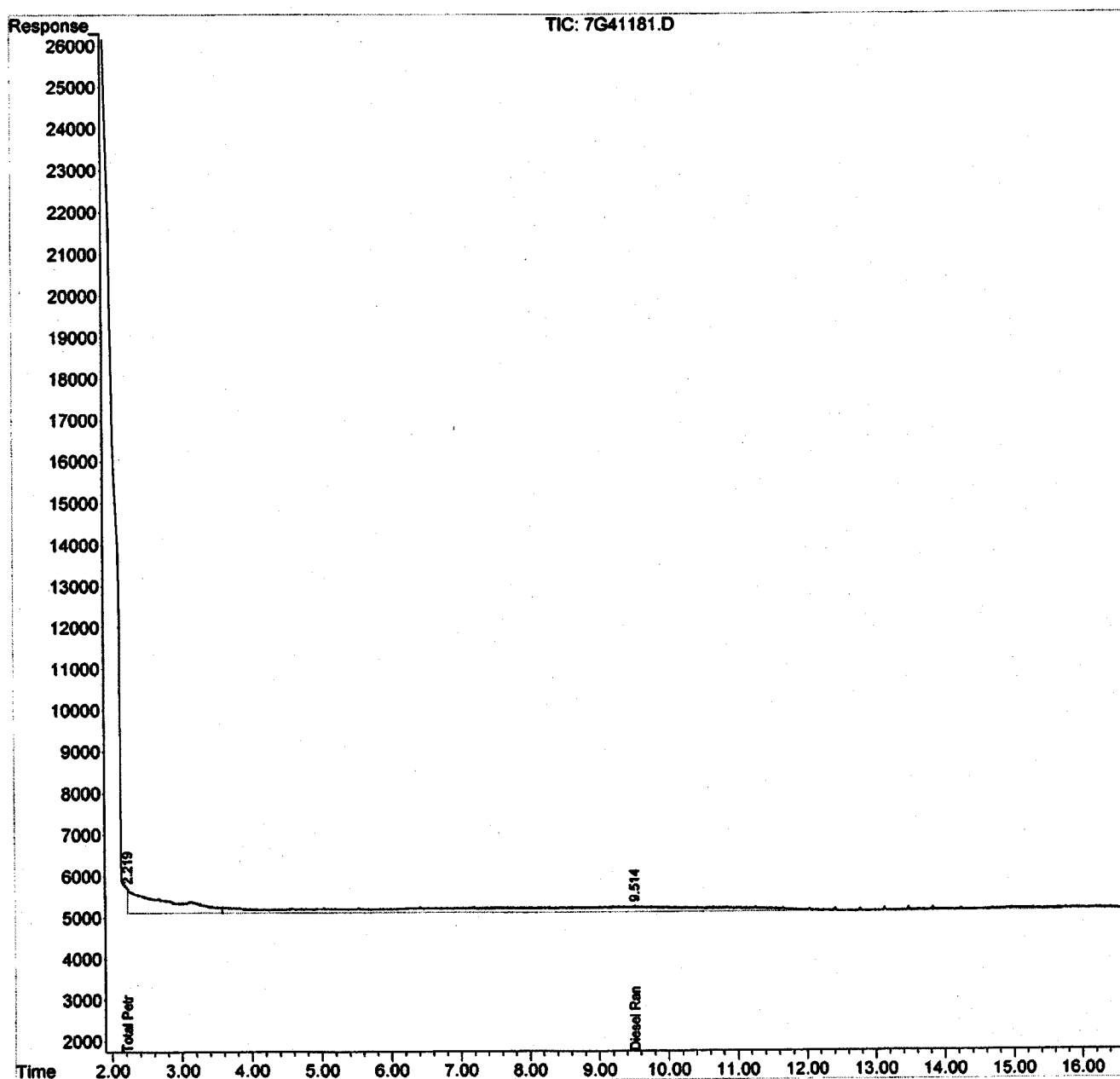
Compound	Spike Amt	Limits
S1=Chlorobenzene	20	20-117
S2=O-Terphenyl	20	30-146



Data Path : G:\Gcdata\2016\GC\_7\Data\05-12-16\  
Data File : 7G41181.D  
Signal(s) : FID2B.CH  
Acq On : 12 May 2016 12:59  
Operator : ABM/KD  
Sample : INST BLK  
Misc : S,TPH  
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e  
Quant Time: May 13 09:27:32 2016  
Quant Method : G:\GC DATA\2016\GC\_7\METHODQT\7G\_T0512.M  
Quant Title : @GC\_7,mg,8015  
QLast Update : Thu May 12 12:28:55 2016  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. :  
Signal Phase :  
Signal Info :



Data Path : G:\Gcdata\2016\GC\_7\Data\05-12-16\  
 Data File : 7G41181.D  
 Signal(s) : FID2B.CH  
 Acq On : 12 May 2016 12:59  
 Operator : ABM/KD  
 Sample : INST BLK  
 Misc : S,TPH  
 ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e  
 Quant Time: May 13 09:27:32 2016  
 Quant Method : G:\GCData\2016\GC\_7\METHODQT\7G\_T0512.M  
 Quant Title : @GC\_7,mg,8015  
 QLast Update : Thu May 12 12:28:55 2016  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. :  
 Signal Phase :  
 Signal Info :

Compound	R.T.	Response	Conc	Units
-----				
Target Compounds				
1)mt C8	0.000	0	N.D.	
2)mte C9	0.000	0	N.D.	
3)mdte C10	0.000	0	N.D.	
4)mdte C12	0.000	0	N.D.	
5)mdte C14	0.000	0	N.D.	
6)dte C16	0.000	0	N.D.	
7)dte C17	0.000	0	N.D.	
8)dte Pristane	0.000	0	N.D.	
9)dte C18	0.000	0	N.D.	
10)dte Phytane	0.000	0	N.D.	
11)dte C20	0.000	0	N.D.	
12)dte C22	0.000	0	N.D.	
13)dte C24	0.000	0	N.D.	
14)dte C26	0.000	0	N.D.	
15)dte C28	0.000	0	N.D.	
16)te C30	0.000	0	N.D.	
17)te C32	0.000	0	N.D.	
18)te C34	0.000	0	N.D.	
19)te C36	0.000	0	N.D.	
20)t C40	0.000	0	N.D.	
21) Chlorobenzene	0.000	0	N.D.	
22) O-Terphenyl	0.000	0	N.D.	
23)d Diesel Range Organics(T	9.514f	486700	74.186	m
24)t Total Petroleum Hydroca	2.219	793617	120.958	m
25)e Ext. Petroleum Hydrocar	0.000	0	N.D.	
26)m Mineral Spirits(TOTAL)	0.000	0	N.D.	
27)m Stoddard Solvent(TOTAL)	0.000	0	N.D.	
-----				

(f)=RT Delta > 1/2 Window

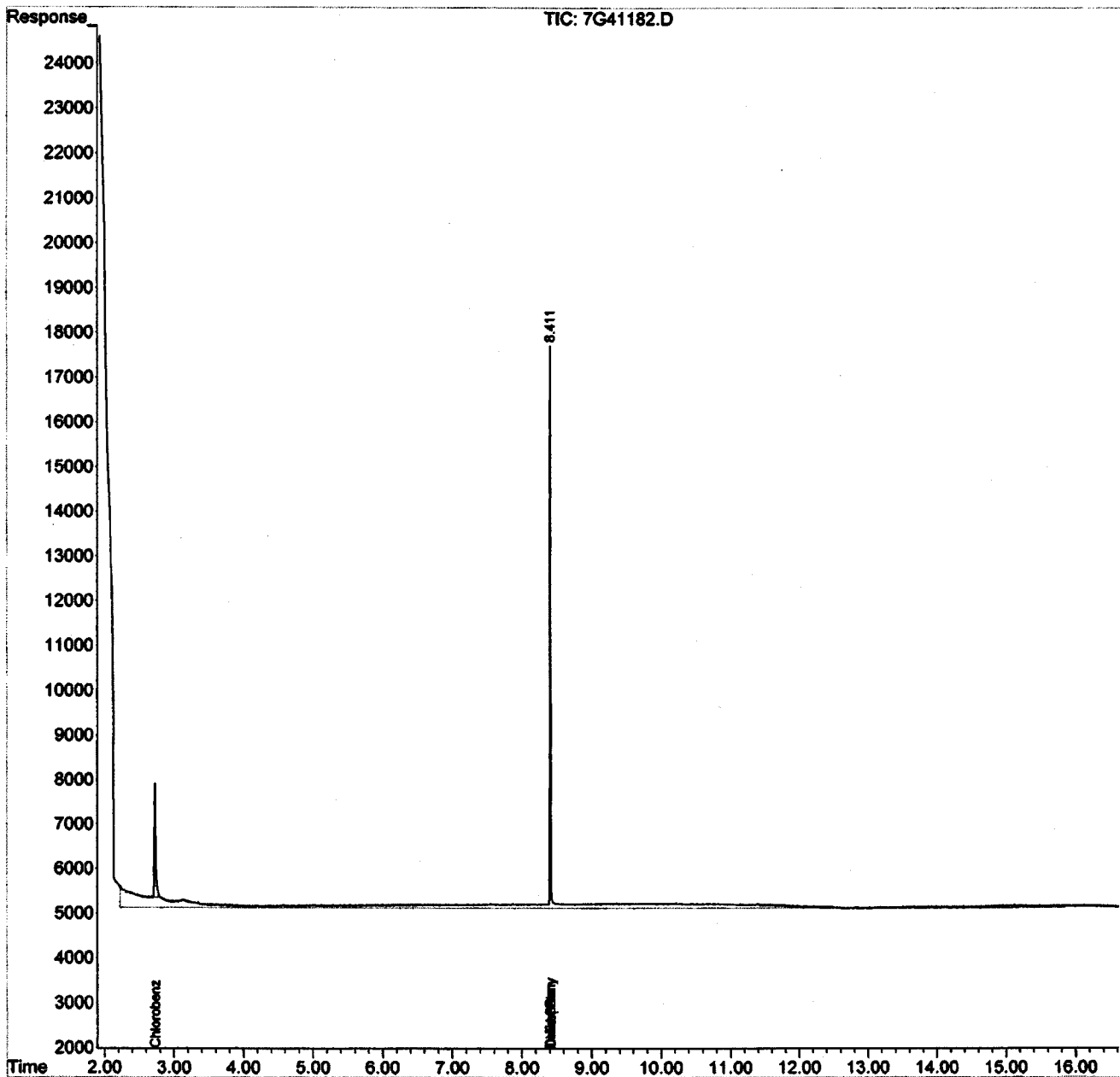
(m)=manual int.

*frei*

Data Path : G:\Gcdata\2016\GC\_7\Data\05-12-16\  
Data File : 7G41182.D  
Signal(s) : FID2B.CH  
Acq On : 12 May 2016 16:40  
Operator : ABM/KD  
Sample : SMB50091  
Misc : S,TPH  
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e  
Quant Time: May 13 10:22:56 2016  
Quant Method : G:\GC DATA\2016\GC\_7\METHODQT\7G\_T0512.M  
Quant Title : @GC\_7,mg,8015  
QLast Update : Fri May 13 07:56:54 2016  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. :  
Signal Phase :  
Signal Info :



Data Path : G:\Gcdata\2016\GC\_7\Data\05-12-16\  
Data File : 7G41182.D  
Signal(s) : FID2B.CH  
Acq On : 12 May 2016 16:40  
Operator : ABM/KD  
Sample : SMB50091  
Misc : S,TPH  
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e  
Quant Time: May 13 10:22:56 2016  
Quant Method : G:\GCData\2016\GC\_7\METHODQT\7G\_T0512.M  
Quant Title : @GC\_7,mg,8015  
QLast Update : Fri May 13 07:56:54 2016  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. :  
Signal Phase :  
Signal Info :

Compound	R.T.	Response	Conc	Units
-----				
Target Compounds				
1)mt C8	0.000	0	N.D.	
2)mte C9	0.000	0	N.D.	
3)mdte C10	0.000	0	N.D.	
4)mdte C12	0.000	0	N.D.	
5)mdte C14	0.000	0	N.D.	
6)dte C16	0.000	0	N.D.	
7)dte C17	0.000	0	N.D.	
8)dte Pristane	0.000	0	N.D.	
9)dte C18	0.000	0	N.D.	
10)dte Phytane	0.000	0	N.D.	
11)dte C20	0.000	0	N.D.	
12)dte C22	0.000	0	N.D.	
13)dte C24	0.000	0	N.D.	
14)dte C26	0.000	0	N.D.	
15)dte C28	0.000	0	N.D.	
16)te C30	0.000	0	N.D.	
17)te C32	0.000	0	N.D.	
18)te C34	0.000	0	N.D.	
19)te C36	0.000	0	N.D.	
20)t C40	0.000	0	N.D.	
21) Chlorobenzene	2.730	33068	10.666	m
22) O-Terphenyl	8.412	87004	11.884	
23)d Diesel Range Organics(T	8.411f	462317	70.470	m
24)t Total Petroleum Hydroca	8.411f	723617	110.289	m
25)e Ext. Petroleum Hydrocar	0.000	0	N.D.	
26)m Mineral Spirits(TOTAL)	0.000	0	N.D.	
27)m Stoddard Solvent(TOTAL)	0.000	0	N.D.	
-----				

(f)=RT Delta > 1/2 Window

(m)=manual int.

*pei*

## Form1

## ORGANICS PETROLEUM HYDROCARBON REPORT

Sample Number: SMB50091      Method: EPA 8015D  
Client Id:      Matrix: Soil  
Data File: 7G41182.D      Initial Vol: 5g  
Analysis Date: 05/12/16 16:40      Final Vol: 1ml  
Date Rec/Extracted: NA-05/12/16      Dilution: 1  
Column: DB-5MS 30M 0.250mm ID 0.25um film      Solids: 100

Units: mg/Kg							
Gas #	Compound	RL	Conc	Gas #	Compound	RL	Conc
	Total Petroleum Hydrocarbo	60	U				

Worksheet #: 383238

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

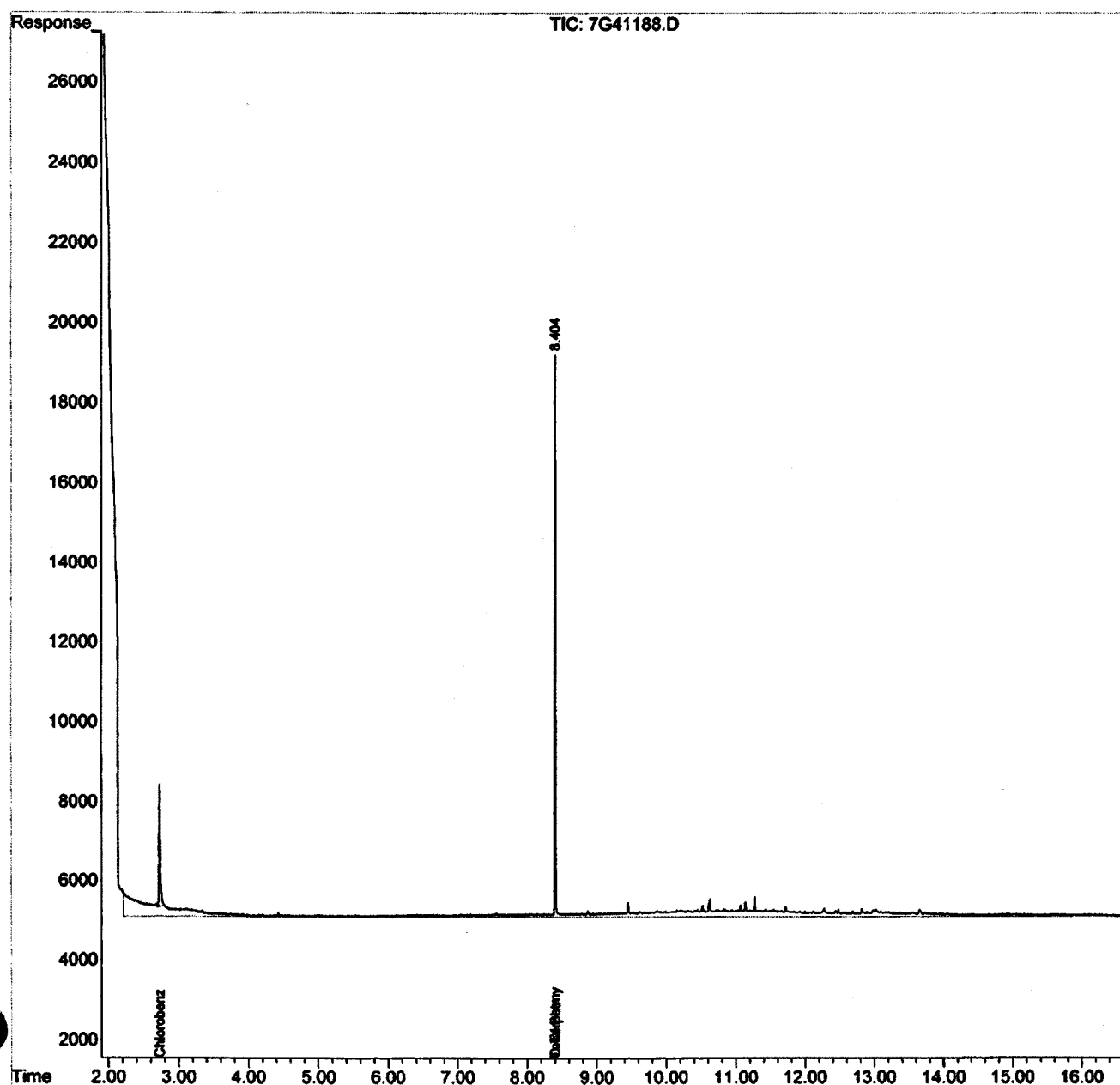
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a Chlordane (Total) is sum of  $\alpha$ -Chlordane and  $\gamma$ -Chlordane.

Data Path : G:\Gcdata\2016\GC\_7\Data\05-12-16\  
Data File : 7G41188.D  
Signal(s) : FID2B.CH  
Acq On : 12 May 2016 19:14  
Operator : ABM/KD  
Sample : AC91273-004  
Misc : S,TPH  
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e  
Quant Time: May 13 10:28:40 2016  
Quant Method : G:\GCDATA\2016\GC\_7\METHODQT\7G\_T0512.M  
Quant Title : @GC\_7,mg,8015  
QLast Update : Fri May 13 07:56:54 2016  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. :  
Signal Phase :  
Signal Info :



Data Path : G:\Gcdata\2016\GC\_7\Data\05-12-16\  
 Data File : 7G41188.D  
 Signal(s) : FID2B.CH  
 Acq On : 12 May 2016 19:14  
 Operator : ABM/KD  
 Sample : AC91273-004  
 Misc : S,TPH  
 ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e  
 Quant Time: May 13 10:28:40 2016  
 Quant Method : G:\GC DATA\2016\GC\_7\METHODQT\7G\_T0512.M  
 Quant Title : @GC\_7,mg,8015  
 QLast Update : Fri May 13 07:56:54 2016  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. :  
 Signal Phase :  
 Signal Info :

Compound	R.T.	Response	Conc	Units
-----				
Target Compounds				
1)mt C8	0.000	0	N.D.	
2)nte C9	0.000	0	N.D.	
3)mdte C10	0.000	0	N.D.	
4)mdte C12	0.000	0	N.D.	
5)mdte C14	0.000	0	N.D.	
6)dte C16	0.000	0	N.D.	
7)dte C17	0.000	0	N.D.	
8)dte Pristane	0.000	0	N.D.	
9)dte C18	0.000	0	N.D.	
10)dte Phytane	0.000	0	N.D.	
11)dte C20	0.000	0	N.D.	
12)dte C22	0.000	0	N.D.	
13)dte C24	0.000	0	N.D.	
14)dte C26	0.000	0	N.D.	
15)dte C28	0.000	0	N.D.	
16)te C30	0.000	0	N.D.	
17)te C32	0.000	0	N.D.	
18)te C34	0.000	0	N.D.	
19)te C36	0.000	0	N.D.	
20)t C40	0.000	0	N.D.	
21) Chlorobenzene	2.726	39090	12.608	m
22) O-Terphenyl	8.404	100099	13.672	
23)d Diesel Range Organics(T	0.000	0	N.D.	
24)t Total Petroleum Hydroca	8.404f	880137	134.145	m
25)e Ext. Petroleum Hydrocar	0.000	0	N.D.	
26)m Mineral Spirits(TOTAL)	0.000	0	N.D.	
27)m Stoddard Solvent(TOTAL)	0.000	0	N.D.	
-----				

(f)=RT Delta > 1/2 Window

(m)=manual int.

*Handwritten signature*

## Form1

## ORGANICS PETROLEUM HYDROCARBON REPORT

Sample Number: AC91273-004  
 Client Id: SB01 COMP  
 Data File: 7G41188.D  
 Analysis Date: 05/12/16 19:14  
 Date Rec/Extracted: 05/11/16-05/12/16  
 Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8015D  
 Matrix: Soil  
 Initial Vol: 5g  
 Final Vol: 1ml  
 Dilution: 1  
 Solids: 90

Units: mg/Kg							
Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
	Total Petroleum Hydrocarbo	67	U				

Worksheet #: 383238

**Total Target Concentration 0**

ColumnID: (^) Indicates results from 2nd column

Indicates the compound was analyzed but not detected.  
 Indicates the analyte was found in the blank as well as in the sample.  
 Indicates the analyte concentration exceeds the calibration range of the instrument.

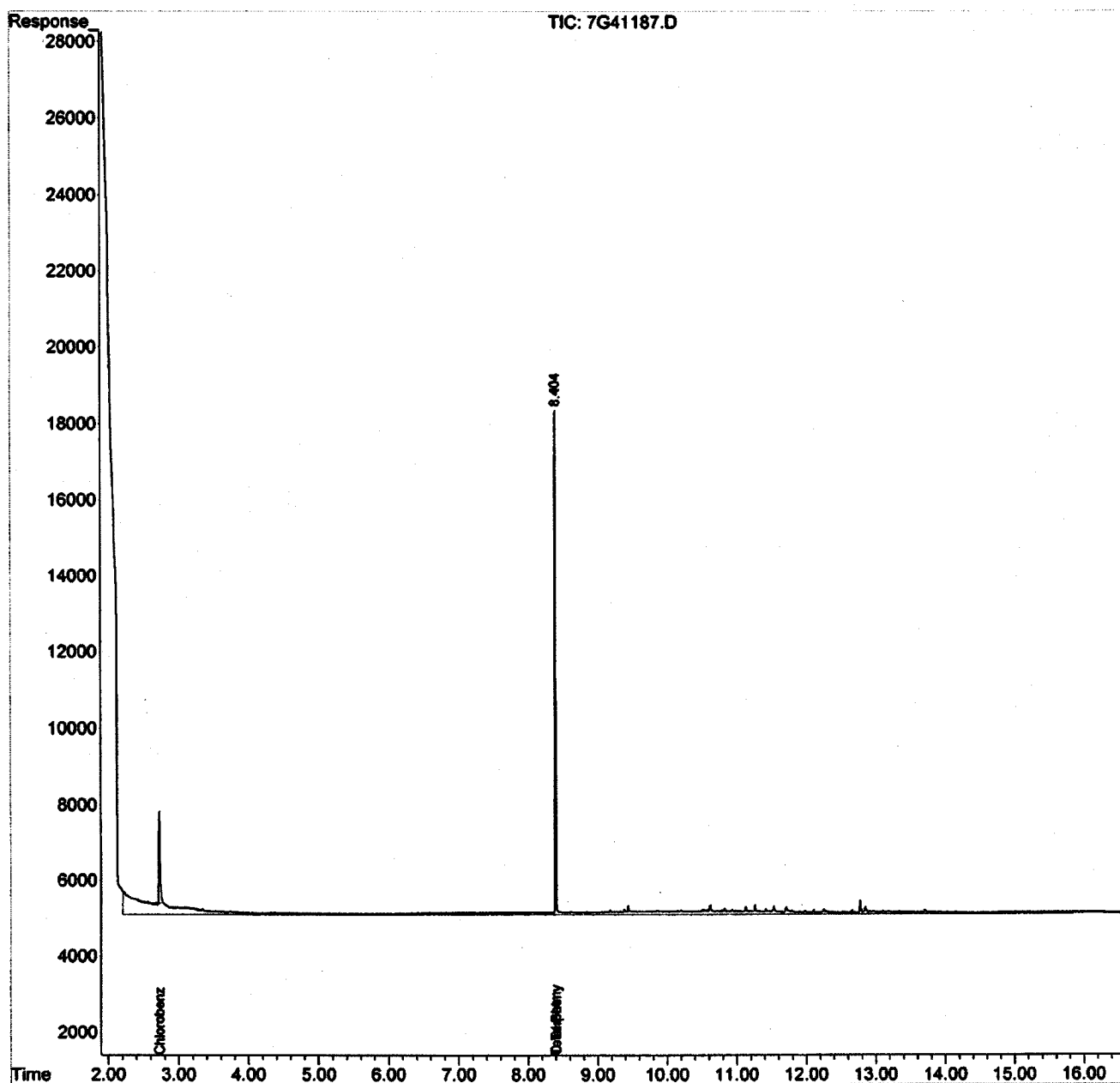
R - Retention Time Out  
 J - Indicates an estimated value when a compound is detected at less than the specified detection limit.  
 d - Pesticide %Diff > 40% between columns due to coelution. Lower concentration use a  
 Chlordane (Total) is sum of  $\alpha$ -Chlordane and  $\gamma$ -Chlordane.



Data Path : G:\Gcdata\2016\GC\_7\Data\05-12-16\  
Data File : 7G41187.D  
Signal(s) : FID2B.CH  
Acq On : 12 May 2016 18:48  
Operator : ABM/KD  
Sample : AC91273-002  
Misc : S,TPH  
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e  
Quant Time: May 13 10:27:49 2016  
Quant Method : G:\GC DATA\2016\GC\_7\METHODQT\7G\_T0512.M  
Quant Title : @GC\_7,mg,8015  
QLast Update : Fri May 13 07:56:54 2016  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. :  
Signal Phase :  
Signal Info :



Data Path : G:\Gcdata\2016\GC\_7\Data\05-12-16\  
Data File : 7G41187.D  
Signal(s) : FID2B.CH  
Acq On : 12 May 2016 18:48  
Operator : ABM/KD  
Sample : AC91273-002  
Misc : S,TPH  
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e  
Quant Time: May 13 10:27:49 2016  
Quant Method : G:\GC DATA\2016\GC\_7\METHODQT\7G\_T0512.M  
Quant Title : @GC\_7.mg,8015  
QLast Update : Fri May 13 07:56:54 2016  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. :  
Signal Phase :  
Signal Info :

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1)mt C8	0.000	0	N.D.
2)mte C9	0.000	0	N.D.
3)mdte C10	0.000	0	N.D.
4)mdte C12	0.000	0	N.D.
5)mdte C14	0.000	0	N.D.
6)dte C16	0.000	0	N.D.
7)dte C17	0.000	0	N.D.
8)dte Pristane	0.000	0	N.D.
9)dte C18	0.000	0	N.D.
10)dte Phytane	0.000	0	N.D.
11)dte C20	0.000	0	N.D.
12)dte C22	0.000	0	N.D.
13)dte C24	0.000	0	N.D.
14)dte C26	0.000	0	N.D.
15)dte C28	0.000	0	N.D.
16)te C30	0.000	0	N.D.
17)te C32	0.000	0	N.D.
18)te C34	0.000	0	N.D.
19)te C36	0.000	0	N.D.
20)t C40	0.000	0	N.D.
21) Chlorobenzene	2.729	29587	9.543
22) O-Terphenyl	8.404	94643	12.927
23)d Diesel Range Organics(T	0.000	0	N.D.
24)t Total Petroleum Hydroca	8.404f	735046	112.031 m
25)e Ext. Petroleum Hydrocar	0.000	0	N.D.
26)m Mineral Spirits(TOTAL)	0.000	0	N.D.
27)m Stoddard Solvent(TOTAL)	0.000	0	N.D.
-----			

(f)=RT Delta > 1/2 Window

(m)=manual int.

*ji*

## Form1

## ORGANICS PETROLEUM HYDROCARBON REPORT

Sample Number: AC91273-002      Method: EPA 8015D  
Client Id: SB02 COMP      Matrix: Soil  
Data File: 7G41187.D      Initial Vol: 5g  
Analysis Date: 05/12/16 18:48      Final Vol: 1ml  
Date Rec/Extracted: 05/11/16-05/12/16      Dilution: 1  
Column: DB-5MS 30M 0.250mm ID 0.25um film      Solids: 88

Cas #	Compound	RL	Conc	Units: mg/Kg	Cas #	Compound	RL	Conc
	Total Petroleum Hydrocarbo	68	U					

Worksheet #: 383238

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff &gt; 40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of  $\alpha$ -Chlordane and  $\gamma$ -Chlordane.

## Form7

RtWindow Summary

Method: EPA 8082A

Data File:		2G112858.D		2G112955.D		2G112990.D					
Calibration Name:		CAL 1660@50PPB		CAL 1660@1000PPB		CAL 1660@1000PPB					
Calibration Date/Time		5/8/2016 7:57:00 PM		5/12/2016 11:41:00 AM		5/12/2016 11:11:00 PM					
Compound	Col Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
TCMX-Surrogate	1 0	3.81	(3.75 - 3.87)	3.81	(3.75 - 3.87)	3.81	(3.75 - 3.87)				
Aroclor-1016	1 1	4.33	(4.29 - 4.37)	4.32	(4.28 - 4.36)	4.33	(4.28 - 4.36)				
Aroclor-1016	1 2	4.69	(4.65 - 4.73)	4.69	(4.65 - 4.73)	4.69	(4.65 - 4.73)				
Aroclor-1016	1 3	5.15	(5.11 - 5.19)	5.15	(5.11 - 5.19)	5.15	(5.11 - 5.19)				
Aroclor-1016	1 4	5.39	(5.35 - 5.43)	5.39	(5.35 - 5.43)	5.39	(5.35 - 5.43)				
Aroclor-1016	1 5	5.51	(5.47 - 5.55)	5.51	(5.47 - 5.55)	5.51	(5.47 - 5.55)				
Aroclor-1260	1 1	7.01	(6.97 - 7.05)	7.01	(6.97 - 7.05)	7.01	(6.97 - 7.05)				
Aroclor-1260	1 2	7.26	(7.22 - 7.30)	7.26	(7.22 - 7.30)	7.26	(7.22 - 7.30)				
Aroclor-1260	1 3	7.46	(7.42 - 7.50)	7.46	(7.42 - 7.50)	7.46	(7.42 - 7.50)				
Aroclor-1260	1 4	8.04	(8.00 - 8.08)	8.04	(8.00 - 8.08)	8.04	(8.00 - 8.08)				
Aroclor-1260	1 5	8.76	(8.72 - 8.80)	8.77	(8.73 - 8.81)	8.76	(8.72 - 8.80)				
Aroclor-1221	1 1	4.12	(4.08 - 4.16)								
Aroclor-1221	1 2	4.26	(4.22 - 4.30)								
Aroclor-1221	1 3	4.32	(4.28 - 4.36)								
Aroclor-1232	1 1	4.32	(4.28 - 4.36)								
Aroclor-1232	1 2	4.69	(4.65 - 4.73)								
Aroclor-1232	1 3	5.15	(5.11 - 5.19)								
Aroclor-1232	1 4	5.29	(5.25 - 5.33)								
Aroclor-1232	1 5	5.75	(5.71 - 5.79)								
Aroclor-1242	1 1	4.33	(4.29 - 4.37)								
Aroclor-1242	1 2	4.69	(4.65 - 4.73)								
Aroclor-1242	1 3	5.15	(5.11 - 5.19)								
Aroclor-1242	1 4	5.51	(5.47 - 5.55)								
Aroclor-1242	1 5	5.75	(5.71 - 5.79)								
Aroclor-1248	1 1	4.69	(4.65 - 4.73)								
Aroclor-1248	1 2	5.15	(5.11 - 5.19)								
Aroclor-1248	1 3	5.49	(5.45 - 5.53)								
Aroclor-1248	1 4	5.85	(5.81 - 5.89)								
Aroclor-1248	1 5	6.45	(6.41 - 6.49)								
Aroclor-1254	1 1	6.65	(6.61 - 6.69)								
Aroclor-1254	1 2	6.85	(6.81 - 6.89)								
Aroclor-1254	1 3	7.01	(6.97 - 7.05)								
Aroclor-1254	1 4	7.13	(7.09 - 7.17)								
Aroclor-1254	1 5	7.52	(7.48 - 7.56)								
Aroclor-1262	1 1	7.68	(7.64 - 7.72)								
Aroclor-1262	1 2	8.69	(8.65 - 8.73)								
Aroclor-1262	1 3	8.75	(8.71 - 8.79)								
Aroclor-1262	1 4	9.48	(9.44 - 9.52)								
Aroclor-1262	1 5	9.82	(9.78 - 9.86)								
Aroclor-1268	1 1	8.03	(7.99 - 8.07)								
Aroclor-1268	1 2	8.36	(8.32 - 8.40)								
Aroclor-1268	1 3	8.92	(8.88 - 8.96)								
Aroclor-1268	1 4	9.02	(8.98 - 9.06)								
Aroclor-1268	1 5	9.82	(9.78 - 9.86)								
DCB-Surrogate	1 0	10.03	(9.97 - 10.09)	10.03	(9.97 - 10.09)	10.03	(9.97 - 10.09)				
TCMX-Surrogate	2 0	3.79	(3.73 - 3.85)	3.79	(3.73 - 3.85)	3.80	(3.74 - 3.86)				
Aroclor-1016	2 1	4.40	(4.36 - 4.44)	4.40	(4.36 - 4.44)	4.40	(4.36 - 4.44)				
Aroclor-1016	2 2	4.82	(4.78 - 4.86)	4.82	(4.78 - 4.86)	4.82	(4.78 - 4.86)				
Aroclor-1016	2 3	5.20	(5.16 - 5.24)	5.20	(5.16 - 5.24)	5.20	(5.16 - 5.24)				
Aroclor-1016	2 4	5.53	(5.49 - 5.57)	5.53	(5.49 - 5.57)	5.53	(5.49 - 5.57)				
Aroclor-1016	2 5	5.90	(5.86 - 5.94)	5.90	(5.86 - 5.94)	5.90	(5.86 - 5.94)				
Aroclor-1260	2 1	7.21	(7.17 - 7.25)	7.21	(7.17 - 7.25)	7.21	(7.17 - 7.25)				
Aroclor-1260	2 2	7.29	(7.25 - 7.33)	7.29	(7.25 - 7.33)	7.29	(7.25 - 7.33)				
Aroclor-1260	2 3	7.92	(7.88 - 7.96)	7.92	(7.88 - 7.96)	7.92	(7.88 - 7.96)				
Aroclor-1260	2 4	8.28	(8.24 - 8.32)	8.28	(8.24 - 8.32)	8.28	(8.24 - 8.32)				
Aroclor-1260	2 5	8.98	(8.94 - 9.02)	8.98	(8.94 - 9.02)	8.98	(8.94 - 9.02)				
Aroclor-1221	2 1	4.18	(4.14 - 4.22)								
Aroclor-1221	2 2	4.33	(4.29 - 4.37)								
Aroclor-1221	2 3	4.40	(4.36 - 4.44)								
Aroclor-1232	2 1	4.40	(4.36 - 4.44)								
Aroclor-1232	2 2	4.82	(4.78 - 4.86)								
Aroclor-1232	2 3	5.20	(5.16 - 5.24)								
Aroclor-1232	2 4	5.53	(5.49 - 5.57)								
Aroclor-1232	2 5	6.04	(6.00 - 6.08)								
Aroclor-1242	2 1	4.40	(4.36 - 4.44)								
Aroclor-1242	2 2	4.82	(4.78 - 4.86)								
Aroclor-1242	2 3	5.20	(5.16 - 5.24)								
Aroclor-1242	2 4	5.53	(5.49 - 5.57)								
Aroclor-1242	2 5	5.90	(5.86 - 5.94)								
Aroclor-1248	2 1	4.82	(4.78 - 4.86)								
Aroclor-1248	2 2	5.20	(5.16 - 5.24)								
Aroclor-1248	2 3	5.53	(5.49 - 5.57)								
Aroclor-1248	2 4	6.04	(6.00 - 6.08)								
Aroclor-1248	2 5	6.18	(6.14 - 6.22)								
Aroclor-1254	2 1	6.40	(6.36 - 6.44)								
Aroclor-1254	2 2	6.74	(6.70 - 6.78)								
Aroclor-1254	2 3	7.14	(7.10 - 7.18)								
Aroclor-1254	2 4	7.65	(7.61 - 7.69)								
Aroclor-1254	2 5	8.34	(8.30 - 8.38)								
Aroclor-1262	2 1	7.71	(7.67 - 7.75)								
Aroclor-1262	2 2	8.87	(8.83 - 8.91)								
Aroclor-1262	2 3	8.98	(8.94 - 9.02)								
Aroclor-1262	2 4	9.57	(9.53 - 9.61)								
Aroclor-1262	2 5	10.10	(10.06 - 10.14)								
Aroclor-1268	2 1	8.38	(8.34 - 8.42)								
Aroclor-1268	2 2	8.42	(8.38 - 8.46)								
Aroclor-1268	2 3	9.31	(9.27 - 9.35)								
Aroclor-1268	2 4	9.47	(9.43 - 9.51)								
Aroclor-1268	2 5	10.10	(10.06 - 10.14)								
DCB-Surrogate	2 0	10.64	(10.58 - 10.70)	10.64	(10.58 - 10.70)	10.64	(10.58 - 10.70)				

**Form7**  
Continuing Calibration

Method: EPA 8082A

6051104 0110

Data File:  
Method:  
Calibration Name:  
Calibration Date/Time

Compound	Limit	Col	Mr	2G112955.D 8082 CAL 1660@1000PP 05/12/16 11:41			2G112973.D 8082 CAL 1660@1000PP 05/12/16 18:50			2G112990.D 8082 CAL 1660@1000PP 05/12/16 23:11			2G112996.D 8082 CAL 1660@2000PP 05/13/16 00:43					
				Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff
TCMX-Surrogate	20	1	0	97.99	100	2.0	102.0	100	2.0	104.2	100	4.2	210.7	200	5.4			
Aroclor-1016	20	1	1	1056	1000	5.6	1163	1000	16.3	1193	1000	19.3	2361	2000	18.0			
Aroclor-1016	20	1	2	1023	1000	2.3	1089	1000	8.9	1116	1000	11.6	2157	2000	7.8			
Aroclor-1016	20	1	3	1058	1000	5.8	1179	1000	17.9	1214	1000	21.4*	2473	2000	23.6*			
Aroclor-1016	20	1	4	1042	1000	4.2	1110	1000	11.0	1154	1000	15.4	2306	2000	15.3			
Aroclor-1016	20	1	5	1002	1000	0.2	1049	1000	4.9	1069	1000	6.9	2097	2000	4.9			
Aroclor-1260	20	1	1	987.2	1000	1.3	1080	1000	8.0	1106	1000	10.6	2160	2000	8.0			
Aroclor-1260	20	1	2	968.1	1000	3.2	1079	1000	7.9	1116	1000	11.6	2228	2000	11.4			
Aroclor-1260	20	1	3	932.5	1000	6.7	1014	1000	1.4	1048	1000	4.8	2105	2000	5.3			
Aroclor-1260	20	1	4	946.1	1000	5.4	1042	1000	4.2	1082	1000	8.2	2124	2000	6.2			
Aroclor-1260	20	1	5	910.2	1000	9.0	1011	1000	1.1	1050	1000	5.0	2240	2000	12.0			
DCB-Surrogate	20	1	0	97.97	100	2.0	107.5	100	7.5	111.5	100	11.5	224.3	200	12.2			
Average Difference	20	1	0			4.0			7.6			10.9			10.8			
TCMX-Surrogate	20	2	0	95.56	100	4.4	100.6	100	0.6	104.1	100	4.1	200.5	200	0.2			
Aroclor-1016	20	2	1	991.8	1000	0.8	1066	1000	6.6	1088	1000	8.8	1957	2000	2.1			
Aroclor-1016	20	2	2	973.2	1000	2.7	1042	1000	4.2	1072	1000	7.2	1964	2000	1.8			
Aroclor-1016	20	2	3	978.4	1000	2.2	1050	1000	5.0	1075	1000	7.5	1992	2000	0.4			
Aroclor-1016	20	2	4	974.6	1000	2.5	1053	1000	5.3	1083	1000	8.3	1998	2000	0.1			
Aroclor-1016	20	2	5	947.3	1000	5.3	1035	1000	3.5	1071	1000	7.1	1988	2000	0.6			
Aroclor-1260	20	2	1	929.4	1000	7.1	1020	1000	2.0	1040	1000	4.0	1837	2000	8.1			
Aroclor-1260	20	2	2	951	1000	4.9	1042	1000	4.2	1063	1000	6.3	1874	2000	6.3			
Aroclor-1260	20	2	3	958	1000	4.2	1056	1000	5.6	1058	1000	5.8	1885	2000	5.8			
Aroclor-1260	20	2	4	975.8	1000	2.4	1050	1000	5.0	1080	1000	8.0	1894	2000	5.3			
Aroclor-1260	20	2	5	945.9	1000	5.4	1061	1000	6.1	1100	1000	10.0	1932	2000	3.4			
DCB-Surrogate	20	2	0	101.6	100	1.6	110.5	100	10.5	114.9	100	14.9	199.1	200	0.4			
Average Difference	20	2	0			3.6			4.9			7.7			2.9			

Flags/Notes:

\* - Values outside of limits for this column/run HAZ. - 188

Method: ERM 82A

FOC 6  
Initial Calibration

Instrument: GC\_

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Calibration Level Concentrations																
1	2G112858.D	CAL 1660@500PPB	05/08/16 19:57	2	2G112859.D	CAL 1660@200PPB	05/08/16 20:12	LV1 LV2 LV3 LV4 LV5 LV6 LV7 LV8																
3	2G112860.D	CAL 1660@500PPB	05/08/16 20:28	4	2G112861.D	CAL 1660@1000PPB	05/08/16 20:43																	
5	2G112862.D	CAL 1660@2000PPB	05/08/16 20:58	6	2G112863.D	CAL 1660@4000PPB	05/08/16 21:14																	
7	2G112863.D	CAL 3268@500PPB	05/08/16 18:40	8	2G112864.D	CAL 1242@500PPB	05/08/16 18:55																	
9	2G112865.D	CAL 1248@500PPB	05/08/16 19:11	10	2G112866.D	CAL 2154@500PPB	05/08/16 19:26																	
Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRt	RT	Corr1	Corr2	%Rsd	LV1	LV2	LV3	LV4	LV5	LV6	LV7	LV8
Atroclor-1248	2	4	Avg	---	---	---	---	---	---	---	---	0.0316	6.04	-1	-1	LV=9	500.0							
Atroclor-1248	2	5	Avg	---	---	---	---	---	---	---	---	0.0385	6.18	-1	-1	LV=9	500.0							
Atroclor-1254	2	1	Avg	---	---	---	---	---	---	---	---	0.0548	6.40	-1	-1	LV=10	500.0							
Atroclor-1254	2	2	Avg	---	---	---	---	---	---	---	---	0.0170	6.74	-1	-1	LV=10	500.0							
Atroclor-1254	2	3	Avg	---	---	---	---	---	---	---	---	0.0454	7.14	-1	-1	LV=10	500.0							
Atroclor-1254	2	4	Avg	---	---	---	---	---	---	---	---	0.0209	7.65	-1	-1	LV=10	500.0							
Atroclor-1254	2	5	Avg	---	---	---	---	---	---	---	---	0.0242	8.34	-1	-1	LV=10	500.0							
Atroclor-1262	2	1	Avg	---	---	---	---	---	---	---	---	0.0560	7.71	-1	-1	LV=11	500.0							
Atroclor-1262	2	2	Avg	---	---	---	---	---	---	---	---	0.0462	8.87	-1	-1	LV=11	500.0							
Atroclor-1262	2	3	Avg	---	---	---	---	---	---	---	---	0.0560	8.98	-1	-1	LV=11	500.0							
Atroclor-1262	2	4	Avg	---	---	---	---	---	---	---	---	0.0601	9.57	-1	-1	LV=11	500.0							
Atroclor-1262	2	5	Avg	---	---	---	---	---	---	---	---	0.0170	10.10	-1	-1	LV=11	500.0							
Atroclor-1268	2	1	Avg	---	---	---	---	---	---	---	---	0.0104	8.38	-1	-1	LV=7	500.0							
Atroclor-1268	2	2	Avg	---	---	---	---	---	---	---	---	0.0159	8.42	-1	-1	LV=7	500.0							
Atroclor-1268	2	3	Avg	---	---	---	---	---	---	---	---	0.0930	9.31	-1	-1	LV=7	500.0							
Atroclor-1268	2	4	Avg	---	---	---	---	---	---	---	---	0.0251	9.47	-1	-1	LV=7	500.0							
Atroclor-1268	2	5	Avg	---	---	---	---	---	---	---	---	0.306	10.10	-1	-1	LV=7	500.0							
DCB-Surrogate	2	0	Que	1.1799	1.0502	0.9722	0.9084	0.8423	0.8042	---	---	0.960	10.64	0.999	1.00	15	5.00	20.00	50.00	100.0	200.0	400.0		

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Avg Rsd Col 1: 14.72 Avg Rsd Col 2: 17.02

Flags

c - failed the initial calibration criteria (if applicable)

Note:

Col = Column Number  
Mr = MultiPeak Analyte (0=single peak analyte, >0=multi peak analyte (i.e. nch/chlordane etc.))  
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.  
Corr 1 = Correlation Coefficient for linear Fit.  
Corr 2 = Correlation Coefficient for quad Fit.

All Response Factors = Response Factors / 10000  
Initial Calibration Criteria: either %RSD <= 20 or Corr >= .995  
Columns: Signal #1 dtb-1701 : Signal #2 dtb-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Form 6  
Initial Calibration

Instrument: GC\_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Calibration Level Concentrations															
1	2G112858.D	CAL 1660@500PB	05/08/16 19:57	2	2G112859.D	CAL 1660@200PB	05/08/16 20:12	LV1 LV2 LV3 LV4 LV5 LV6 LV7 LV8															
3	2G112860.D	CAL 1660@500PB	05/08/16 20:28	4	2G112861.D	CAL 1660@1000PB	05/08/16 20:43																
5	2G112862.D	CAL 1660@2000PB	05/08/16 20:58	6	2G112863.D	CAL 1660@4000PB	05/08/16 21:14																
7	2G112863.D	CAL 3268@500PB	05/08/16 18:40	8	2G112864.D	CAL 1242@500PB	05/08/16 18:55																
9	2G112865.D	CAL 1248@500PB	05/08/16 19:11	10	2G112866.D	CAL 2154@500PB	05/08/16 19:26																
Compound	Col	Mr	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRt	RT	Corr1	Corr2	%Rsd	LV1	LV2	LV3	LV4	LV5	LV6	LV7	LV8
Anoclo-1262	1	3	Avg	---	---	---	---	---	---	---	0.0360	8.75	-1	-1	LV=11	500.0							
Anoclo-1262	1	4	Avg	---	---	---	---	---	---	---	0.0161	9.48	-1	-1	LV=11	500.0							
Anoclo-1262	1	5	Avg	---	---	---	---	---	---	---	0.00614	9.82	-1	-1	LV=11	500.0							
Anoclo-1268	1	1	Avg	---	---	---	---	---	---	---	0.00618	8.03	-1	-1	LV=7	500.0							
Anoclo-1268	1	2	Avg	---	---	---	---	---	---	---	0.00517	8.36	-1	-1	LV=7	500.0							
Anoclo-1268	1	3	Avg	---	---	---	---	---	---	---	0.0374	8.92	-1	-1	LV=7	500.0							
Anoclo-1268	1	4	Avg	---	---	---	---	---	---	---	0.0153	9.02	-1	-1	LV=7	500.0							
Anoclo-1268	1	5	Avg	---	---	---	---	---	---	---	0.0982	9.82	-1	-1	LV=7	500.0							
DCB-Surrogate	1	0	Qua	0.4394	0.3961	0.3372	0.3226	0.3017	0.2922	---	0.347	10.03	1.00	1.00	16	5.00	20.00	50.00	100.0	200.0	400.0		
TCMX-Surrogate	2	0	Qua	0.8394	0.7738	0.8170	0.7815	0.7393	0.7161	---	0.778	3.80	0.999	1.00	5.9	5.00	20.00	50.00	100.0	200.0	400.0		
Anoclo-1016	2	1	Qua	0.0261	0.0219	0.0207	0.0197	0.0177	0.0180	---	0.0207	4.40	0.999	0.999	15	50.00	200.0	500.0	1000.	2000.	4000.		
Anoclo-1016	2	2	Qua	0.0490	0.0455	0.0406	0.0360	0.0313	0.0284	---	0.0385	4.82	0.995	0.999	21	50.00	200.0	500.0	1000.	2000.	4000.		
Anoclo-1016	2	3	Qua	0.1027	0.0900	0.0803	0.0770	0.0689	0.0636	---	0.0805	5.20	0.997	1.00	18	50.00	200.0	500.0	1000.	2000.	4000.		
Anoclo-1016	2	4	Qua	0.0447	0.0376	0.0338	0.0317	0.0284	0.0263	---	0.0338	5.53	0.998	1.00	20	50.00	200.0	500.0	1000.	2000.	4000.		
Anoclo-1016	2	5	Qua	0.0307	0.0269	0.0243	0.0228	0.0206	0.0190	---	0.0241	5.90	0.997	1.00	18	50.00	200.0	500.0	1000.	2000.	4000.		
Anoclo-1260	2	1	Qua	0.0732	0.0616	0.0546	0.0481	0.0417	0.0373	---	0.0528	7.21	0.995	0.999	25	50.00	200.0	500.0	1000.	2000.	4000.		
Anoclo-1260	2	2	Qua	0.0789	0.0658	0.0606	0.0537	0.0466	0.0420	---	0.0580	7.29	0.995	0.999	23	50.00	200.0	500.0	1000.	2000.	4000.		
Anoclo-1260	2	3	Qua	0.0337	0.0313	0.0284	0.0263	0.0236	0.0219	---	0.0276	7.92	0.998	1.00	16	50.00	200.0	500.0	1000.	2000.	4000.		
Anoclo-1260	2	4	Qua	0.0612	0.0564	0.0514	0.0475	0.0422	0.0407	---	0.0500	8.28	0.999	0.999	16	50.00	200.0	500.0	1000.	2000.	4000.		
Anoclo-1260	2	5	Qua	0.0509	0.0503	0.0472	0.0435	0.0403	0.0378	---	0.0450	8.98	0.998	1.00	12	50.00	200.0	500.0	1000.	2000.	4000.		
Anoclo-1221	2	1	Avg	---	---	---	---	---	---	---	0.0115	4.18	-1	-1	LV=10	500.0							
Anoclo-1221	2	2	Avg	---	---	---	---	---	---	---	0.0068	4.33	-1	-1	LV=10	500.0							
Anoclo-1221	2	3	Avg	---	---	---	---	---	---	---	0.0235	4.40	-1	-1	LV=10	500.0							
Anoclo-1232	2	1	Avg	---	---	---	---	---	---	---	0.0206	4.40	-1	-1	LV=7	500.0							
Anoclo-1232	2	2	Avg	---	---	---	---	---	---	---	0.0182	4.82	-1	-1	LV=7	500.0							
Anoclo-1232	2	3	Avg	---	---	---	---	---	---	---	0.0365	5.20	-1	-1	LV=7	500.0							
Anoclo-1232	2	4	Avg	---	---	---	---	---	---	---	0.0157	5.53	-1	-1	LV=7	500.0							
Anoclo-1232	2	5	Avg	---	---	---	---	---	---	---	0.0112	6.04	-1	-1	LV=7	500.0							
Anoclo-1242	2	1	Avg	---	---	---	---	---	---	---	0.0178	4.40	-1	-1	LV=8	500.0							
Anoclo-1242	2	2	Avg	---	---	---	---	---	---	---	0.0300	4.82	-1	-1	LV=8	500.0							
Anoclo-1242	2	3	Avg	---	---	---	---	---	---	---	0.0627	5.20	-1	-1	LV=8	500.0							
Anoclo-1242	2	4	Avg	---	---	---	---	---	---	---	0.0261	5.53	-1	-1	LV=8	500.0							
Anoclo-1242	2	5	Avg	---	---	---	---	---	---	---	0.0214	5.90	-1	-1	LV=8	500.0							
Anoclo-1248	2	1	Avg	---	---	---	---	---	---	---	0.0153	4.82	-1	-1	LV=9	500.0							
Anoclo-1248	2	2	Avg	---	---	---	---	---	---	---	0.0415	5.20	-1	-1	LV=9	500.0							
Anoclo-1248	2	3	Avg	---	---	---	---	---	---	---	0.0296	5.53	-1	-1	LV=9	500.0							

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Avg Rsd Col 1: 14.72 Avg Rsd Col 2: 17.02

## Flags

c - failed the initial calibration criteria(if applicable)

## Note:

Col = Column Number  
 Mr = MultiPeak Analyte (single peak analyte, >N=multi peak analyte (i.e. nch/chlordane etc.))  
 Fit = Indicates whether Avg RF: Linear, or Quadratic Curve was used for compound.  
 Corr 1 = Correlation Coefficient for linear Fit.  
 Corr 2 = Correlation Coefficient for quad Fit.

All Response Factors = Response Factors / 10000  
 Initial Calibration Criteria: either %RSD <=20 or Corr >= .995  
 Column: Signal #1 db-1701 : Signal #2 db-608

⚠: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Level #:				Data File:				Cal Identifier:				Analysis Date/Time				Level #:				Data File:				Cal Identifier:				Analysis Date/Time			
1	2G112858.D	CAL 1660@500PPB	05/08/16 19:57	2	2G112859.D	CAL 1660@200PPB	05/08/16 20:12	3	2G112860.D	CAL 1660@500PPB	05/08/16 20:28	4	2G112861.D	CAL 1660@1000PPB	05/08/16 20:43	5	2G112862.D	CAL 1660@2000PPB	05/08/16 20:58	6	2G112863.D	CAL 1660@4000PPB	05/08/16 21:14	7	2G112863.D	CAL 1242@500PPB	05/08/16 18:55	8	2G112854.D	CAL 2154@500PPB	05/08/16 19:26
9	2G112855.D	CAL 1248@500PPB	05/08/16 19:11	10	2G112856.D	CAL 1242@500PPB	05/08/16 19:26																								
UN																															
Compound		Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRt	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations													
UN		CMX-Surrogate	1	0	Avg	0.4255	0.4011	0.4053	0.4079	0.4018	0.4034	---	---	0.408	3.81	1.00	1.00	2.2	50.0	20.0	50.0	100.0	200.0	400.0	---	---	---	---	---	---	
UN		Atroclor-1016	1	1	Qua	0.0134	0.0123	0.0118	0.0110	0.0099	0.0094	---	---	0.0114	4.33	0.998	1.00	13	50.0	200.0	500.0	1000.0	2000.0	4000.0	---	---	---	---	---	---	
UN		Atroclor-1016	1	2	Qua	0.0297	0.0261	0.0240	0.0232	0.0192	0.0176	---	---	0.0231	4.69	0.997	0.999	19	50.0	200.0	500.0	1000.0	2000.0	4000.0	---	---	---	---	---	---	
UN		Atroclor-1016	1	3	Qua	0.0458	0.0398	0.0357	0.0323	0.0288	0.0262	---	---	0.0348	5.15	0.996	1.00	21	50.0	200.0	500.0	1000.0	2000.0	4000.0	---	---	---	---	---	---	
UN		Atroclor-1016	1	4	Qua	0.0157	0.0136	0.0129	0.0121	0.0113	0.0108	---	---	0.0128	5.39	0.999	1.00	14	50.0	200.0	500.0	1000.0	2000.0	4000.0	---	---	---	---	---	---	
UN		Atroclor-1016	1	5	Qua	0.0371	0.0330	0.0318	0.0299	0.0286	0.0273	---	---	0.0313	5.51	0.999	1.00	11	50.0	200.0	500.0	1000.0	2000.0	4000.0	---	---	---	---	---	---	
UN		Atroclor-1260	1	1	Qua	0.0309	0.0256	0.0238	0.0222	0.0202	0.0189	---	---	0.0237	7.01	0.998	1.00	18	50.0	200.0	500.0	1000.0	2000.0	4000.0	---	---	---	---	---	---	
UN		Atroclor-1260	1	2	Qua	0.0330	0.0277	0.0255	0.0236	0.0215	0.0198	---	---	0.0252	7.26	0.998	1.00	19	50.0	200.0	500.0	1000.0	2000.0	4000.0	---	---	---	---	---	---	
UN		Atroclor-1260	1	3	Qua	0.0172	0.0150	0.0148	0.0147	0.0143	0.0141	---	---	0.0151	7.46	1.00	1.00	7.4	50.0	200.0	500.0	1000.0	2000.0	4000.0	---	---	---	---	---	---	
UN		Atroclor-1260	1	4	Qua	0.0221	0.0179	0.0160	0.0148	0.0136	0.0127	---	---	0.0162	8.04	0.999	1.00	21	50.0	200.0	500.0	1000.0	2000.0	4000.0	---	---	---	---	---	---	
UN		Atroclor-1260	1	5	Qua	0.0313	0.0267	0.0246	0.0224	0.0229	0.0224	---	---	0.0251	8.77	1.00	1.00	14	50.0	200.0	500.0	1000.0	2000.0	4000.0	---	---	---	---	---	---	
UN		Atroclor-1221	1	1	Avg	---	---	---	---	---	---	---	---	0.0065	4.12	-1	-1	---	500.0	---	---	---	---	---	---	---	---	---	---	---	
UN		Atroclor-1221	1	2	Avg	---	---	---	---	---	---	---	---	0.0038	4.27	-1	-1	---	500.0	---	---	---	---	---	---	---	---	---	---	---	
UN		Atroclor-1221	1	3	Avg	---	---	---	---	---	---	---	---	0.0180	4.33	-1	-1	---	500.0	---	---	---	---	---	---	---	---	---	---	---	
UN		Atroclor-1232	1	1	Avg	---	---	---	---	---	---	---	---	0.0113	4.33	-1	-1	---	500.0	---	---	---	---	---	---	---	---	---	---	---	
UN		Atroclor-1232	1	2	Avg	---	---	---	---	---	---	---	---	0.0106	4.69	-1	-1	---	500.0	---	---	---	---	---	---	---	---	---	---	---	
UN		Atroclor-1232	1	3	Avg	---	---	---	---	---	---	---	---	0.0153	5.15	-1	-1	---	500.0	---	---	---	---	---	---	---	---	---	---	---	
UN		Atroclor-1232	1	4	Avg	---	---	---	---	---	---	---	---	0.0073	6.29	-1	-1	---	500.0	---	---	---	---	---	---	---	---	---	---	---	
UN		Atroclor-1232	1	5	Avg	---	---	---	---	---	---	---	---	0.0080	5.75	-1	-1	---	500.0	---	---	---	---	---	---	---	---	---	---	---	
UN		Atroclor-1242	1	1	Avg	---	---	---	---	---	---	---	---	0.0089	4.33	-1	-1	---	500.0	---	---	---	---	---	---	---	---	---	---	---	
UN		Atroclor-1242	1	2	Avg	---	---	---	---	---	---	---	---	0.0185	4.69	-1	-1	---	500.0	---	---	---	---	---	---	---	---	---	---	---	
UN		Atroclor-1242	1	3	Avg	---	---	---	---	---	---	---	---	0.0278	5.15	-1	-1	---	500.0	---	---	---	---	---	---	---	---	---	---	---	
UN		Atroclor-1242	1	4	Avg	---	---	---	---	---	---	---	---	0.0231	5.51	-1	-1	---	500.0	---	---	---	---	---	---	---	---	---	---	---	
UN		Atroclor-1242	1	5	Avg	---	---	---	---	---	---	---	---	0.0135	5.75	-1	-1	---	500.0	---	---	---	---	---	---	---	---	---	---	---	
UN		Atroclor-1248	1	1	Avg	---	---	---	---	---	---	---	---	0.0094	5.69	-1	-1	---	500.0	---	---	---	---	---	---	---	---	---	---	---	
UN		Atroclor-1248	1	2	Avg	---	---	---	---	---	---	---	---	0.0178	5.15	-1	-1	---	500.0	---	---	---	---	---	---	---	---	---	---	---	
UN		Atroclor-1248	1	3	Avg	---	---	---	---	---	---	---	---	0.0360	5.49	-1	-1	---	500.0	---	---	---	---	---	---	---	---	---	---	---	
UN		Atroclor-1248	1	4	Avg	---	---	---	---	---	---	---	---	0.0198	5.85	-1	-1	---	500.0	---	---	---	---	---	---	---	---	---	---	---	
UN		Atroclor-1248	1	5	Avg	---	---	---	---	---	---	---	---	0.0208	6.45	-1	-1	---	500.0	---	---	---	---	---	---	---	---	---	---	---	
UN		Atroclor-1254	1	1	Avg	---	---	---	---	---	---	---	---	0.0084	5.65	-1	-1	---	500.0	---	---	---	---	---	---	---	---	---	---	---	
UN		Atroclor-1254	1	2	Avg	---	---	---	---	---	---	---	---	0.0272	6.85	-1	-1	---	500.0	---	---	---	---	---	---	---	---	---	---	---	
UN		Atroclor-1254	1	3	Avg	---	---	---	---	---	---	---	---	0.0181	7.01	-1	-1	---	500.0	---	---	---	---	---	---	---	---	---	---	---	
UN		Atroclor-1254	1	4	Avg	---	---	---	---	---	---	---	---	0.0225	7.13	-1	-1	---	500.0	---	---	---	---	---	---	---	---	---	---	---	
UN		Atroclor-1254	1	5	Avg	---	---	---	---	---	---	---	---	0.0105	7.52	-1	-1	---	500.0	---	---	---	---	---	---	---	---	---	---	---	
UN		Atroclor-1262	1	1	Avg	---	---	---	---	---	---	---	---	0.0288	7.69	-1	-1	---	500.0	---	---	---	---	---	---	---	---	---	---	---	
UN		Atroclor-1262	1	2	Avg	---	---	---	---	---	---	---	---	0.0169	8.69	-1	-1	---	500.0	---	---	---	---	---	---	---	---	---	---	---	

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Avg Rsd Col 1: 14.72 Avg Rsd Col 2: 17.02

## Flags

c - failed the initial calibration criteria (if applicable)

## Note:

Col = Column Number

Mf = MultiPeak Analyte (single peak analyte, &gt;N=multi peak analyte (i.e. nch/chlorane etc.))

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Corr 1 = Correlation Coefficient for linear Fit.

Corr 2 = Correlation Coefficient for quad Fit.

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

All Response Factors = Response Factors / 10000

Initial Calibration Criteria: either %RSD &lt;=20 or Corr &gt;= .995

Columns: Signal #1 dh-1701 : Signal #2 dh-608



## Form 5

Method: EPA 8082A

Instrument: GC\_2

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
2G112946.D	CAL 1660@1000PPB	05/12/16 09:22	Aqueous	2G11294	10.0267	0	10.6390	0
2G112947.D	AC90897-004(TI/MS)	05/12/16 09:38	Aqueous	2G11294	10.0262	0.005	10.6400	0.0094
2G112948.D	AC90897-004(TI/MSD)	05/12/16 09:53	Aqueous	2G11294	10.0246	0.0209	10.6385	0.0047
2G112949.D	AC90897-004(TI)	05/12/16 10:08	Aqueous	2G11294	10.0279	0.012	10.6416	0.0244
2G112950.D	AC90897-006(TI)	05/12/16 10:24	Aqueous	2G11294	10.0270	0.003	10.6418	0.0263
2G112951.D	AC90897-011(TI)	05/12/16 10:39	Aqueous	2G11294	10.0285	0.0179	10.6436	0.0432
2G112952.D	AC90897-014(5X)(TI)	05/12/16 10:55	Aqueous	2G11294	10.0280	0.013	10.6427	0.0348
2G112953.D	AC90897-016(TI)	05/12/16 11:10	Aqueous	2G11294	10.0271	0.004	10.6415	0.0235
2G112954.D	EF-SPLP-232434(5/5)	05/12/16 11:26	Aqueous	2G11294	10.0279	0.012	10.6425	0.0329
2G112955.D	CAL 1660@1000PPB	05/12/16 11:41	Aqueous	2G11294	10.0279	0.012	10.6421	0.0291
2G112956.D	SMB50089	05/12/16 14:28	Soil	2G11295	10.0338	0.0588	10.6412	0.0085
2G112957.D	SMB50089(MS)	05/12/16 14:44	Soil	2G11295	10.0305	0.0259	10.6432	0.0103
2G112958.D	AC91248-001	05/12/16 14:59	Soil	2G11295	10.0292	0.013	10.6429	0.0075
2G112959.D	AC91248-002	05/12/16 15:15	Soil	2G11295	10.0294	0.015	10.6432	0.0103
2G112960.D	AC91248-003	05/12/16 15:30	Soil	2G11295	10.0277	0.002	10.6424	0.0028
2G112961.D	AC91248-004	05/12/16 15:45	Soil	2G11295	10.0290	0.011	10.6446	0.0235
2G112962.D	AC91255-001	05/12/16 16:01	Soil	2G11295	10.0287	0.008	10.6431	0.0094
2G112963.D	AC91247-007	05/12/16 16:16	Soil	2G11295	10.0329	0.0498	10.6470	0.046
2G112964.D	AC91262-001	05/12/16 16:32	Soil	2G11295	10.0279	0	10.6427	0.0056
2G112965.D	AC91262-002	05/12/16 16:47	Soil	2G11295	10.0301	0.0219	10.6439	0.0169
2G112966.D	AC91262-003	05/12/16 17:02	Soil	2G11295	10.0290	0.011	10.6432	0.0103
2G112967.D	AC91262-004	05/12/16 17:18	Soil	2G11295	10.0290	0.011	10.6438	0.016
2G112968.D	AC91262-005	05/12/16 17:33	Soil	2G11295	10.0279	0	10.6436	0.0141
2G112969.D	AC91262-006	05/12/16 17:49	Soil	2G11295	10.0291	0.012	10.6436	0.0141
2G112970.D	AC91262-007	05/12/16 18:04	Soil	2G11295	10.0287	0.008	10.6442	0.0197
2G112971.D	AC91273-002	05/12/16 18:19	Soil	2G11295	10.0290	0.011	10.6427	0.0056
2G112972.D	AC91273-004	05/12/16 18:35	Soil	2G11295	10.0287	0.008	10.6424	0.0028
2G112973.D	CAL 1660@1000PPB	05/12/16 18:50	Soil	2G11295	10.0284	0.005	10.6427	0.0056
2G112974.D	2000PPB	05/12/16 19:05	Soil	2G11297	10.0268	0.016	10.6417	0.0094
2G112975.D	SMB50090	05/12/16 19:21	Soil	2G11297	10.0289	0.005	10.6430	0.0028
2G112976.D	SMB50090(MS)	05/12/16 19:36	Soil	2G11297	10.0292	0.008	10.6439	0.0113
2G112977.D	AC91270-019(MS:AC91	05/12/16 19:51	Soil	2G11297	10.0299	0.0149	10.6442	0.0141
2G112978.D	AC91270-021(MSD:AC9	05/12/16 20:07	Soil	2G11297	10.0302	0.0179	10.6433	0.0056
2G112979.D	AC91270-017	05/12/16 20:22	Soil	2G11297	10.0297	0.013	10.6430	0.0028
2G112980.D	AC91270-001	05/12/16 20:38	Soil	2G11297	10.0275	0.009	10.6411	0.015
2G112981.D	AC91270-003	05/12/16 20:53	Soil	2G11297	10.0298	0.014	10.6432	0.0047
2G112982.D	AC91270-005	05/12/16 21:08	Soil	2G11297	10.0295	0.011	10.6431	0.0038
2G112983.D	AC91270-007	05/12/16 21:24	Soil	2G11297	10.0292	0.008	10.6427	0
2G112984.D	AC91270-009	05/12/16 21:39	Soil	2G11297	10.0286	0.002	10.6430	0.0028
2G112985.D	AC91270-011	05/12/16 21:55	Soil	2G11297	10.0276	0.008	10.6411	0.015
2G112986.D	AC91270-013	05/12/16 22:10	Soil	2G11297	10.0280	0.004	10.6422	0.0047
2G112987.D	AC91270-015	05/12/16 22:25	Soil	2G11297	10.0277	0.007	10.6418	0.0085
2G112988.D	AC91270-023	05/12/16 22:41	Soil	2G11297	10.0279	0.005	10.6416	0.0103
2G112989.D	AC91270-025	05/12/16 22:56	Soil	2G11297	10.0267	0.017	10.6424	0.0028
2G112990.D	CAL 1660@1000PPB	05/12/16 23:11	Soil	2G11297	10.0277	0.007	10.6427	0
2G112991.D	2000PPB	05/12/16 23:27	Soil	2G11299	10.0258	0.019	10.6402	0.0235
2G112992.D	AC91280-002(MS)	05/12/16 23:42	Soil	2G11299	10.0255	0.0219	10.6397	0.0282
2G112993.D	AC91280-002(MSD)	05/12/16 23:57	Soil	2G11299	10.0287	0.01	10.6420	0.0066
2G112994.D	AC91280-002	05/13/16 00:13	Soil	2G11299	10.0283	0.006	10.6411	0.015
2G112995.D	1000PPB	05/13/16 00:28	Soil	2G11299	10.0294	0.0169	10.6414	0.0122
2G112996.D	CAL 1660@2000PPB	05/13/16 00:43	Soil	2G11299	10.0278	0.001	10.6432	0.0047

Drift Compound: DCB-Surrogate

Drift Limit(s): 0.5 (Pest/Pcb) 1.5 (Herb/Ph)

\* - Values outside of limits for this column/run

## Form 5

Method: EPA 8082A

Instrument: GC\_2

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
2G112836.D	1000	05/08/16 13:45	Aqueous					
2G112853.D	CAL 3268@500PPB	05/08/16 18:40	Aqueous	2G11285	10.0270	0.0249	10.6410	0.0103
2G112854.D	CAL 1242@500PPB	05/08/16 18:55	Aqueous	2G11285	10.0282	0.013	10.6421	0
2G112855.D	CAL 1248@500PPB	05/08/16 19:11	Aqueous	2G11285	10.0279	0.016	10.6428	0.0066
2G112856.D	CAL 2154@500PPB	05/08/16 19:26	Aqueous	2G11285	10.0284	0.011	10.6418	0.0028
2G112857.D	CAL 1282@500PPB	05/08/16 19:41	Aqueous	2G11285	10.0282	0.013	10.6423	0.0019
2G112858.D	CAL 1660@50PPB	05/08/16 19:57	Aqueous	2G11285	10.0295	0	10.6421	0
2G112859.D	CAL 1660@200PPB	05/08/16 20:12	Aqueous	2G11285	10.0288	0.007	10.6421	0
2G112860.D	CAL 1660@500PPB	05/08/16 20:28	Aqueous	2G11285	10.0273	0.0219	10.6433	0.0113
2G112861.D	CAL 1660@1000PPB	05/08/16 20:43	Aqueous	2G11285	10.0254	0.0409	10.6403	0.0169
2G112862.D	CAL 1660@2000PPB	05/08/16 20:58	Aqueous	2G11285	10.0263	0.0319	10.6418	0.0028
2G112863.D	CAL 1660@4000PPB	05/08/16 21:14	Aqueous	2G11285	10.0269	0.0259	10.6414	0.0066
2G112864.D	ICV	05/08/16 21:29	Aqueous	2G11285	10.0270	0.0249	10.6416	0.0047
2G112865.D	PEST WS	05/08/16 21:44	Aqueous	2G11285	0.0000	200*	0.0000	200*

**FORM 4**  
Blank SummaryBlank Number: SMB50089  
Blank Data File: 2G112956.D  
Matrix: SoilBlank Analysis Date: 05/12/16 14:28  
Blank Extraction Date: 05/12/16  
(If Applicable)  
Method: EPA 8082A

Sample Number	Data File	Analysis Date
AC91273-002	2G112971.D	05/12/16 18:19
AC91273-004	2G112972.D	05/12/16 18:35
AC91280-002	2G112994.D	05/13/16 00:13
AC91280-002(MSD)	2G112993.D	05/12/16 23:57
AC91280-002(MS)	2G112992.D	05/12/16 23:42
SMB50089(MS)	2G112957.D	05/12/16 14:44

**Form3  
RPD Data**

**QC Batch: SMB50089**

<b>Data File</b>	<b>Sample ID:</b>	<b>Analysis Date</b>
Spike or Dup: 2G112993.D	AC91280-002(MSD)	5/12/2016 11:57:00 PM
Duplicate(If applicable): 2G112992.D	AC91280-002(MS)	5/12/2016 11:42:00 PM
Inst Blank(If applicable):		
<b>Method: 8082</b>	<b>Matrix: Soil</b>	<b>QC Type: MSD</b>

<b>Analyte:</b>	<b>Column</b>	<b>Dup/MSD/MBSD Conc</b>	<b>Sample/MS/MBS Conc</b>	<b>RPD</b>	<b>Limit</b>
Aroclor-1016 -Total	1	1111.516	1393.194	22	30
Aroclor-1260 -Total	1	1119.144	1376.824	21	30

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

**Form3**  
**Recovery Data**  
**QC Batch: SMB50089**

<b>Data File</b>	<b>Sample ID:</b>	<b>Analysis Date</b>
Spike or Dup: 2G112992.D	AC91280-002(MS)	5/12/2016 11:42:00 PM
Non Spike(if applicable): 2G112994.D	AC91280-002	5/13/2016 12:13:00 AM
Inst Blank(if applicable):		
<b>Method: 8082</b>	<b>Matrix: Soil</b>	<b>QC Type: MS</b>

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Aroclor-1016 -Total	1	1393.194	0	1000	139	40	140
Aroclor-1260 -Total	1	1376.824	0	1000	138	40	140

<b>Data File</b>	<b>Sample ID:</b>	<b>Analysis Date</b>
Spike or Dup: 2G112993.D	AC91280-002(MSD)	5/12/2016 11:57:00 PM
Non Spike(if applicable): 2G112994.D	AC91280-002	5/13/2016 12:13:00 AM
Inst Blank(if applicable):		
<b>Method: 8082</b>	<b>Matrix: Soil</b>	<b>QC Type: MSD</b>

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Aroclor-1016 -Total	1	1111.516	0	1000	111	40	140
Aroclor-1260 -Total	1	1119.144	0	1000	112	40	140

\* - Indicates outside of limits

# - Indicates outside of standard limits but within method exceedance limits

**Form3**  
**Recovery Data**  
 QC Batch: SMB50089

Data File		Sample ID:		Analysis Date			
Spike or Dup: 2G112957.D		SMB50089(MS)		5/12/2016 2:44:00 PM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 8082		Matrix: Soil		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Aroclor-1016 -Total	1	888.208	0	1000	89	40	140
Aroclor-1260 -Total	1	860.56	0	1000	86	40	140

## FORM2

## Surrogate Recovery

Method: EPA 8082A

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column2 S2 Recov	Column1 S3 Recov	Column2 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
2G112956.D	SMB50089	S	05/12/16 14:28	1		75	72	83	91		
2G112971.D	AC91273-002	S	05/12/16 18:19	1		81	78	88	89		
2G112972.D	AC91273-004	S	05/12/16 18:35	1		87	83	94	96		
2G112957.D	SMB50089(MS)	S	05/12/16 14:44	1		84	83	87	94		
2G112992.D	AC91280-002(MS)	S	05/12/16 23:42	1		127	118	214 *	189 *		
2G112993.D	AC91280-002(MSD)	S	05/12/16 23:57	1		94	92	107	136		
2G112994.D	AC91280-002	S	05/13/16 00:13	1		135	122	148	127		

Flags: SD=Surrogate diluted out

\*=Surrogate out

Method: EPA 8082A

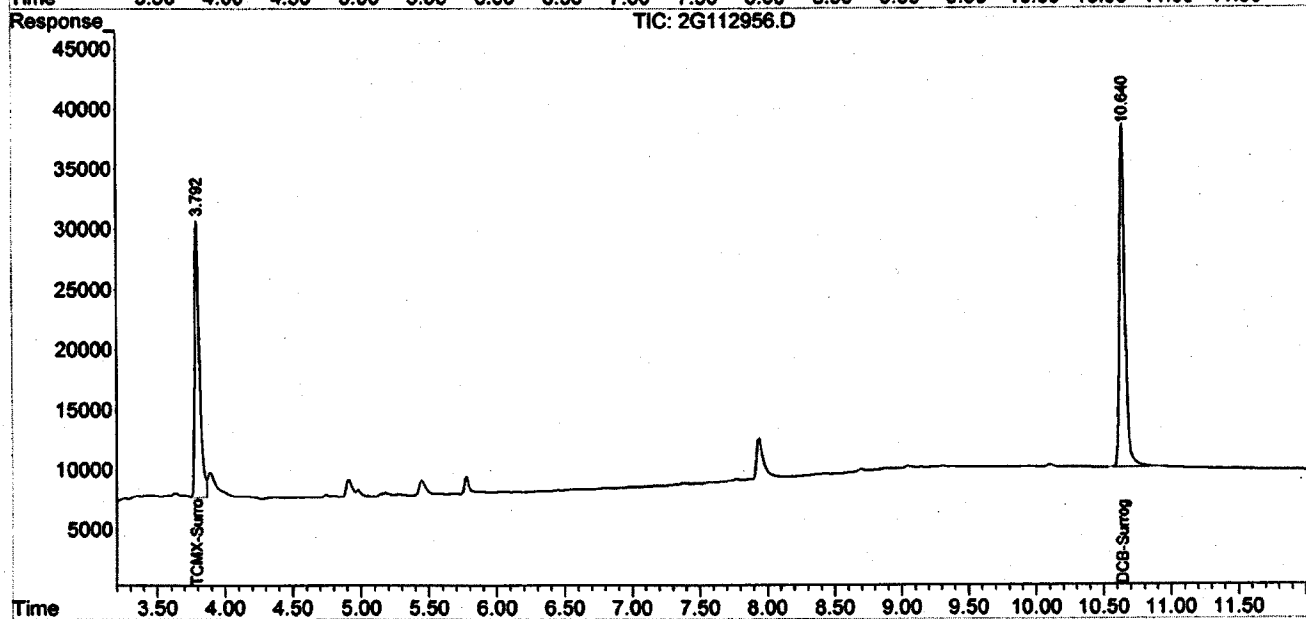
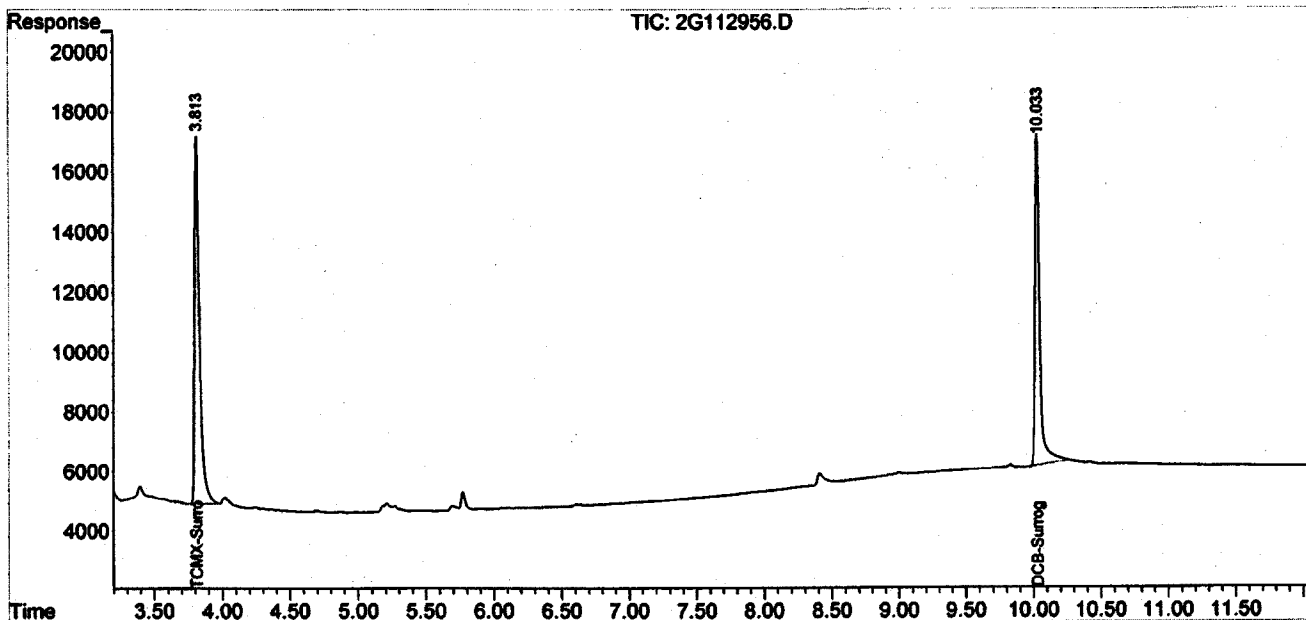
## Soil DKQP Limits

Compound	Spike Amt	Limits
S1=TCMX-Surrogate	100	30-150
S2=TCMX-Surrogate	100	30-150
S3=DCB-Surrogate	100	30-150
S4=DCB-Surrogate	100	30-150

Data Path : G:\Gcdata\2016\GC\_2\Data\05-12-16\  
Data File : 2G112956.D  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 12 May 2016 14:28  
Operator : MAS/ZM/MLC  
Sample : SMB50089  
Misc : S,PCB  
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E  
Integration File signal 2: AUTOINT2.E  
Quant Time: May 12 14:56:06 2016  
Quant Method : G:\GC DATA\2016\GC\_2\METHODQT\2G\_C0508.M  
Quant Title : @GC\_2,ug,608,8082  
QLast Update : Tue May 10 17:36:09 2016  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. : 1ul  
Signal #1 Phase : db-1701  
Signal #1 Info : .32  
Signal #2 Phase : db-17  
Signal #2 Info : .32





Data Path : G:\Gcdata\2016\GC\_2\Data\05-12-16\  
Data File : 2G112956.D  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 12 May 2016 14:28  
Operator : MAS/ZM/MLC  
Sample : SMB50089  
Misc : S,PCB  
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E  
Integration File signal 2: AUTOINT2.E  
Quant Time: May 12 14:56:06 2016  
Quant Method : G:\GC DATA\2016\GC\_2\METHODQT\2G\_C0508.M  
Quant Title : @GC\_2,ug,608,8082  
QLast Update : Tue May 10 17:36:09 2016  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. : 1ul  
Signal #1 Phase : db-1701 Signal #2 Phase: db-17  
Signal #1 Info : .32 Signal #2 Info : .32

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
-----						
Target Compounds						
1)TCMX-Surrogate	3.814	3.793	304659	558090	74.755	72.358
45)DCB-Surrogate	10.034	10.641	263676	811865	83.180	91.061
-----						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

**Form1**  
ORGANICS PCB REPORT

Sample Number: SMB50089

Client Id:

Data File: 2G112956.D

Analysis Date: 05/12/16 14:28

Date Rec/Extracted: NA-05/12/16

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8082A

Matrix: Soil

Initial Vol: 20g

Final Vol: 10ml

Dilution: 1

Solids: 100

Units: mg/Kg							
Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.025	U	11097-69-1	Aroclor-1254	0.025	U
11104-28-2	Aroclor-1221	0.025	U	11096-82-5	Aroclor-1260	0.025	U
11141-16-5	Aroclor-1232	0.025	U	37324-23-5	Aroclor-1262	0.025	U
53469-21-9	Aroclor-1242	0.025	U	11100-14-4	Aroclor-1268	0.025	U
12672-29-6	Aroclor-1248	0.025	U				

Worksheet #: 383254

**Total Target Concentration 0**

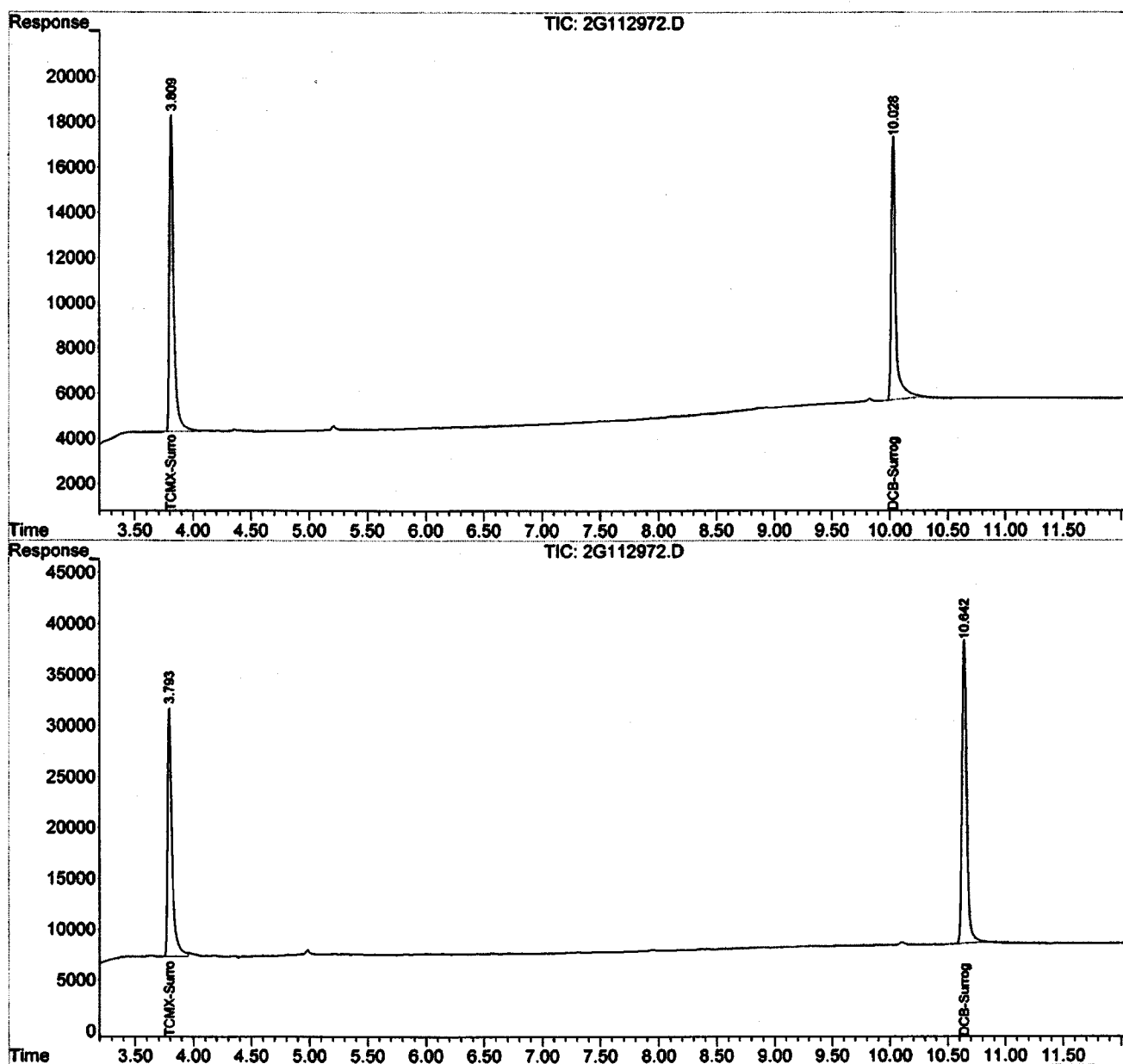
ColumnID: (^) Indicates results from 2nd column

*U - Indicates the compound was analyzed but not detected.**B - Indicates the analyte was found in the blank as well as in the sample.**E - Indicates the analyte concentration exceeds the calibration range of the instrument.**R - Retention Time Out**J - Indicates an estimated value when a compound is detected at less than the specified detection limit.**d - Pesticide %Diff > 40% between columns due to coelution. Lower concentration used**Chlordane (Total) is sum of α-Chlordane and γ-Chlordane.*

Data Path : G:\Gcdata\2016\GC\_2\Data\05-12-16\  
Data File : 2G112972.D  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 12 May 2016 18:35  
Operator : MAS/ZM/MLC  
Sample : AC91273-004  
Misc : S, PCB  
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E  
Integration File signal 2: AUTOINT2.E  
Quant Time: May 13 11:00:36 2016  
Quant Method : G:\GC DATA\2016\GC\_2\METHODQT\2G\_C0508.M  
Quant Title : @GC\_2,ug,608,8082  
QLast Update : Tue May 10 17:36:09 2016  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. : 1ul  
Signal #1 Phase : db-1701  
Signal #1 Info : .32  
Signal #2 Phase: db-17  
Signal #2 Info : .32



Data Path : G:\Gcdata\2016\GC\_2\Data\05-12-16\  
Data File : 2G112972.D  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 12 May 2016 18:35  
Operator : MAS/ZM/MLC  
Sample : AC91273-004  
Misc : S,PCB  
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E  
Integration File signal 2: AUTOINT2.E  
Quant Time: May 13 11:00:36 2016  
Quant Method : G:\GCDATA\2016\GC\_2\METHODQT\2G\_C0508.M  
Quant Title : @GC\_2,ug,608,8082  
QLast Update : Tue May 10 17:36:09 2016  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. : 1ul  
Signal #1 Phase : db-1701 Signal #2 Phase: db-17  
Signal #1 Info : .32 Signal #2 Info : .32

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
-----						
Target Compounds						
1)TCMX-Surrogate	3.809	3.793	355318	638794	87.185m	83.018m
45)DCB-Surrogate	10.029	10.642	298009	857710	94.274	96.368
-----						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

**Form1**  
ORGANICS PCB REPORT

Sample Number: AC91273-004  
 Client Id: SB01 COMP  
 Data File: 2G112972.D  
 Analysis Date: 05/12/16 18:35  
 Date Rec/Extracted: 05/11/16-05/12/16  
 Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8082A  
 Matrix: Soil  
 Initial Vol: 20g  
 Final Vol: 10ml  
 Dilution: 1  
 Solids: 90

Units: mg/Kg							
Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.028	U	11097-69-1	Aroclor-1254	0.028	U
11104-28-2	Aroclor-1221	0.028	U	11096-82-5	Aroclor-1260	0.028	U
11141-16-5	Aroclor-1232	0.028	U	37324-23-5	Aroclor-1262	0.028	U
53469-21-9	Aroclor-1242	0.028	U	11100-14-4	Aroclor-1268	0.028	U
12672-29-6	Aroclor-1248	0.028	U	1336-36-3	Aroclor (Total)	0.028	U

Worksheet #: 383254

**Total Target Concentration 0**

ColumnID: (^) Indicates results from 2nd column

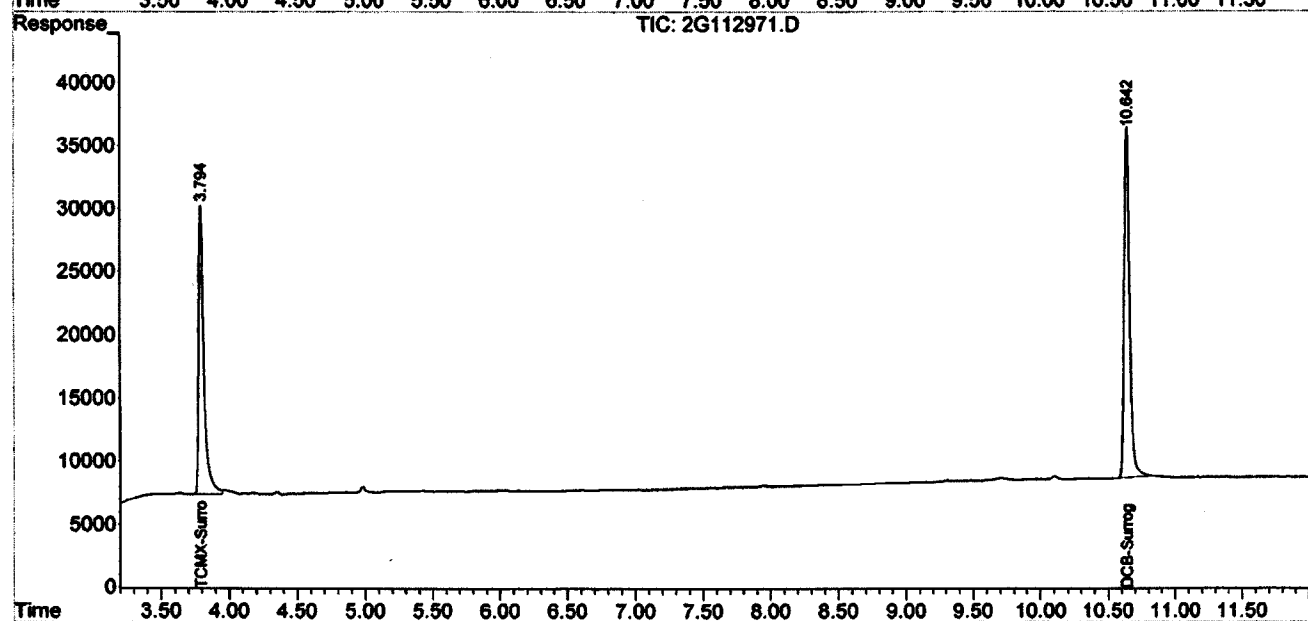
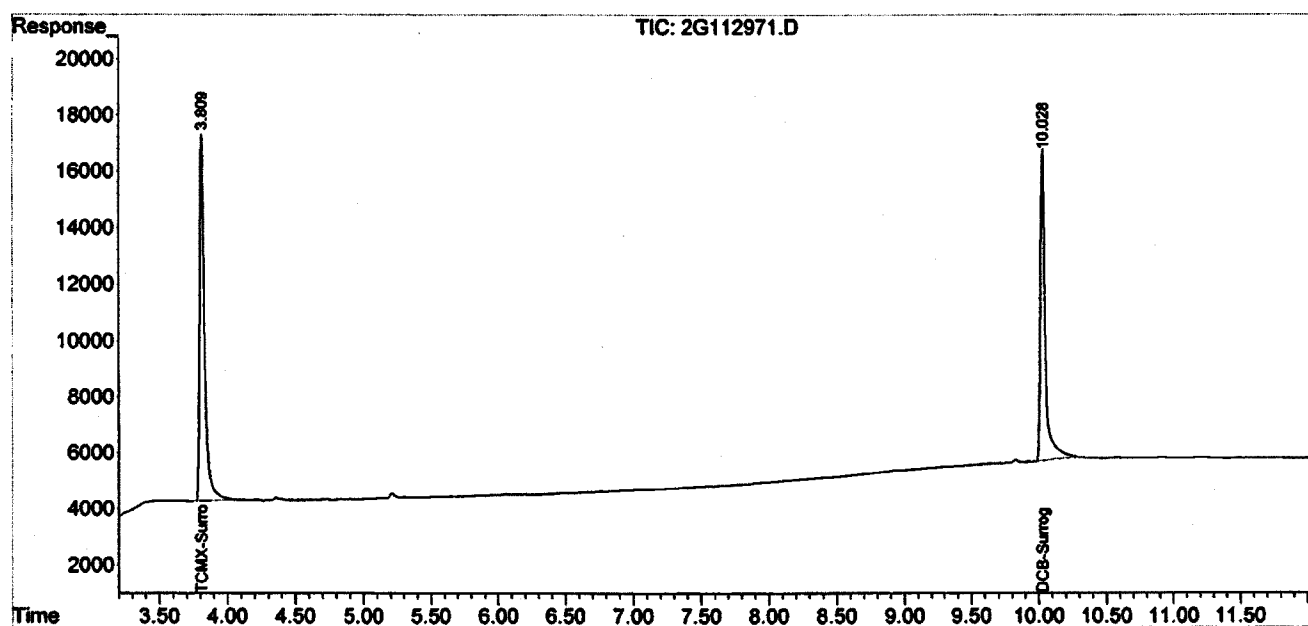
Indicates the compound was analyzed but not detected.  
 Indicates the analyte was found in the blank as well as in the sample.  
 Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out  
 J - Indicates an estimated value when a compound is detected at less than the specified detection limit.  
 d - Pesticide %Diff>40% between columns due to coelution. Lower concentration uses  
 Chlordane (Total) is sum of  $\alpha$ -Chlordane and  $\gamma$ -Chlordane.

Data Path : G:\Gcdata\2016\GC\_2\Data\05-12-16\  
Data File : 2G112971.D  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 12 May 2016 18:19  
Operator : MAS/ZM/MLC  
Sample : AC91273-002  
Misc : S,PCB  
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E  
Integration File signal 2: AUTOINT2.E  
Quant Time: May 13 11:00:22 2016  
Quant Method : G:\GCDATA\2016\GC\_2\METHODQT\2G\_C0508.M  
Quant Title : @GC\_2,ug,608,8082  
QLast Update : Tue May 10 17:36:09 2016  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. : 1ul  
Signal #1 Phase : db-1701  
Signal #1 Info : .32  
Signal #2 Phase: db-17  
Signal #2 Info : .32



Data Path : G:\Gcdata\2016\GC\_2\Data\05-12-16\  
Data File : 2G112971.D  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 12 May 2016 18:19  
Operator : MAS/ZM/MLC  
Sample : AC91273-002  
Misc : S,PCB  
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E  
Integration File signal 2: AUTOINT2.E  
Quant Time: May 13 11:00:22 2016  
Quant Method : G:\GC\DATA\2016\GC\_2\METHODQT\2G\_C0508.M  
Quant Title : @GC\_2,ug,608,8082  
QLast Update : Tue May 10 17:36:09 2016  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. : 1ul  
Signal #1 Phase : db-1701 Signal #2 Phase: db-17  
Signal #1 Info : .32 Signal #2 Info : .32

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
-----						
Target Compounds						
1)TCMX-Surrogate	3.809	3.794	329853	598419	80.937m	77.679m
45)DCB-Surrogate	10.029	10.643	278162	793359	87.853	88.924
-----						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

**Form1**  
ORGANICS PCB REPORT

Sample Number: AC91273-002  
 Client Id: SB02 COMP  
 Data File: 2G112971.D  
 Analysis Date: 05/12/16 18:19  
 Date Rec/Extracted: 05/11/16-05/12/16  
 Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8082A  
 Matrix: Soil  
 Initial Vol: 20g  
 Final Vol: 10ml  
 Dilution: 1  
 Solids: 88

Units: mg/Kg							
Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.028	U	11097-69-1	Aroclor-1254	0.028	U
11104-28-2	Aroclor-1221	0.028	U	11096-82-5	Aroclor-1260	0.028	U
11141-16-5	Aroclor-1232	0.028	U	37324-23-5	Aroclor-1262	0.028	U
53469-21-9	Aroclor-1242	0.028	U	11100-14-4	Aroclor-1268	0.028	U
12672-29-6	Aroclor-1248	0.028	U	1336-36-3	Aroclor (Total)	0.028	U

Worksheet #: 383254

**Total Target Concentration 0**

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.  
 B - Indicates the analyte was found in the blank as well as in the sample.  
 E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out  
 J - Indicates an estimated value when a compound is detected at less than the specified detection limit.  
 d - Pesticide %Diff > 40% between columns due to coelution. Lower concentration uses  
 Chlordane (Total) is sum of  $\alpha$ -Chlordane and  $\gamma$ -Chlordane.



## FORM8

## Internal Standard Areas

Evaluation Std Data File: 7M76912.D

Method: EPA 8270D

Analysis Date/Time: 05/13/16 13:03

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	84330	5.91	366272	6.93	245684	8.39	480172	9.86	567279	12.93	525995	14.63
Eval File Area Limit:	42165-168660		183136-732544		122842-491368		240086-960344		283640-1134558		262998-1051990	
Eval File Rt Limit:	5.41-6.41		6.43-7.43		7.89-8.89		9.36-10.36		12.43-13.43		14.13-15.13	

## Data File Sample

7M76913.D WMB50097	98161	5.91	420180	6.94	277930	8.41	560284	9.87	633825	12.92	588915	14.60
7M76914.D WMB50108	51132	5.91	193290	6.92	120197 A	8.37	258721	9.84	337375	12.91	320218	14.58
7M76915.D WMB50098	100952	5.91	421223	6.92	270707	8.37	542010	9.85	614582	12.91	552124	14.57
7M76916.D SMB50105/M	48918	5.91	209024	6.92	144558	8.36	313784	9.84	423064	12.91	400602	14.56
7M76917.D SMB50104/M	73526	5.91	339691	6.92	240393	8.36	488121	9.84	565007	12.91	517013	14.56
7M76918.D AC91216-002i	72317	5.91	301035	6.92	191416	8.36	382818	9.84	455707	12.91	426323	14.57
7M76919.D AC91216-005i	71795	5.91	299753	6.92	192633	8.36	391229	9.84	451214	12.91	411807	14.56
7M76920.D SMB50105	69069	5.91	302882	6.92	207756	8.36	445107	9.84	522081	12.91	462005	14.56
7M76921.D SMB50104	95859	5.91	407471	6.92	264185	8.36	519762	9.84	566506	12.91	479400	14.56
7M76922.D AC91255-001	109965	5.91	477820	6.92	312532	8.36	624119	9.84	684869	12.91	605016	14.56
7M76923.D AC91255-001i	89148	5.91	359635	6.92	230471	8.36	466715	9.84	572351	12.91	545822	14.56
7M76924.D AC91255-001i	108484	5.91	462255	6.92	302646	8.36	587223	9.84	651045	12.91	570420	14.56
7M76925.D AC91273-002	88586	5.91	381384	6.92	251160	8.36	500450	9.84	560805	12.91	491855	14.56
7M76926.D AC91273-004	70711	5.91	296912	6.91	200509	8.36	428152	9.84	564653	12.91	562420	14.56
7M76927.D AC91136-017	118079	5.91	507224	6.92	328464	8.36	639099	9.84	675111	12.91	553673	14.56
7M76928.D AC91136-008	87427	5.91	387201	6.92	261346	8.36	525883	9.84	591739	12.91	522611	14.56
7M76929.D AC91136-007	97713	5.91	452866	6.91	302950	8.36	599452	9.84	657867	12.91	541880	14.56
7M76930.D AC91136-005	86498	5.91	390141	6.92	263546	8.36	538889	9.84	607259	12.91	516193	14.56
7M76931.D AC91136-001	84841	5.91	355553	6.92	234139	8.36	473303	9.84	561512	12.91	519167	14.56
7M76932.D AC91289-001	91989	5.91	413543	6.91	279789	8.36	561468	9.84	624800	12.91	530455	14.56
7M76933.D AC91136-019	88845	5.91	416702	6.91	296644	8.36	585040	9.84	665258	12.91	553013	14.56
7M76934.D AC91136-018	90808	5.91	387049	6.92	257641	8.36	522186	9.84	615111	12.91	540515	14.56
7M76935.D AC91216-002i	106706	5.91	465410	6.92	304712	8.36	576760	9.84	617775	12.91	515491	14.56
7M76936.D AC91216-005i	97760	5.91	427617	6.92	277423	8.36	540898	9.84	584963	12.91	498369	14.56

I1 = 1,4-Dichlorobenzene-d4  
 I2 = Nanththalene-d8  
 I3 = Acenaphthene-d10

I4 = Phenanthrene-d10  
 I5 = Chrysene-d12  
 I6 = Perylene-d12

625/8270 Internal Standard concentration = 40 mg/L (in final extract)  
 624/8260 Internal Standard concentration = 30ug/L  
 524 Internal Standard concentration = 5ug/L

## QC Limits:

## Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

## Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

## Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

## FORM8

Internal Standard Areas

Evaluation Std Data File: 7M76739.D

Method: EPA 8270D

Analysis Date/Time: 05/04/16 13:13

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	94087	5.91	403544	6.92	255023	8.37	496363	9.85	536936	12.92	477436	14.59
Eval File Area Limit:	47044-188174		201772-807088		127512-510046		248182-992726		268468-1073872		238718-954872	
Eval File Rt Limit:	5.41-6.41		6.42-7.42		7.87-8.87		9.35-10.35		12.42-13.42		14.09-15.09	

## Data File Sample

7M76731.D CAL BNA@1S	87922	5.91	372542	6.94	239398	8.39	441868	9.86	422618	12.93	380752	14.61
7M76732.D CAL BNA@1E	97920	5.91	411061	6.92	266813	8.38	514471	9.85	530320	12.93	485629	14.60
7M76733.D CAL BNA@12	100043	5.91	418372	6.93	269620	8.38	502243	9.85	517584	12.92	469887	14.61
7M76734.D CAL BNA@8C	109509	5.91	452077	6.92	284720	8.37	554429	9.85	592279	12.92	534863	14.59
7M76735.D CAL BNA@2C	99907	5.91	407180	6.94	247822	8.38	475107	9.86	552432	12.92	492994	14.57
7M76736.D CAL BNA@2F	93505	5.91	392992	6.92	246853	8.37	477257	9.85	543815	12.91	486274	14.57
7M76737.D CAL BNA@.5	89855	5.91	374885	6.92	232051	8.37	447035	9.85	495633	12.92	450417	14.61
7M76738.D CAL BNA@1C	101750	5.91	404687	6.92	244962	8.37	463941	9.85	508993	12.92	446360	14.60
7M76739.D CAL BNA@5C	94087	5.91	403544	6.92	255023	8.37	496363	9.85	536936	12.92	477436	14.59
7M76740.D ICV BNA@50	91255	5.91	392210	6.93	246695	8.39	472047	9.86	515979	12.93	445221	14.60
7M76741.D WMB50006	88188	5.91	371585	6.95	233907	8.41	449245	9.87	482084	12.92	424969	14.57

I1 = 1,4-Dichlorobenzene-d4  
I2 = Naphthalene-d8  
I3 = Acenaphthene-d10

I4 = Phenanthrene-d10  
I5 = Chrysene-d12  
I6 = Perylene-d12

625/8270 Internal Standard concentration = 40 mg/L (in final extract)  
624/8260 Internal Standard concentration = 30ug/L  
524 Internal Standard concentration = 5ug/L

Limits:Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 5/13/2016 1:03:00 PData File: 7M76912.D  
Method: EPA 8270D

Instrument: GCMS 7

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
1,4-Dioxane	1	100		0.00	0.00	51	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.701	0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.902	0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
C1-Compound %Diff exceeds limits

\*\*- No limit specified in method

Page 3 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found. HAZ. - 165625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 5/13/2016 1:03:00 PData File: 7M76912.D  
Method: EPA 8270D

Instrument: GCMS 7

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Coumarin	1	0		8.16	51.40		**		0.513			
Acenaphthylene	1	0		8.26	49.68	50	20	0.9	1.752	1.741	0.64	
Dimethylphthalate	1	0		8.12	51.00	50	20	0.01	1.259	1.284	2.00	
2,6-Dinitrotoluene	1	0		8.17	58.81	50	20	0.2	0.249	0.293	17.62	
Acenaphthene	1	0		8.41	50.29	50	20	0.9	1.118	1.125	0.58	
3-Nitroaniline	1	0		8.33	55.26	50	20	0.01	0.284	0.353	10.52	
2,4-Dinitrophenol	1	0		8.42	63.42	50	20	0.01	0.076	0.095	26.85	C1
Dibenzofuran	1	0		8.58	49.40	50	20	0.8	1.648	1.628	1.20	
2,4-Dinitrotoluene	1	0		8.54	55.68	50	20	0.2	0.334	0.403	11.36	
4-Nitrophenol	1	0		8.45	53.38	50	20	0.01	0.170	0.194	6.76	
2,3,4,6-Tetrachlorophenol	1	0		8.68	55.87	50	20	0.01	0.280	0.313	11.73	
Fluorene	1	0		8.90	52.06	50	20	0.9	1.308	1.362	4.13	
4-Chlorophenyl-phenylether	1	0		8.89	50.90	50	20	0.4	0.578	0.589	1.80	
Diethylphthalate	1	0		8.76	50.53	50	20	0.01	1.256	1.269	1.07	
4-Nitroaniline	1	0		8.90	58.08	50	20	0.01	0.333	0.386	16.15	
Atrazine	1	0		9.53	51.70	50	20	0.01	0.397	0.410	3.40	
Phenanthrene-d10	1	0	I	9.86	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.93	58.16	50	20	0.01	0.074	0.093	16.32	
n-Nitrosodiphenylamine	1	0		9.00	50.59	50	20	0.01	0.597	0.604	1.17	
2,4,6-Tribromophenol	1	0	S	9.13	53.67	50	**		0.072	0.081	7.35	
1,2-Diphenylhydrazine	1	0		9.04	46.00	50	**		0.621	0.571	8.00	
4-Bromophenyl-phenylether	1	0		9.38	50.10	50	20	0.1	0.177	0.178	0.20	
Hexachlorobenzene	1	0		9.45	51.70	50	20	0.1	0.182	0.189	3.41	
N-Octadecane	1	0		9.71	45.90	50	**	0.05	0.312	0.286	8.21	
Pentachlorophenol	1	0		9.64	54.51	50	20	0.05	0.097	0.106	9.03	
Phenanthrene	1	0		9.88	50.66	50	20	0.7	1.071	1.086	1.33	
Anthracene	1	0		9.94	51.17	50	20	0.7	1.061	1.085	2.33	
Carbazole	1	0		10.10	51.77	50	20	0.01	1.050	1.087	3.54	
Di-n-butylphthalate	1	0		10.48	48.71	50	20	0.01	1.085	1.166	2.57	
Fluoranthene	1	0		11.22	53.16	50	20	0.6	1.134	1.206	6.33	
Chrysene-d12	1	0	I	12.93	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.48	48.42	50	20	0.6	1.107	1.072	3.16	
Benzidine	1	0		11.36	44.23	50	**		0.208	0.229	11.54	
Terphenyl-d14	1	0	S	11.66	23.68	25	**		0.552	0.523	5.28	
4,4'-DDE	1	0		11.60	48.14		**		0.189			
4,4'-DDD	1	0		12.00	50.23		**		0.325			
Butylbenzylphthalate	1	0		12.26	46.68	50	20	0.01	0.470	0.453	6.64	
4,4'-DDT	1	0		12.36	55.66		**		0.222			
3,3'-Dichlorobenzidine	1	0		12.89	53.94	50	20	0.01	0.285	0.354	7.88	
Benzo[a]anthracene	1	0		12.92	49.10	50	20	0.8	1.089	1.069	1.80	
Chrysene	1	0		12.96	51.92	50	20	0.7	0.988	1.026	3.83	
bis(2-Ethylhexyl)phthalate	1	0		12.97	49.76	50	20	0.01	0.647	0.644	0.48	
Perylene-d12	1	0	I	14.63	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.74	42.93	50	20	0.01	1.217	1.084	14.14	
Benzo[b]fluoranthene	1	0		14.19	48.37	50	20	0.7	1.150	1.112	3.27	
Benzo[k]fluoranthene	1	0		14.22	53.87	50	20	0.7	1.071	1.154	7.75	
Benzo[a]pyrene	1	0		14.56	51.02	50	20	0.7	1.079	1.101	2.04	
Indeno[1,2,3-cd]pyrene	1	0		16.03	54.59	50	20	0.5	1.150	1.256	9.17	
Dibenzo[a,h]anthracene	1	0		16.05	54.57	50	20	0.4	0.972	1.060	9.15	
Benzo[g,h,i]perylene	1	0		16.43	54.88	50	20	0.5	0.965	1.059	9.75	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8(INT)	1	100		0.00	0.00	40	**			0.000	100.00	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 2 of 3

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.

HAZ. - 164

625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM  
Cont Calibration Date/Time 5/13/2016 1:03:00 PData File: 7M76912.D  
Method: EPA 8270D

Instrument: GCMS 7

TxtCompd:	Co#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dichlorobenzene-d4	1	0	I	5.91	40.00	40	**			0.000	0.00	
Pyridine	1	0		3.20	51.70	50	**		1.251	1.378	3.41	
N-Nitrosodimethylamine	1	0		3.13	46.38	50	**		0.846	0.785	7.23	
2-Fluorophenol	1	0	S	4.71	47.78	50	**		1.272	1.215	4.43	
Benzaldehyde	1	0		5.53	46.24	50	20	0.01	0.836	0.759	7.52	
Aniline	1	0		5.62	53.30	50	**		1.833	1.954	6.60	
Pentachloroethane	1	0		5.67	49.02	50	**	0.05	0.438	0.430	1.97	
bis(2-Chloroethyl)ether	1	0		5.68	46.85	50	20	0.7	1.407	1.318	6.29	
Phenol-d5	1	0	S	5.58	50.85	50	**		1.735	1.765	1.71	
Phenol	1	0		5.59	51.52	50	20	0.8	1.904	1.962	3.03	
2-Chlorophenol	1	0		5.72	50.97	50	20	0.8	1.409	1.436	1.94	
N-Decane	1	0		5.78	43.60	50	**	0.05	1.108	0.966	12.80	
1,3-Dichlorobenzene	1	0		5.86	49.35	50	**		1.501	1.481	1.30	
1,4-Dichlorobenzene	1	0		5.92	49.50	50	20		1.526	1.510	1.00	
1,2-Dichlorobenzene	1	0		6.05	49.52	50	**		1.462	1.448	0.95	
Benzyl alcohol	1	0		6.02	51.43	50	**		0.932	0.959	2.86	
bis(2-chloroisopropyl)ether	1	0		6.13	45.73	50	20	0.01	1.354	1.239	8.53	
2-Methylphenol	1	0		6.11	51.04	50	20	0.7	1.314	1.341	2.07	
Acetophenone	1	0		6.24	52.67	50	20	0.01	2.094	2.206	5.34	
Hexachloroethane	1	0		6.33	49.56	50	20	0.3	0.522	0.518	0.88	
N-Nitroso-di-n-propylamine	1	0		6.23	50.67	50	20	0.5	0.902	0.914	1.34	
3&4-Methylphenol	1	0		6.23	55.49	50	20		1.303	1.447	10.97	
Naphthalene-d8	1	0	I	6.93	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.36	26.17	25	**		0.153	0.160	4.70	
Nitrobenzene	1	0		6.37	49.72	50	20	0.2	0.301	0.299	0.55	
Isophorone	1	0		6.56	48.62	50	20	0.4	0.632	0.614	2.75	
2-Nitrophenol	1	0		6.63	56.99	50	20	0.1	0.137	0.164	13.97	
2,4-Dimethylphenol	1	0		6.65	50.75	50	20	0.2	0.325	0.330	1.50	
Benzoic Acid	1	0		6.70	13.94	50	**		0.133	0.036	72.11	
bis(2-Chloroethoxy)methane	1	0		6.73	49.00	50	20	0.3	0.398	0.390	1.99	
2,4-Dichlorophenol	1	0		6.81	55.84	50	20	0.2	0.265	0.296	11.67	
1,2,4-Trichlorobenzene	1	0		6.89	50.44	50	**		0.301	0.303	0.89	
Naphthalene	1	0		6.95	50.87	50	20	0.7	1.055	1.074	1.75	
4-Chloroaniline	1	0		6.98	49.39	50	20	0.01	0.344	0.429	1.22	
Hexachlorobutadiene	1	0		7.04	49.99	50	20	0.01	0.149	0.149	0.02	
Caprolactam	1	0		7.25	50.92	50	20	0.01	0.144	0.153	1.85	
4-Chloro-3-methylphenol	1	0		7.35	54.00	50	20	0.2	0.284	0.307	8.01	
2-Methylnaphthalene	1	0		7.50	51.56	50	**	0.4	0.717	0.740	3.12	
1-Methylnaphthalene	1	0		7.58	51.82	50	**		0.684	0.709	3.65	
Methylnaphthalenes	1	0		7.50	103.35	100	**			0.724	3.35	
1,1'-Biphenyl	1	0		7.88	52.42	50	20	0.01	0.928	0.973	4.85	
Acenaphthene-d10	1	0	I	8.39	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.63	49.89	50	20	0.01	0.543	0.542	0.22	
Hexachlorocyclopentadiene	1	0		7.62	43.67	50	20	0.05	0.165	0.153	12.65	
2,4,6-Trichlorophenol	1	0		7.72	53.47	50	20	0.2	0.294	0.315	6.94	
2,4,5-Trichlorophenol	1	0		7.75	51.84	50	20	0.2	0.309	0.320	3.67	
2-Fluorobiphenyl	1	0	S	7.79	24.17	25	**		1.259	1.217	3.33	
2-Chloronaphthalene	1	0		7.90	48.89	50	20	0.8	1.069	1.045	2.23	
1,4-Dimethylnaphthalene	1	0		8.19	50.78	50	**		0.902	0.916	1.55	
Dimethylnaphthalenes	1	0		8.19	50.78	50	20			0.916	1.55	
Diphenyl Ether	1	0		7.96	49.60	50	**		0.893	0.886	0.80	
2-Nitroaniline	1	0		7.97	54.22	50	20	0.01	0.281	0.305	8.44	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
C1-Compound %Diff exceeds limits

\*\* - No limit specified in method

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Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.

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625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	7M76739.D	CAL BNA@50PPM	05/04/16 13:13	2	7M76736.D	CAL BNA@20PPM	05/04/16 12:03
3	7M76738.D	CAL BNA@10PPM	05/04/16 12:49	4	7M76735.D	CAL BNA@20PPM	05/04/16 11:40
5	7M76734.D	CAL BNA@80PPM	05/04/16 11:17	6	7M76733.D	CAL BNA@120PPM	05/04/16 10:53
7	7M76732.D	CAL BNA@160PPM	05/04/16 10:30	8	7M76731.D	CAL BNA@198PPM	05/04/16 10:07
9	7M76737.D	CAL BNA@5PPM	05/04/16 12:26				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Cor1	Cor2	%Rsd	Lv1	Lv2	Lv3	Lv4	Lv5	Lv6	Lv7	Lv8	Lv9
4,4'-DDD	1	0	Avg	0.3325	0.2133	0.2859	0.2968	0.3464	0.3705	0.3619	0.3887	---	0.325	12.00	0.997	0.999	18	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Buylbenzophthalate	1	0	Quc	0.4933	0.2216	0.3597	0.4334	0.5308	0.5686	0.5514	0.5970	---	0.470	12.26	0.996	0.999	27	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
4,4'-DDT	1	0	Quc	0.2421	0.0877	0.1569	0.1901	0.2622	0.2790	0.2658	0.2890	---	0.222	12.36	0.997	0.998	32	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Quc	0.3395	0.0998	0.1982	0.3155	0.3495	0.3432	0.3126	0.3179	---	0.285	12.89	0.996	0.997	31	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Benzofluoranthene	1	0	Avg	1.0937	1.0452	1.0972	1.0750	1.0854	1.1190	1.0586	1.1332	---	1.09	12.92	0.998	0.998	2.7	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Chrysene	1	0	Avg	1.0193	1.0086	1.0729	1.0166	0.9632	0.9856	0.9039	0.9347	---	0.988	12.96	0.998	0.998	5.4	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
bis(2-Ethylhexyl)phthal	1	0	Avg	0.7119	0.3933	0.5847	0.6732	0.7169	0.7197	0.6676	0.7092	---	0.647	12.97	0.999	0.999	17	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Di-n-octylphthalate	1	0	Quc	1.2852	0.5014	0.8591	1.1348	1.4182	1.5012	1.4546	1.5784	---	1.22	13.75	0.995	0.999	30	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Benzofluoranthene	1	0	Avg	1.1626	1.0137	1.1588	1.1061	1.1636	1.1834	1.1681	1.2425	---	1.15	14.18	0.999	1.00	5.8	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Benzofluoranthene	1	0	Avg	1.1125	0.9965	1.1372	1.0302	1.0715	1.0697	1.0431	1.1051	---	1.07	14.22	0.998	0.999	4.4	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Benzofluoranthene	1	0	Avg	1.1012	0.9131	1.0516	1.0674	1.0922	1.1469	1.0910	1.1687	---	1.08	14.56	0.998	0.998	7.2	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Indeno[1,2,3-cd]pyren	1	0	Avg	1.1812	0.9764	1.1329	1.1365	1.1596	1.2252	1.1698	1.2181	---	1.15	16.03	0.999	0.999	6.8	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Dibenzofluoranthracen	1	0	Avg	1.0062	0.8070	0.9580	0.9729	0.9888	1.0405	0.9816	1.0168	---	0.972	16.05	0.999	0.999	7.3	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Benzofluoranthene	1	0	Avg	0.9841	0.8386	0.9665	0.9403	0.9701	1.0348	0.9754	1.0118	---	0.965	16.43	0.999	0.999	6.1	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0

## Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria (if applicable)

## Note:

Avg Rsd: 11.7

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	7M76739.D	CAL BNA@50PPM	05/04/16 12:13	2	7M76736.D	CAL BNA@20PPM	05/04/16 12:03
3	7M76738.D	CAL BNA@10PPM	05/04/16 12:49	4	7M76735.D	CAL BNA@20PPM	05/04/16 11:40
5	7M76734.D	CAL BNA@80PPM	05/04/16 11:17	6	7M76733.D	CAL BNA@120PPM	05/04/16 10:53
7	7M76732.D	CAL BNA@160PPM	05/04/16 10:30	8	7M76731.D	CAL BNA@196PPM	05/04/16 10:07
9	7M76737.D	CAL BNA@5PPM	05/04/16 12:26				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Red	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9	
2,4,6-Trichlorophenol	1	0	Avg	0.2982	0.2049	0.2713	0.2999	0.3143	0.3324	0.3069	0.3246	---	0.2947	7.71	0.998	0.998	14	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,5-Trichlorophenol	1	0	Avg	0.3147	0.2073	0.2989	0.3065	0.3326	0.3497	0.3289	0.3433	---	0.3097	7.74	0.998	0.999	14	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorobiphenyl	1	0	Avg	1.2496	1.3115	1.3378	1.2688	1.2333	1.2449	1.1861	1.2369	---	1.2677	7.8	0.999	1.00	3.8	---	25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
2-Chloronaphthalene	1	0	Avg	1.0626	1.0910	1.1510	1.0906	1.0448	1.0998	0.9787	1.0321	---	1.0777	8.9	0.997	0.997	4.8	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dimethylnaphthalene	1	0	Avg	0.9264	0.9698	0.9940	0.9404	0.8998	0.8717	0.8093	0.8061	---	0.9028	8.17	0.997	1.00	7.7	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylnaphthalenes	1	0	Avg	0.9264	0.9698	0.9940	0.9404	0.8998	0.8717	0.8093	0.8061	---	0.9028	8.17	0.997	1.00	7.7	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diphenyl Ether	1	0	Avg	0.9037	0.9123	0.9887	0.9249	0.8835	0.8689	0.8214	0.8431	---	0.8837	9.6	0.999	0.999	5.8	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitroaniline	1	0	Avg	0.2977	0.1967	0.2407	0.2773	0.3105	0.3128	0.3009	0.3118	---	0.2817	9.7	0.999	0.999	15	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Coumarin	1	0	Avg	0.5265	0.5117	0.5508	0.5142	0.5146	0.5097	0.4835	0.4901	---	0.5138	8.15	0.999	1.00	4.1	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthylene	1	0	Avg	1.7851	1.6448	1.8479	1.7974	1.7705	1.7679	1.6751	1.7271	---	1.758	8.25	0.999	1.00	3.8	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,6-Dinitrophenol	1	0	Avg	1.2801	1.1777	1.3245	1.2806	1.2720	1.2662	1.2209	1.2510	---	1.268	8.11	1.00	1.00	3.5	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,6-Dinitrotoluene	1	0	Avg	0.2816	0.1412	0.2287	0.2589	0.2809	0.2792	0.2639	0.2652	---	0.2498	8.17	0.997	1.00	19	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthene	1	0	Avg	1.1302	1.1598	1.2098	1.1438	1.1156	1.0978	1.0311	1.0560	---	1.12	8.41	0.999	0.999	5.1	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3-Nitroaniline	1	0	Qua	0.3290	0.1312	0.2156	0.2997	0.3361	0.3313	0.3156	0.3107	---	0.2848	8.32	0.998	0.999	26	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dinitrophenol	1	0	Qua	0.0622	---	0.0140	0.0337	0.0904	0.1087	0.1094	0.1146	---	0.0762	8.41	0.988	0.995	53	0.01	50.00	---	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofuran	1	0	Avg	1.6351	1.6748	1.7573	1.6478	1.6120	1.6031	1.5296	1.5517	1.8178	---	1.658	8.56	0.999	1.00	5.6	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
2,4-Dinitrotoluene	1	0	Qua	0.3691	0.1557	0.2496	0.3105	0.3925	0.3978	0.3961	0.4005	---	0.3348	8.53	0.998	0.999	27	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitrophenol	1	0	Qua	0.1817	0.0773	0.1050	0.1593	0.2075	0.2022	0.2090	0.2139	---	0.1708	8.44	0.996	0.998	31	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,3,4,6-Tetrachlorophenol	1	0	Avg	0.2860	0.2019	0.2530	0.2843	0.3006	0.3096	0.2976	0.3047	---	0.2808	8.67	0.999	1.00	13	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Fluorene	1	0	Avg	1.3603	1.3425	1.4268	1.3658	1.3115	1.2762	1.1887	1.1938	---	1.318	8.89	0.997	0.999	6.4	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chlorophenyl-phenyl	1	0	Avg	0.5817	0.5955	0.6190	0.5919	0.5713	0.5691	0.5471	0.5517	---	0.578	8.88	0.999	1.00	4.1	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diethylphthalate	1	0	Avg	1.3023	1.1172	1.2599	1.2763	1.2651	1.2811	1.2488	1.2542	---	1.268	8.75	1.00	1.00	4.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitroaniline	1	0	Avg	0.3607	0.1979	0.2785	0.3383	0.3791	0.3746	0.3644	0.3676	---	0.3338	8.89	0.999	0.999	19	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Atrazine	1	0	Avg	0.4239	0.2902	0.3756	0.3987	0.4279	0.4246	0.4179	0.4145	---	0.397	9.52	1.00	1.00	12	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,6-Dinitro-2-methylphenol	1	0	Qua	0.0680	---	0.0251	0.0416	0.0850	0.0987	0.0993	0.1048	---	0.0744	8.92	0.996	0.998	42	0.01	50.00	---	10.00	20.00	80.00	120.0	160.0	196.0	
n-Nitrosodibenzylamine	1	0	Avg	0.6079	0.5479	0.6222	0.6042	0.6004	0.6175	0.5727	0.6039	---	0.597	8.99	0.999	0.999	4.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Tribromophenol	1	0	Qua	0.0745	0.0402	0.0575	0.0681	0.0797	0.0857	0.0823	0.0849	---	0.0716	9.13	0.998	0.999	22	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Dichlorohydrazine	1	0	Avg	0.6180	0.5738	0.6547	0.6178	0.6038	0.6271	0.5857	0.6877	---	0.621	9.03	0.995	0.996	5.9	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Bromophenyl-phenyl	1	0	Avg	0.1782	0.1571	0.1829	0.1762	0.1782	0.1857	0.1751	0.1834	---	0.177	9.37	0.999	0.999	5.0	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorobenzene	1	0	Avg	0.1796	0.1833	0.1909	0.1808	0.1772	0.1868	0.1764	0.1845	---	0.182	9.45	0.999	0.999	2.7	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
n-Octadecane	1	0	Avg	0.3272	0.2610	0.3320	0.3248	0.3198	0.3266	0.2926	0.3105	---	0.312	9.71	0.996	0.997	7.7	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pentachlorophenol	1	0	Qua	0.0932	---	0.0474	0.0757	0.1088	0.1193	0.1172	0.1204	---	0.0975	9.64	0.998	0.999	28	0.05	50.00	---	10.00	20.00	80.00	120.0	160.0	196.0	
Phenanthrene	1	0	Avg	1.0655	1.1597	1.1424	1.0663	1.0438	1.0704	0.9938	1.0290	---	1.07	9.88	0.999	0.999	5.2	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Anthracene	1	0	Avg	1.0785	1.0357	1.1041	1.0788	1.0573	1.0786	1.0106	1.0392	---	1.06	9.94	0.999	0.999	2.9	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Carbazole	1	0	Avg	1.0767	0.9323	1.0874	1.0688	1.0628	1.0866	1.0299	1.0570	---	1.05	10.10	0.999	0.999	4.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dih-n-butylphthalate	1	0	Qua	1.2158	0.7960	1.0457	1.1364	1.2244	1.2683	1.1970	1.2288	0.6490	---	1.08	10.48	0.999	0.999	20	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0
Fluoranthene	1	0	Avg	1.1718	1.0110	1.1424	1.1552	1.1642	1.1912	1.1216	1.1163	---	1.13	11.22	0.998	1.00	4.9	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pyrene	1	0	Avg	1.1328	0.9532	1.1128	1.0706	1.1200	1.1813	1.1043	1.1833	---	1.11	11.48													

HAZ. - 161

## Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

## Note:

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

RF1 = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	7M76739.D	CAL BNA@50PPM	05/04/16 13:13	2	7M76736.D	CAL BNA@20PPM	05/04/16 12:03
3	7M76738.D	CAL BNA@10PPM	05/04/16 12:49	4	7M76735.D	CAL BNA@20PPM	05/04/16 11:40
5	7M76734.D	CAL BNA@80PPM	05/04/16 11:17	6	7M76733.D	CAL BNA@120PPM	05/04/16 10:53
7	7M76732.D	CAL BNA@160PPM	05/04/16 10:30	8	7M76731.D	CAL BNA@196PPM	05/04/16 10:07
9	7M76737.D	CAL BNA@5PPM	05/04/16 12:25				

Compound	Col	Mt.	Ft.	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Pyridine	1	0	Qua	1.3759	0.2408	1.1983	1.3029	1.4164	1.4689	1.4094	1.5965	---	1.253.20	0.997	0.998	34	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
N-Nitrosodimethylaniline	1	0	Qua	0.8050	0.7755	0.8155	0.8245	0.8435	0.8550	0.8578	0.9942	---	0.8463.12	0.993	0.998	7.8	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
2-Fluorophenol	1	0	Qua	1.2470	1.0587	1.1490	1.2261	1.3087	1.3778	1.3374	1.4677	---	1.274.71	0.997	0.999	10	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
Benzaldehyde	1	0	Qua	0.8431	1.1911	1.2306	1.1963	0.7149	0.6035	0.4893	0.4180	---	0.8365.53	0.911	0.995	40	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
Aniline	1	0	Qua	2.0965	1.2386	1.7980	2.0846	2.0434	2.0763	1.9230	2.0269	1.2121	1.835.67	0.998	0.998	19	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pentachloroethane	1	0	Qua	0.4262	0.4585	0.4383	0.4310	0.4276	0.4344	0.4291	0.4614	---	0.4385.67	0.997	0.999	3.2	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
bis(2-Chloroethyl)ether	1	0	Qua	1.3703	1.4448	1.4402	1.3828	1.3152	1.3532	1.2926	1.3848	1.6781	1.415.68	0.998	0.999	8.1	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol-d5	1	0	Qua	1.7725	1.4711	1.5820	1.7007	1.7739	1.8680	1.7858	1.9290	---	1.745.58	0.997	0.998	8.6	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
Phenol	1	0	Qua	1.9746	1.6386	1.8437	1.8662	1.9129	1.9977	1.9219	2.0753	---	1.905.59	0.987	0.998	6.8	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
2-Chlorophenol	1	0	Qua	1.4089	1.2615	1.3479	1.3846	1.4259	1.4877	1.4248	1.5282	---	1.415.73	0.998	0.999	5.8	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
N-Decane	1	0	Qua	1.0891	1.1907	1.1938	1.1437	1.0860	1.0638	1.0283	1.0698	---	1.115.78	0.998	0.999	5.5	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
1,3-Dichlorobenzene	1	0	Qua	1.4961	1.5259	1.5854	1.4951	1.4586	1.4911	1.4287	1.5235	---	1.505.86	0.998	0.999	3.1	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
1,4-Dichlorobenzene	1	0	Qua	1.5033	1.5768	1.5967	1.5130	1.4877	1.5243	1.4567	1.5459	---	1.535.93	0.998	0.999	3.0	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
1,2-Dichlorobenzene	1	0	Qua	1.4583	1.4929	1.5164	1.4654	1.4175	1.4566	1.3945	1.4913	---	1.466.05	0.998	0.999	2.8	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
Benzyl alcohol	1	0	Qua	0.9604	0.7503	0.8362	0.8965	0.9704	1.0171	0.9727	1.0501	---	0.9326.02	0.998	0.998	11	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
bis(2-chloroisopropyl) ether	1	0	Qua	1.3707	1.4444	1.3982	1.3583	1.3004	1.3388	1.2737	1.3509	---	1.356.13	0.998	0.999	3.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
2-Methylphenol	1	0	Qua	1.3628	1.2057	1.2840	1.3072	1.3131	1.3669	1.3179	1.4205	1.2459	1.316.11	0.999	0.999	5.0	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Acetophenone	1	0	Qua	2.2291	2.2099	2.2541	2.1860	2.0519	2.0166	1.8674	1.9387	---	2.086.24	0.997	0.999	7.0	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
Hexachloroethane	1	0	Qua	0.5180	0.5231	0.5251	0.5020	0.5141	0.5316	0.5151	0.5495	---	0.5226.33	0.998	0.999	2.7	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
N-Nitroso-di-n-propylamine	1	0	Qua	0.9607	0.9163	0.9425	0.9461	0.8811	0.8909	0.8231	0.9089	---	0.9026.24	0.998	0.999	5.1	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
3,4-Methylenedioxyphenol	1	0	Qua	1.4348	1.2176	1.3064	1.3671	1.3503	1.3807	1.2663	1.3003	1.1072	1.306.23	0.998	0.999	7.5	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Nitrobenzene-d5	1	0	Qua	0.1485	0.1310	0.1375	0.1486	0.1596	0.1658	0.1598	0.1694	---	0.1536.36	0.998	0.999	8.9	---	25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	---
Nitrobenzene	1	0	Qua	0.3001	0.2603	0.2948	0.3025	0.3058	0.3202	0.2998	0.3212	---	0.3016.37	0.998	0.998	6.3	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
Isophorone	1	0	Qua	0.6410	0.5621	0.6386	0.6278	0.6372	0.6567	0.6255	0.6649	---	0.6326.56	0.998	0.999	4.9	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
2-Nitrophenol	1	0	Qua	0.1331	0.0851	0.0937	0.1245	0.1589	0.1707	0.1631	0.1702	---	0.1376.63	0.994	0.997	25	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
2,4-Dimethylphenol	1	0	Qua	0.3362	0.2802	0.3239	0.3339	0.3349	0.3448	0.3277	0.3486	0.2983	0.3256.65	0.999	0.999	6.9	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzoic Acid	1	0	Qua	0.1020	---	0.0097	0.0460	0.1670	0.1949	0.2026	0.2106	---	0.1336.71	0.994	0.996	61	---	50.00	---	10.00	20.00	80.00	120.0	160.0	196.0	---
bis(2-Chloroethoxy)methane	1	0	Qua	0.4044	0.3842	0.4151	0.3988	0.3972	0.4038	0.3827	0.3992	---	0.3986.73	0.999	0.999	2.7	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
2,4-Dichlorophenol	1	0	Qua	0.2829	0.2077	0.2557	0.2705	0.2925	0.3067	0.2888	0.3062	0.1713	0.2856.81	0.998	0.999	18	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,2,4-Trichlorobenzene	1	0	Qua	0.2921	0.3104	0.3214	0.3037	0.2938	0.2999	0.2866	0.2974	---	0.30316.88	1.00	1.00	3.7	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
Naphthalene	1	0	Qua	1.0242	1.0775	1.1308	1.0552	1.0192	1.0369	0.9772	1.0149	1.1608	1.066.95	0.999	0.999	5.6	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloroaniline	1	0	Qua	0.4236	0.2504	0.3570	0.4362	0.4035	0.3620	0.3035	0.2678	0.2880	0.3446.98	0.986	0.999	20	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Hexachlorobutadiene	1	0	Qua	0.1455	0.1550	0.1556	0.1511	0.1472	0.1505	0.1420	0.1478	---	0.1497.04	0.999	0.999	3.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
Carbazole	1	0	Qua	0.1547	0.0829	0.1047	0.1409	0.1595	0.1658	0.1615	0.1794	---	0.1447.25	0.995	0.998	23	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
4-Chloro-3-methylphenol	1	0	Qua	0.2961	0.2175	0.2453	0.2751	0.3008	0.3144	0.3035	0.3194	---	0.2847.34	0.999	0.999	13	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
2-Methylnaphthalene	1	0	Qua	0.7270	0.7146	0.7616	0.7172	0.7119	0.7260	0.6790	0.7008	---	0.7177.49	0.999	0.999	3.3	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
1-Methylnaphthalene	1	0	Qua	0.6870	0.7047	0.7264	0.6764	0.6783	0.6835	0.6488	0.6658	---	0.6847.57	0.999	0.999	3.4	---	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
Methylnaphthalenes (1,1'-Biphenyl)	1	0	Qua	0.7070	0.7097	0.7438	0.6986	0.6985	0.7052	0.6642	0.6834	---	0.7071.57	0.999	0.999	3.3	---	100.0	4.00	20.00	40.00	160.0	240.0	320.0	392.0	---
1,2,4,5-Tetrachlorobenzene	1	0	Qua	0.9458	0.9589	0.9756	0.9226	0.9258	0.9285	0.8724	0.8912	---	0.9287.86	0.998	0.999	3.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
Hexachlorocyclopentadiene	1	0	Qua	0.5454	0.5727	0.6093	0.5704	0.5315	0.5222	0.4888	0.5071	---	0.5437.62	0.998	0.999	7.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---
Hexachlorocyclopentadiene	1	0	Qua	0.1683	0.0597	0.1080	0.1409	0.2029	0.2160	0.2086	0.2134	---	0.1657.61	0.994	0.996	35	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	---

## Flags

a - failed the min. of criteria

c - failed the minimum correlation coefficient criteria (if applicable)

## Note:

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg Rt, Linear, or Quadratic Curve was used for compound.

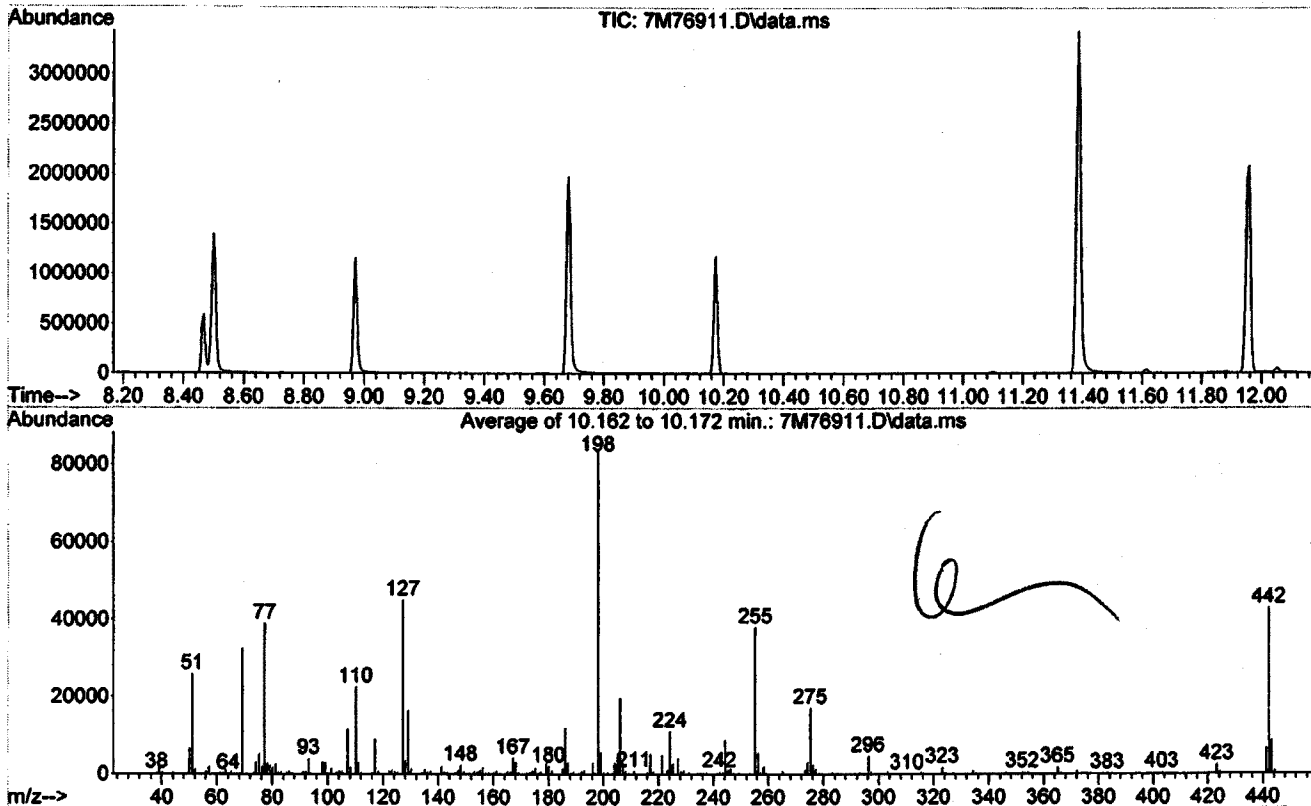
Avg Rsd: 11.7



Data Path : G:\GcMsData\2016\GCMS\_7\Data\05-1316\  
 Data File : 7M76911.D  
 Acq On : 13 May 2016 12:35  
 Operator : AH/JB  
 Sample : CAL DFTPP  
 Misc : A,BNA  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2016\GCMS\_7\METHODQT\7M\_0504.M  
 Title : @GCMS\_7,mg,625,8270D  
 Last Update : Wed May 04 13:42:26 2016



Spectrum Information: Average of 10.162 to 10.172 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	30.7	25848	PASS
68	69	0.00	2	0.2	81	PASS
69	198	0.00	100	38.6	32479	PASS
70	69	0.00	2	0.4	129	PASS
127	198	40	60	53.5	44981	PASS
197	198	0.00	1	0.4	362	PASS
198	198	100	100	100.0	84077	PASS
199	198	5	9	6.7	5631	PASS
275	198	10	30	20.3	17103	PASS
365	198	1	100	2.0	1645	PASS
441	443	0.01	100	77.4	6528	PASS
442	198	40	100	51.0	42893	PASS
443	442	17	23	19.7	8438	PASS

## Form 5

Tune Name: CAL DFTPP  
Instrument: GCMS 7

Data File: 7M76911.D  
Analysis Date: 05/13/16 12:35  
Method: EPA 8270D

Tune Scan/Time Range: Average of 10.162 to 10.172 min

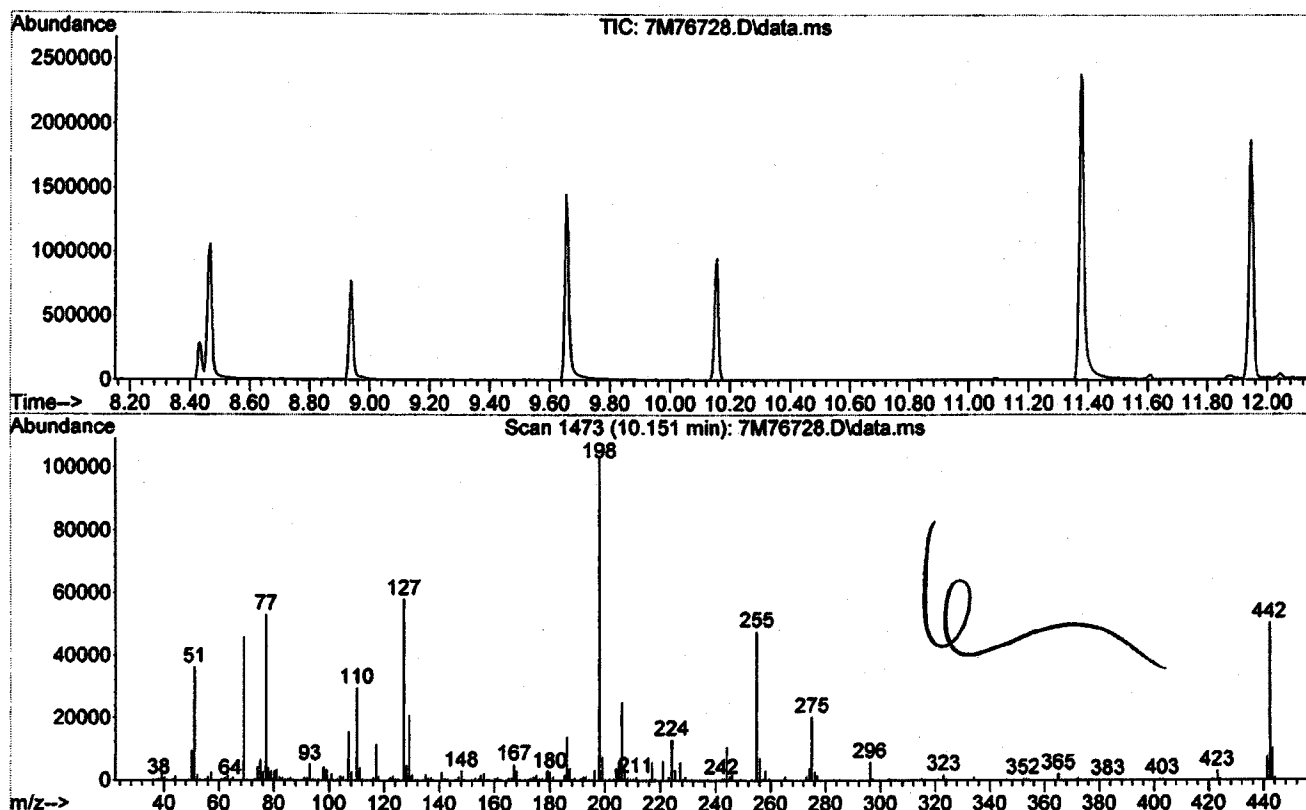
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	30.7	25848	PASS
68	69	0.00	2	0.2	81	PASS
69	198	0.00	100	38.6	32479	PASS
70	69	0.00	2	0.4	129	PASS
127	198	40	60	53.5	44981	PASS
197	198	0.00	1	0.4	362	PASS
198	198	100	100	100.0	84077	PASS
199	198	5	9	6.7	5631	PASS
275	198	10	30	20.3	17103	PASS
365	198	1	100	2.0	1645	PASS
441	443	0.01	100	77.4	6528	PASS
442	198	40	100	51.0	42893	PASS
443	442	17	23	19.7	8438	PASS

Data File	Sample Number	Analysis Date:
7M76912.D	CAL BNA@50PPM	05/13/16 13:03
7M76913.D	WMB50097	05/13/16 14:13
7M76914.D	WMB50108	05/13/16 14:36
7M76915.D	WMB50098	05/13/16 14:59
7M76916.D	SMB50105(MS)	05/13/16 15:23
7M76917.D	SMB50104(MS)	05/13/16 15:46
7M76918.D	AC91216-002(20X)	05/13/16 16:10
7M76919.D	AC91216-005(20X)	05/13/16 16:33
7M76920.D	SMB50105	05/13/16 16:57
7M76921.D	SMB50104	05/13/16 17:20
7M76922.D	AC91255-001	05/13/16 17:44
7M76923.D	AC91255-001(MS)	05/13/16 18:07
7M76924.D	AC91255-001(MSD)	05/13/16 18:30
7M76925.D	AC91273-002	05/13/16 18:54
7M76926.D	AC91273-004	05/13/16 19:17
7M76927.D	AC91136-017	05/13/16 19:40
7M76928.D	AC91136-008	05/13/16 20:04
7M76929.D	AC91136-007	05/13/16 20:27
7M76930.D	AC91136-005	05/13/16 20:50
7M76931.D	AC91136-001	05/13/16 21:13
7M76932.D	AC91289-001	05/13/16 21:37
7M76933.D	AC91136-019	05/13/16 22:00
7M76934.D	AC91136-018	05/13/16 22:23
7M76935.D	AC91216-002(40X)	05/13/16 22:46
7M76936.D	AC91216-005(40X)	05/13/16 23:09

Data Path : G:\GcMsData\2016\GCMS\_7\Data\05-04-16\  
Data File : 7M76728.D  
Acq On : 4 May 2016 8:32  
Operator : AH/JB  
Sample : CAL DFTPP  
Misc : A,BNA  
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2016\GCMS\_7\METHODQT\7M\_0503.M  
Title : @GCMS\_7,mg,625,8270D  
Last Update : Wed Apr 06 13:14:50 2016



Spectrum Information: Scan 1473

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.9	36304	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.4	46168	PASS
70	69	0.00	2	0.9	434	PASS
127	198	40	60	55.9	58144	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	103952	PASS
199	198	5	9	7.3	7551	PASS
275	198	10	30	19.6	20416	PASS
365	198	1	100	2.0	2066	PASS
441	443	0.01	100	72.4	7415	PASS
442	198	40	100	48.5	50432	PASS
443	442	17	23	20.3	10235	PASS

## Form 5

Tune Name: CAL DFTPP  
Instrument: GCMS 7

Data File: 7M76728.D  
Analysis Date: 05/04/16 08:32  
Method: EPA 8270D

## Tune Scan/Time Range: Scan 1473

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	34.9	36304	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.4	46168	PASS
70	69	0.00	2	0.9	434	PASS
127	198	40	60	55.9	58144	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	103952	PASS
199	198	5	9	7.3	7551	PASS
275	198	10	30	19.6	20416	PASS
365	198	1	100	2.0	2066	PASS
441	443	0.01	100	72.4	7415	PASS
442	198	40	100	48.5	50432	PASS
443	442	17	23	20.3	10235	PASS

Data File	Sample Number	Analysis Date:
7M76729.D	CAL BNA@10PPM	05/04/16 09:04
7M76730.D	CAL BNA@50PPM	05/04/16 09:40
7M76731.D	CAL BNA@196PP	05/04/16 10:07
7M76732.D	CAL BNA@160PP	05/04/16 10:30
7M76733.D	CAL BNA@120PP	05/04/16 10:53
7M76734.D	CAL BNA@80PPM	05/04/16 11:17
7M76735.D	CAL BNA@20PPM	05/04/16 11:40
7M76736.D	CAL BNA@2PPM	05/04/16 12:03
7M76737.D	CAL BNA@.5PPM	05/04/16 12:26
7M76738.D	CAL BNA@10PPM	05/04/16 12:49
7M76739.D	CAL BNA@50PPM	05/04/16 13:13
7M76740.D	ICV BNA@50PPM	05/04/16 13:44
7M76741.D	WMB50006	05/04/16 15:15

**FORM 4**  
Blank Summary

Blank Number: SMB50105  
Blank Data File: 7M76920.D  
Matrix: Soil

Blank Analysis Date: 05/13/16 16:57  
Blank Extraction Date: 05/13/16  
(If Applicable)  
Method: EPA 8270D

Sample Number	Data File	Analysis Date
AC91273-002	7M76925.D	05/13/16 18:54
AC91273-004	7M76926.D	05/13/16 19:17
AC91255-001(MSD)	7M76924.D	05/13/16 18:30
AC91255-001(MS)	7M76923.D	05/13/16 18:07
AC91255-001	7M76922.D	05/13/16 17:44
SMB50105(MS)	7M76916.D	05/13/16 15:23

Form3  
RPD Data Laboratory Limits

QC Batch: SMB50105

Benzo[b]fluoranthene	1	52.585	48.8248	7.4	30
Benzo[k]fluoranthene	1	56.2853	52.739	6.5	30
Benzo[a]pyrene	1	52.6079	49.9437	5.2	30
Indeno[1,2,3-cd]pyrene	1	49.2629	51.4527	4.3	30
Dibenzo[a,h]anthracene	1	48.4966	50.9867	5	30
Benzo[g,h,i]perylene	1	46.6218	48.912	4.8	30

\* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

# Form3 RPD Data Laboratory Limits

QC Batch: SMB50105

6051104 0075

Data File	Sample ID:	Analysis Date
Spike or Dup: 7M76924.D	AC91255-001(MSD)	5/13/2016 6:30:00 PM
Duplicate(If applicable): 7M76923.D	AC91255-001(MS)	5/13/2016 6:07:00 PM
Inst Blank(If applicable):		
Method: 8270D	Matrix: Soil	QC Type: MSD

Analyte:	Column	Dup/MSD/MSBS Conc	Sample/MS/MSBS Conc	RPD	Limit
Pyridine	1	25.4745	24.2581	4.9	30
N-Nitrosodimethylamine	1	35.8101	35.8881	0.22	30
Benzaldehyde	1	43.2979	34.203	23	30
Aniline	1	35.4416	27.5366	25	30
Pentachloroethane	1	36.9953	33.2713	11	30
bis(2-Chloroethyl)ether	1	42.1833	38.1381	10	30
N-Decane	1	26.5914	25.6839	3.5	30
1,3-Dichlorobenzene	1	39.6409	35.3831	11	30
1,4-Dichlorobenzene	1	43.1699	38.4714	12	40
1,2-Dichlorobenzene	1	41.3392	36.387	13	30
Benzyl alcohol	1	48.8681	42.0275	15	30
bis(2-chloroisopropyl)ether	1	35.8165	31.5839	13	30
Acetophenone	1	36.3744	31.8392	13	30
Hexachloroethane	1	41.3734	35.4706	15	30
N-Nitroso-di-n-propylamine	1	39.9083	35.6036	12	40
Nitrobenzene	1	48.2535	43.0932	11	30
Isophorone	1	33.908	30.4372	11	30
Benzoic Acid	1	51.8514	48.7568	6.2	30
bis(2-Chloroethoxy)methane	1	45.8584	41.7978	9.3	30
1,2,4-Trichlorobenzene	1	42.4341	37.844	11	40
Naphthalene	1	46.7641	41.9935	11	40
4-Chloroaniline	1	37.4744	30.1454	22	30
Hexachlorobutadiene	1	42.4645	37.7531	12	30
Caprolactam	1	38.4701	38.1451	0.85	30
2-Methylnaphthalene	1	47.139	41.8267	12	30
1,1'-Biphenyl	1	41.5753	37.5415	10	30
1,2,4,5-Tetrachlorobenzene	1	34.3631	31.3896	9	30
Hexachlorocyclopentadiene	1	35.8535	27.6817	26	30
2-Chloronaphthalene	1	46.9907	43.6277	7.4	30
1,4-Dimethylnaphthalene	1	40.2436	37.3073	7.6	30
Diphenyl Ether	1	36.286	33.9365	6.7	30
2-Nitroaniline	1	53.2603	49.6138	7.1	30
Coumarin	1	41.7479	40.5509	2.9	30
Acenaphthylene	1	53.5248	49.8667	7.1	30
Dimethylphthalate	1	53.7445	50.9162	5.4	30
2,6-Dinitrotoluene	1	61.6627	56.7958	8.2	30
Acenaphthene	1	49.9342	46.7736	6.5	40
3-Nitroaniline	1	49.1476	43.6422	12	30
Dibenzofuran	1	48.4308	45.9189	5.3	30
2,4-Dinitrotoluene	1	55.0932	51.8657	6	40
Fluorene	1	51.5978	49.6403	3.9	40
4-Chlorophenyl-phenylether	1	51.8044	49.5076	4.5	30
Diethylphthalate	1	51.1708	49.7191	2.9	30
4-Nitroaniline	1	56.6015	53.9514	4.8	30
Atrazine	1	40.8995	40.7293	0.42	30
n-Nitrosodiphenylamine	1	38.9734	36.2535	7.2	30
1,2-Diphenylhydrazine	1	49.3708	45.6841	7.8	30
4-Bromophenyl-phenylether	1	56.0976	50.9161	9.7	30
Hexachlorobenzene	1	52.0632	47.1536	9.9	30
N-Octadecane	1	45.9119	41.8921	9.2	30
Phenanthrene	1	50.5838	48.4704	4.3	30
Anthracene	1	51.5657	48.662	5.8	30
Carbazole	1	44.6941	43.246	3.3	30
Di-n-butylphthalate	1	56.0861	53.7309	4.3	30
Fluoranthene	1	54.191	53.3708	1.5	30
Pyrene	1	51.6353	46.1109	11	40
Benzidine	1	0	0	NA	30
Butylbenzylphthalate	1	53.3436	49.1466	8.2	40
3,3'-Dichlorobenzidine	1	43.4534	35.9952	19	30
Benzo[a]anthracene	1	50.2457	48.1491	4.3	30
Chrysene	1	52.522	50.7143	3.5	30
bis(2-Ethylhexyl)phthalate	1	59.8198	56.1304	6.4	30
Di-n-octylphthalate	1	56.1187	48.6805	14	30

## Form3

## Recovery Data Laboratory Limits

QC Batch: SMB50105

bis(2-Ethylhexyl)phthalate	1	59.8198	0	50	120	70	130
Di-n-octylphthalate	1	56.1187	0	50	112	70	130
Benzo[b]fluoranthene	1	52.585	0	50	105	70	130
Benzo[k]fluoranthene	1	56.2853	0	50	113	70	130
Benzo[a]pyrene	1	52.6079	0	50	105	70	130
Indeno[1,2,3-cd]pyrene	1	49.2629	0	50	99	70	130
Dibenzo[a,h]anthracene	1	48.4966	0	50	97	60	130
Benzo[g,h,i]perylene	1	46.6218	0	50	93	70	130

\* - Indicates outside of limits

# - Indicates outside of standard limits but within method exceedance limits



**Form3**  
**Recovery Data Laboratory Limits**  
**QC Batch: SMB50105**

6051104 0073

<b>Data File</b>	<b>Sample ID:</b>	<b>Analysis Date</b>
Spike or Dup: 7M76924.D	AC91255-001(MSD)	5/13/2016 6:30:00 PM
Non Spike(If applicable): 7M76922.D	AC91255-001	5/13/2016 5:44:00 PM
Inst Blank(If applicable):		
<b>Method: 8270D</b>	<b>Matrix: Soil</b>	<b>QC Type: MSD</b>

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	25.4745	0	50	51	1	150
N-Nitrosodimethylamine	1	35.8101	0	50	72	50	130
Benzaldehyde	1	43.2979	0	50	87	20	150
Aniline	1	35.4416	0	50	71	20	150
Pentachloroethane	1	36.9953	0	50	74	50	130
bis(2-Chloroethyl)ether	1	42.1833	0	50	84	50	130
N-Decane	1	26.5914	0	50	53	20	130
1,3-Dichlorobenzene	1	39.6409	0	50	79	60	130
1,4-Dichlorobenzene	1	43.1699	0	50	86	60	130
1,2-Dichlorobenzene	1	41.3392	0	50	83	50	130
Benzyl alcohol	1	48.8681	0	50	98	20	130
bis(2-chloroisopropyl)ether	1	35.8165	0	50	72	40	130
Acetophenone	1	36.3744	0	50	73	50	130
Hexachloroethane	1	41.3734	0	50	83	50	130
N-Nitroso-di-n-propylamine	1	39.9083	0	50	80	40	130
Nitrobenzene	1	48.2535	0	50	97	70	130
Isophorone	1	33.908	0	50	68	60	130
Benzoic Acid	1	51.8514	0	100	52	20	130
bis(2-Chloroethoxy)methane	1	45.8584	0	50	92	60	130
1,2,4-Trichlorobenzene	1	42.4341	0	50	85	50	130
Naphthalene	1	46.7641	0	50	94	50	130
4-Chloroaniline	1	37.4744	0	50	75	10	150
Hexachlorobutadiene	1	42.4645	0	50	85	60	130
Caprolactam	1	38.4701	0	50	77	50	130
2-Methylnaphthalene	1	47.139	0	50	94	70	130
1,1'-Biphenyl	1	41.5753	0	50	83	60	130
1,2,4,5-Tetrachlorobenzene	1	34.3631	0	50	69*	70	130
Hexachlorocyclopentadiene	1	35.8535	0	50	72	20	160
2-Chloronaphthalene	1	46.9907	0	50	94	70	130
1,4-Dimethylnaphthalene	1	40.2436	0	50	80	70	130
Diphenyl Ether	1	36.286	0	50	73	70	130
2-Nitroaniline	1	53.2603	0	50	107	50	130
Coumarin	1	41.7479	0	50	83	70	130
Acenaphthylene	1	53.5248	0	50	107	70	130
Dimethylphthalate	1	53.7445	0	50	107	70	130
2,6-Dinitrotoluene	1	61.6627	0	50	123	70	130
Acenaphthene	1	49.9342	0	50	100	50	130
3-Nitroaniline	1	49.1476	0	50	98	70	130
Dibenzofuran	1	48.4308	0	50	97	70	130
2,4-Dinitrotoluene	1	55.0932	0	50	110	40	130
Fluorene	1	51.5978	0	50	103	50	130
4-Chlorophenyl-phenylether	1	51.8044	0	50	104	70	130
Diethylphthalate	1	51.1708	0	50	102	70	130
4-Nitroaniline	1	56.6015	0	50	113	50	130
Atrazine	1	40.8995	0	50	82	50	130
n-Nitrosodiphenylamine	1	38.9734	0	50	78	50	130
1,2-Diphenylhydrazine	1	49.3708	0	50	99	70	130
4-Bromophenyl-phenylether	1	56.0976	0	50	112	70	130
Hexachlorobenzene	1	52.0632	0	50	104	70	130
N-Octadecane	1	45.9119	0	50	92	70	130
Phenanthrene	1	50.5838	0	50	101	70	130
Anthracene	1	51.5657	0	50	103	70	130
Carbazole	1	44.6941	0	50	89	70	130
Di-n-butylphthalate	1	56.0861	0	50	112	70	130
Fluoranthene	1	54.191	0	50	108	70	130
Pyrene	1	51.6353	0	50	103	50	130
Benzidine	1	0	0	50	0*	1	130
Butylbenzylphthalate	1	53.3436	0	50	107	50	130
3,3'-Dichlorobenzidine	1	43.4534	0	50	87	10	130
Benzo[a]anthracene	1	50.2457	0	50	100	70	130
Chrysene	1	52.522	0	50	105	60	130

\* - Indicates outside of limits

# - Indicates outside of standard limits but within method exceedance limits

## Form3

## Recovery Data Laboratory Limits

QC Batch: SMB50105

bis(2-Ethylhexyl)phthalate	1	56.1304	0	50	112	70	130
Di-n-octylphthalate	1	48.6805	0	50	97	70	130
Benzo[b]fluoranthene	1	48.8248	0	50	98	70	130
Benzo[k]fluoranthene	1	52.739	0	50	105	70	130
Benzo[a]pyrene	1	49.9437	0	50	100	70	130
Indeno[1,2,3-cd]pyrene	1	51.4527	0	50	103	70	130
Dibenzo[a,h]anthracene	1	50.9867	0	50	102	60	130
Benzo[g,h,i]perylene	1	48.912	0	50	98	70	130

\* - Indicates outside of limits

# - Indicates outside of standard limits but within method exceedance limits

**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: SMB50105

Data File		Sample ID:		Analysis Date			
Spike or Dup: 7M76923.D		AC91255-001(MS)		5/13/2016 6:07:00 PM			
Non Spike(If applicable): 7M76922.D		AC91255-001		5/13/2016 5:44:00 PM			
Inst Blank(If applicable):							
Method: 8270D		Matrix: Soil		QC Type: MS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	24.2581	0	50	49	1	150
N-Nitrosodimethylamine	1	35.8881	0	50	72	50	130
Benzaldehyde	1	34.203	0	50	68	20	150
Aniline	1	27.5366	0	50	55	20	150
Pentachloroethane	1	33.2713	0	50	67	50	130
bis(2-Chloroethyl)ether	1	38.1381	0	50	76	50	130
N-Decane	1	25.6839	0	50	51	20	130
1,3-Dichlorobenzene	1	35.3831	0	50	71	60	130
1,4-Dichlorobenzene	1	38.4714	0	50	77	60	130
1,2-Dichlorobenzene	1	36.387	0	50	73	50	130
Benzyl alcohol	1	42.0275	0	50	84	20	130
bis(2-chloroisopropyl)ether	1	31.5839	0	50	63	40	130
Acetophenone	1	31.8392	0	50	64	50	130
Hexachloroethane	1	35.4706	0	50	71	50	130
N-Nitroso-di-n-propylamine	1	35.5036	0	50	71	40	130
Nitrobenzene	1	43.0932	0	50	86	70	130
Isophorone	1	30.4372	0	50	61	60	130
Benzoic Acid	1	48.7568	0	100	49	20	130
bis(2-Chloroethoxy)methane	1	41.7978	0	50	84	60	130
1,2,4-Trichlorobenzene	1	37.844	0	50	76	50	130
Naphthalene	1	41.9935	0	50	84	50	130
4-Chloroaniline	1	30.1454	0	50	60	10	150
Hexachlorobutadiene	1	37.7531	0	50	76	60	130
Caprolactam	1	38.1451	0	50	76	50	130
2-Methylnaphthalene	1	41.8267	0	50	84	70	130
1,1'-Biphenyl	1	37.5415	0	50	75	60	130
1,2,4,5-Tetrachlorobenzene	1	31.3896	0	50	63*	70	130
Hexachlorocyclopentadiene	1	27.6817	0	50	55	20	160
2-Chloronaphthalene	1	43.6277	0	50	87	70	130
1,4-Dimethylnaphthalene	1	37.3073	0	50	75	70	130
Diphenyl Ether	1	33.9365	0	50	68*	70	130
2-Nitroaniline	1	49.6138	0	50	99	50	130
Coumarin	1	40.5509	0	50	81	70	130
Acenaphthylene	1	49.8667	0	50	100	70	130
Dimethylphthalate	1	50.9162	0	50	102	70	130
2,6-Dinitrotoluene	1	56.7958	0	50	114	70	130
Acenaphthene	1	46.7736	0	50	94	50	130
3-Nitroaniline	1	43.6422	0	50	87	10	130
Dibenzofuran	1	45.9189	0	50	92	70	130
2,4-Dinitrotoluene	1	51.8657	0	50	104	40	130
Fluorene	1	49.6403	0	50	99	50	130
4-Chlorophenyl-phenylether	1	49.5076	0	50	99	70	130
Diethylphthalate	1	49.7191	0	50	99	70	130
4-Nitroaniline	1	53.9514	0	50	108	50	130
Atrazine	1	40.7293	0	50	81	50	130
n-Nitrosodiphenylamine	1	36.2535	0	50	73	50	130
1,2-Diphenylhydrazine	1	45.6841	0	50	91	70	130
4-Bromophenyl-phenylether	1	50.9161	0	50	102	70	130
Hexachlorobenzene	1	47.1536	0	50	94	70	130
N-Octadecane	1	41.8921	0	50	84	70	130
Phenanthrene	1	48.4704	0	50	97	70	130
Anthracene	1	48.662	0	50	97	70	130
Carbazole	1	43.246	0	50	86	70	130
Di-n-butylphthalate	1	53.7309	0	50	107	70	130
Fluoranthene	1	53.3708	0	50	107	70	130
Pyrene	1	46.1109	0	50	92	50	130
Benzidine	1	0	0	50	0*	1	130
Butylbenzylphthalate	1	49.1466	0	50	98	50	130
3,3'-Dichlorobenzidine	1	35.9952	0	50	72	10	130
Benzo[a]anthracene	1	48.1491	0	50	96	70	130
Chrysene	1	50.7143	0	50	101	60	130

\* - Indicates outside of limits

# - Indicates outside of standard limits but within method exceedance limits

## Form3

## Recovery Data Laboratory Limits

QC Batch: SMB50105

bis(2-Ethylhexyl)phthalate	1	59.3688	0	50	119	70	130
Di-n-octylphthalate	1	48.6373	0	50	97	70	130
Benzo[b]fluoranthene	1	52.8128	0	50	106	70	130
Benzo[k]fluoranthene	1	57.8552	0	50	116	70	130
Benzo[a]pyrene	1	56.3328	0	50	113	70	130
Indeno[1,2,3-cd]pyrene	1	63.6326	0	50	127	70	130
Dibenzo[a,h]anthracene	1	62.8263	0	50	126	60	130
Benzo[g,h,i]perylene	1	62.3718	0	50	125	70	130

\* - Indicates outside of limits

# - Indicates outside of standard limits but within method exceedance limits

**Form3**  
**Recovery Data Laboratory Limits**  
 QC Batch: SMB50105

Data File		Sample ID:		Analysis Date			
Spike or Dup: 7M76916.D		SMB50105(MS)		5/13/2016 3:23:00 PM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 8270D		Matrix: Soil		QC Type: MBS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	33.3072	0	50	67	1	150
N-Nitrosodimethylamine	1	50.5784	0	50	101	50	130
Benzaldehyde	1	52.0897	0	50	104	20	150
Aniline	1	30.9083	0	50	62	20	150
Pentachloroethane	1	42.4598	0	50	85	50	130
bis(2-Chloroethyl)ether	1	49.7372	0	50	99	50	130
N-Decane	1	31.17	0	50	62	20	130
1,3-Dichlorobenzene	1	45.575	0	50	91	60	130
1,4-Dichlorobenzene	1	49.8413	0	50	100	60	130
1,2-Dichlorobenzene	1	47.1298	0	50	94	50	130
Benzyl alcohol	1	50.8383	0	50	102	20	130
bis(2-chloroisopropyl)ether	1	40.6192	0	50	81	40	130
Acetophenone	1	41.2672	0	50	83	50	130
Hexachloroethane	1	45.3589	0	50	91	50	130
N-Nitroso-di-n-propylamine	1	45.251	0	50	91	40	130
Nitrobenzene	1	51.8526	0	50	104	70	130
Isophorone	1	36.4877	0	50	73	60	130
Benzoic Acid	1	55.9878	0	100	56	20	130
bis(2-Chloroethoxy)methane	1	50.8253	0	50	102	60	130
1,2,4-Trichlorobenzene	1	45.8866	0	50	92	50	130
Naphthalene	1	49.7192	0	50	99	50	130
4-Chloroaniline	1	32.202	0	50	64	10	150
Hexachlorobutadiene	1	45.8892	0	50	92	60	130
Caprolactam	1	45.8159	0	50	92	50	130
2-Methylnaphthalene	1	50.5268	0	50	101	70	130
1,1'-Biphenyl	1	44.4633	0	50	89	60	130
1,2,4,5-Tetrachlorobenzene	1	34.3524	0	50	69*	70	130
Hexachlorocyclopentadiene	1	29.6498	0	50	59	20	160
2-Chloronaphthalene	1	48.045	0	50	96	70	130
1,4-Dimethylnaphthalene	1	41.6332	0	50	83	70	130
Diphenyl Ether	1	37.1109	0	50	74	70	130
2-Nitroaniline	1	55.9447	0	50	112	50	130
Coumarin	1	47.0324	0	50	94	70	130
Acenaphthylene	1	55.8283	0	50	112	70	130
Dimethylphthalate	1	61.1301	0	50	122	70	130
2,6-Dinitrotoluene	1	65.5252	0	50	131*	70	130
Acenaphthene	1	52.8597	0	50	106	50	130
3-Nitroaniline	1	48.8172	0	50	98	10	130
Dibenzofuran	1	52.933	0	50	106	70	130
2,4-Dinitrotoluene	1	62.8736	0	50	126	40	130
Fluorene	1	57.7751	0	50	116	50	130
4-Chlorophenyl-phenylether	1	56.9565	0	50	114	70	130
Diethylphthalate	1	60.3187	0	50	121	70	130
4-Nitroaniline	1	69.7435	0	50	139*	50	130
Atrazine	1	49.4644	0	50	99	50	130
n-Nitrosodiphenylamine	1	40.8779	0	50	82	50	130
1,2-Diphenylhydrazine	1	48.9541	0	50	98	70	130
4-Bromophenyl-phenylether	1	56.3345	0	50	113	70	130
Hexachlorobenzene	1	52.3499	0	50	105	70	130
N-Octadecane	1	41.823	0	50	84	70	130
Phenanthrene	1	55.8453	0	50	112	70	130
Anthracene	1	55.7546	0	50	112	70	130
Carbazole	1	50.0208	0	50	100	70	130
Di-n-butylphthalate	1	62.7046	0	50	125	70	130
Fluoranthene	1	63.3749	0	50	127	70	130
Pyrene	1	50.3063	0	50	101	50	130
Benzidine	1	4.6101	0	50	9.2	1	130
Butylbenzylphthalate	1	51.7891	0	50	104	50	130
3,3'-Dichlorobenzidine	1	35.7654	0	50	72	10	130
Benzo[a]anthracene	1	53.435	0	50	107	70	130
Chrysene	1	58.1205	0	50	116	60	130

\* - Indicates outside of limits

# - Indicates outside of standard limits but within method exceedance limits

## FORM2

## Surrogate Recovery

Method: EPA 8270D

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column1 S5 Recov	Column1 S6 Recov
7M76920.D	SMB50105	S	05/13/16 16:57	1		NA	NA	62	67	NA	91
7M76925.D	AC91273-002	S	05/13/16 18:54	1		NA	NA	66	68	NA	93
7M76926.D	AC91273-004	S	05/13/16 19:17	1		NA	NA	68	67	NA	89
7M76916.D	SMB50105(MS)	S	05/13/16 15:23	1		NA	NA	93	88	NA	95
7M76922.D	AC91255-001	S	05/13/16 17:44	1		NA	NA	75	76	NA	92
7M76923.D	AC91255-001(MS)	S	05/13/16 18:07	1		NA	NA	78	79	NA	86
7M76924.D	AC91255-001(MSD)	S	05/13/16 18:30	1		NA	NA	88	85	NA	95

Flags: SD=Surrogate diluted out

\*=Surrogate out

Method: EPA 8270D

## Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=2-Fluorophenol	100	43-128
S2=Phenol-d5	100	49-129
S3=Nitrobenzene-d5	50	52-129
S4=2-Fluorobiphenyl	50	58-125
S5=2,4,6-Tribromophenol	100	54-145
S6=Terphenyl-d14	50	58-148

Abundance

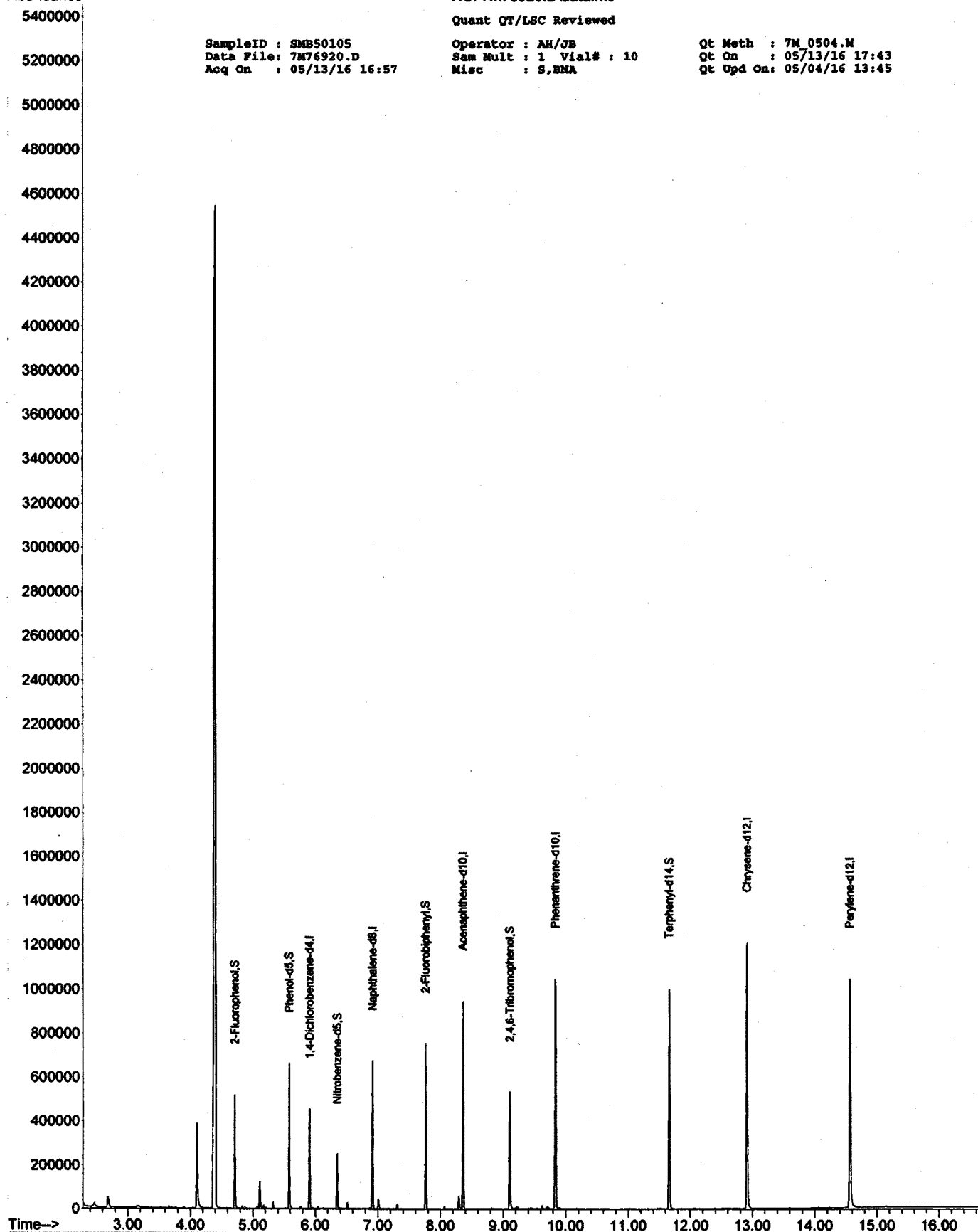
TIC: 7M76920.D\data.ms

Quant QT/LSC Reviewed

SampleID : SMB50105  
Data File: 7M76920.D  
Acq On : 05/13/16 16:57

Operator : AH/JB  
Sam Mult : 1 Vial# : 10  
Misc : S,BNA

Qt Meth : 7M\_0504.M  
Qt On : 05/13/16 17:43  
Qt Upd On: 05/04/16 13:45



SampleID : SMB50105  
 Data File: 7M76920.D  
 Acq On : 05/13/16 16:57

Operator : AH/JB  
 Sam Mult : 1 Vial# : 10  
 Misc : S,BNA

Qt Meth : 7M\_0504.M  
 Qt On : 05/13/16 17:43  
 Qt Upd On: 05/04/16 13:45

Data Path : G:\GCMSData\2016\GCMS\_7\Data\05-1316\  
 Qt Path : G:\GCMSData\2016\GCMS\_7\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dichlorobenzene-d4	5.909	152	69069	40.00	ng	0.00
29) Naphthalene-d8	6.919	136	302882	40.00	ng	-0.01
48) Acenaphthene-d10	8.361	164	207756	40.00	ng	-0.02
75) Phenanthrene-d10	9.836	188	445107	40.00	ng	-0.02
89) Chrysene-d12	12.913	240	522081	40.00	ng	-0.02
101) Perylene-d12	14.558	264	462005	40.00	ng	-0.07
System Monitoring Compounds						
10) 2-Fluorophenol	4.713	112	160450	73.07	ng	0.00
Spiked Amount 100.000			Recovery	=	73.07%	
15) Phenol-d5	5.583	99	233374	77.88	ng	0.00
Spiked Amount 100.000			Recovery	=	77.88%	
30) Nitrobenzene-d5	6.353	128	36011	31.17	ng	0.00
Spiked Amount 50.000			Recovery	=	62.34%	
53) 2-Fluorobiphenyl	7.763	172	219986	33.65	ng	-0.02
Spiked Amount 50.000			Recovery	=	67.30%	
78) 2,4,6-Tribromophenol	9.109	330	61060	71.41	ng	-0.02
Spiked Amount 100.000			Recovery	=	71.41%	
92) Terphenyl-d14	11.652	244	325981	45.26	ng	-0.01
Spiked Amount 50.000			Recovery	=	90.52%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed



**Form1**  
ORGANICS SEMIVOLATILE REPORT

Sample Number: SMB50105	Method: EPA 8270D
Client Id:	Matrix: Soil
Data File: 7M76920.D	Initial Vol: 30g
Analysis Date: 05/13/16 16:57	Final Vol: 0.5ml
Date Rec/Extracted: NA-05/13/16	Dilution: 1
Column: DB-5MS 30M 0.250mm ID 0.25um film	Solids: 100

## Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
91-57-6	2-Methylnaphthalene	0.033	U	218-01-9	Chrysene	0.033	U
83-32-9	Acenaphthene	0.033	U	53-70-3	Dibenzo[a,h]anthracene	0.033	U
208-96-8	Acenaphthylene	0.033	U	206-44-0	Fluoranthene	0.033	U
120-12-7	Anthracene	0.033	U	86-73-7	Fluorene	0.033	U
56-55-3	Benzo[a]anthracene	0.033	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.033	U
50-32-8	Benzo[a]pyrene	0.033	U	91-20-3	Naphthalene	0.0083	U
205-99-2	Benzo[b]fluoranthene	0.033	U	85-01-8	Phenanthrene	0.033	U
191-24-2	Benzo[g,h,i]perylene	0.033	U	129-00-0	Pyrene	0.033	U
207-08-9	Benzo[k]fluoranthene	0.033	U				

Worksheet #: 383797

**Total Target Concentration 0**

ColumnID: (\*) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.  
 B - Indicates the analyte was found in the blank as well as in the sample.  
 E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out  
 J - Indicates an estimated value when a compound is detected at less than the specified detection limit.  
 d - Pesticide %Diff > 40% between columns due to coelution. Lower concentration use a Chlordane (Total) is sum of  $\alpha$ -Chlordane and  $\gamma$ -Chlordane.

Abundance

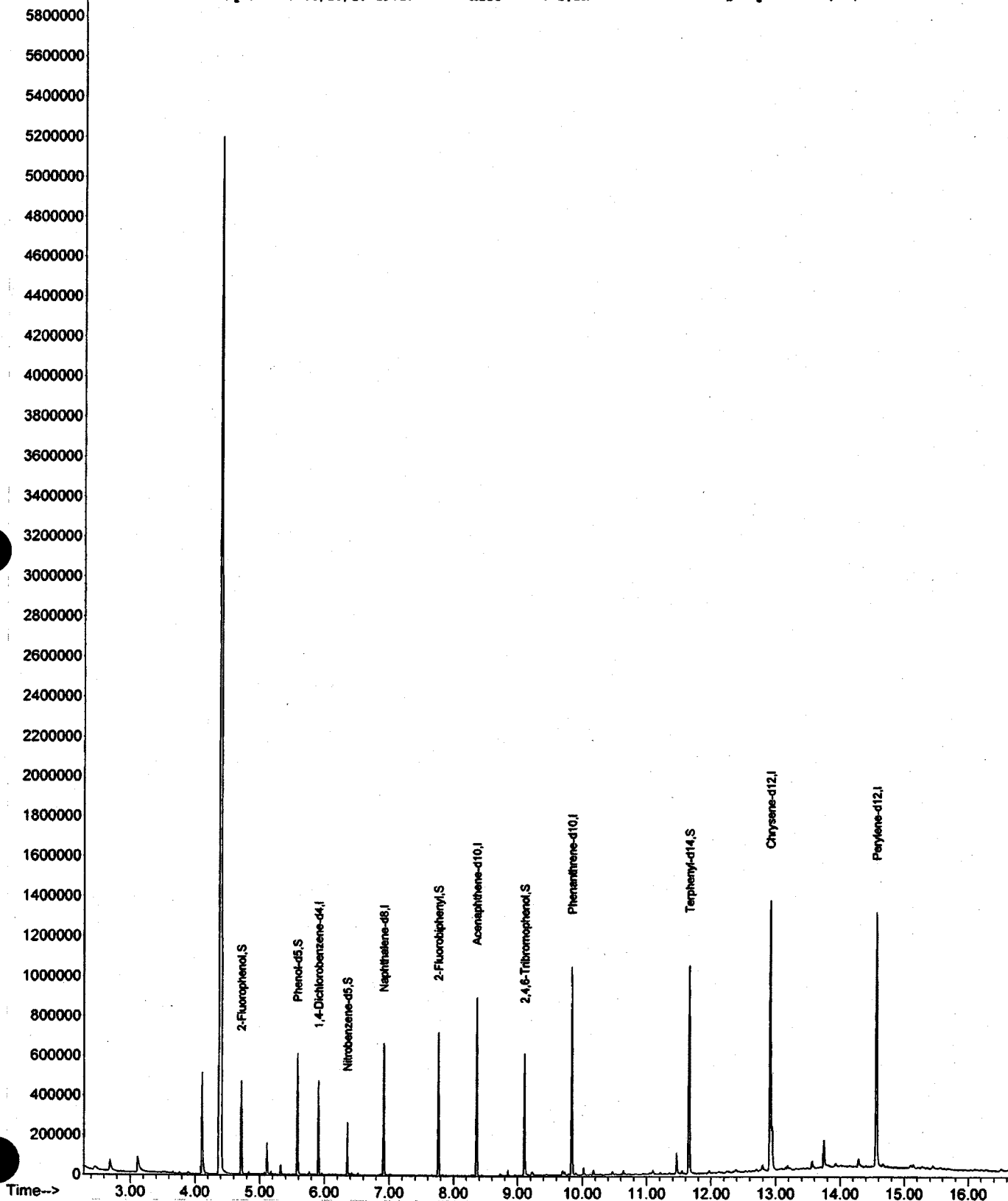
TIC: 7M76926.D\data.ms

Quant QT Reviewed

SampleID : AC91273-004  
Data File: 7M76926.D  
Acq On : 05/13/16 19:17

Operator : AH/JS  
Sam Mult : 1 Vial# : 16  
Misc : S,BN

Qt Meth : 7M 0504.M  
Qt On : 05/15/16 11:44  
Qt Upd On: 05/04/16 13:45



SampleID : AC91273-004  
 Data File: 7M76926.D  
 Acq On : 05/13/16 19:17

Operator : AH/JB  
 Sam Mult : 1 Vial# : 16  
 Misc : S,BN

Qt Meth : 7M\_0504.M  
 Qt On : 05/15/16 11:44  
 Qt Upd On: 05/04/16 13:45

Data Path : G:\GcMsData\2016\GCMS\_7\Data\05-1316\  
 Qt Path : G:\GCMSDATA\2016\GCMS\_7\METHODQT\  
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
7) 1,4-Dichlorobenzene-d4	5.909	152	70711	40.00	ng	0.00
29) Naphthalene-d8	6.914	136	296912	40.00	ng	-0.02
48) Acenaphthene-d10	8.361	164	200509	40.00	ng	-0.02
75) Phenanthrene-d10	9.836	188	428152	40.00	ng	-0.02
89) Chrysene-d12	12.913	240	564653	40.00	ng	-0.02
101) Perylene-d12	14.558	264	562420	40.00	ng	-0.07
System Monitoring Compounds						
10) 2-Fluorophenol	4.718	112	165145	73.47	ng	0.01
Spiked Amount 100.000			Recovery	=	73.47%	
15) Phenol-d5	5.583	99	220335	71.82	ng	0.00
Spiked Amount 100.000			Recovery	=	71.82%	
30) Nitrobenzene-d5	6.353	128	38566	34.05	ng	0.00
Spiked Amount 50.000			Recovery	=	68.10%	
53) 2-Fluorobiphenyl	7.763	172	211433	33.51	ng	-0.02
Spiked Amount 50.000			Recovery	=	67.02%	
78) 2,4,6-Tribromophenol	9.109	330	72471	86.78	ng	-0.02
Spiked Amount 100.000			Recovery	=	86.78%	
92) Terphenyl-d14	11.658	244	346553	44.49	ng	0.00
Spiked Amount 50.000			Recovery	=	88.98%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

*h*

## Form1

## ORGANICS SEMIVOLATILE REPORT

Sample Number: AC91273-004      Method: EPA 8270D  
 Client Id: SB01 COMP      Matrix: Soil  
 Data File: 7M76926.D      Initial Vol: 30g  
 Analysis Date: 05/13/16 19:17      Final Vol: 0.5ml  
 Date Rec/Extracted: 05/11/16-05/13/16      Dilution: 1  
 Column: DB-5MS 30M 0.250mm ID 0.25um film      Solids: 90

Units: mg/Kg							
Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
91-57-6	2-Methylnaphthalene	0.037	U	218-01-9	Chrysene	0.037	U
83-32-9	Acenaphthene	0.037	U	53-70-3	Dibenzo[a,h]anthracene	0.037	U
208-96-8	Acenaphthylene	0.037	U	206-44-0	Fluoranthene	0.037	U
120-12-7	Anthracene	0.037	U	86-73-7	Fluorene	0.037	U
56-55-3	Benzo[a]anthracene	0.037	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.037	U
50-32-8	Benzo[a]pyrene	0.037	U	91-20-3	Naphthalene	0.0093	U
205-99-2	Benzo[b]fluoranthene	0.037	U	85-01-8	Phenanthrene	0.037	U
191-24-2	Benzo[g,h,i]perylene	0.037	U	129-00-0	Pyrene	0.037	U
207-08-9	Benzo[k]fluoranthene	0.037	U				

Worksheet #: 383732

Total Target Concentration 0

ColumnID: (\*) Indicates results from 2nd column

Indicates the compound was analyzed but not detected.  
 Indicates the analyte was found in the blank as well as in the sample.  
 Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out  
 J - Indicates an estimated value when a compound is detected at less than the specified detection limit.  
 d - Pesticide %Diff > 40% between columns due to coelution. Lower concentration uses Chlordane (Total) is sum of  $\alpha$ -Chlordane and  $\gamma$ -Chlordane.

Abundance

TIC: 7M76925.D\data.ms

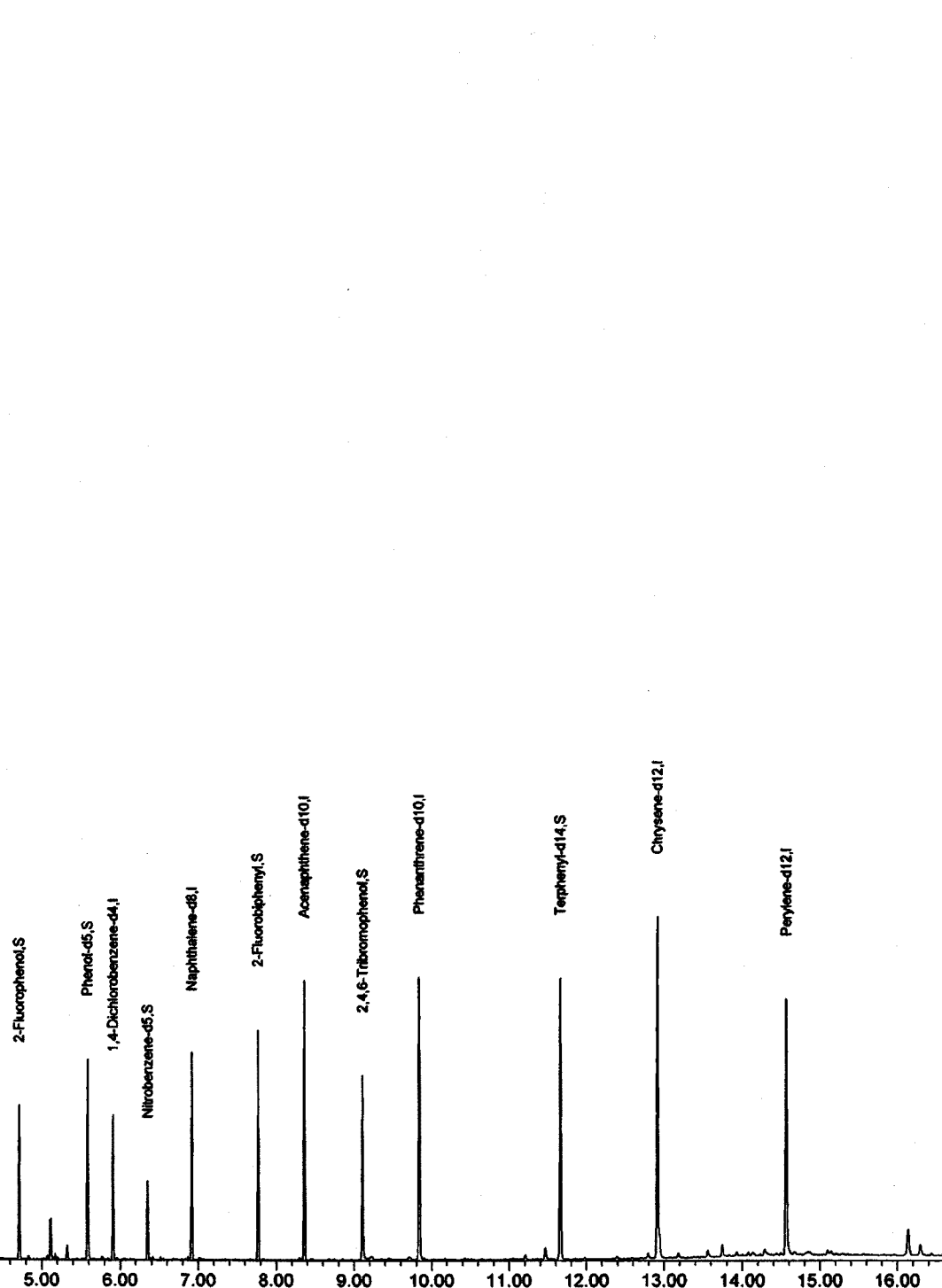
Quant QT Reviewed

SampleID : AC91273-002  
Data File: 7M76925.D  
Acq On : 05/13/16 18:54

Operator : AH/JB  
Sam Mult : 1 Vial# : 15  
Misc : S,BW

Qt Meth : 7M\_0504.M  
Qt On : 05/15/16 11:44  
Qt Upd On: 05/04/16 13:45

6000000  
5800000  
5600000  
5400000  
5200000  
5000000  
4800000  
4600000  
4400000  
4200000  
4000000  
3800000  
3600000  
3400000  
3200000  
3000000  
2800000  
2600000  
2400000  
2200000  
2000000  
1800000  
1600000  
1400000  
1200000  
1000000  
800000  
600000  
400000  
200000  
0



SampleID : AC91273-002  
Data File: 7M76925.D  
Acq On : 05/13/16 18:54

Operator : AH/JB  
Sam Mult : 1 Vial# : 15  
Misc : S,BN

Qt Meth : 7M\_0504.M  
Qt On : 05/15/16 11:44  
Qt Upd On: 05/04/16 13:45

Data Path : G:\GCMSData\2016\GCMS\_7\Data\05-1316\  
Qt Path : G:\GCMSDATA\2016\GCMS\_7\METHODQT\  
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dichlorobenzene-d4	5.909	152	88586	40.00	ng	0.00
29) Naphthalene-d8	6.919	136	381384	40.00	ng	-0.01
48) Acenaphthene-d10	8.361	164	251160	40.00	ng	-0.02
75) Phenanthrene-d10	9.836	188	500450	40.00	ng	-0.02
89) Chrysene-d12	12.913	240	560805	40.00	ng	-0.02
101) Perylene-d12	14.564	264	491855	40.00	ng	-0.06
System Monitoring Compounds						
10) 2-Fluorophenol	4.713	112	199652	70.90	ng	0.00
Spiked Amount	100.000		Recovery	=	70.90%	
15) Phenol-d5	5.583	99	294235	76.56	ng	0.00
Spiked Amount	100.000		Recovery	=	76.56%	
30) Nitrobenzene-d5	6.353	128	48357	33.24	ng	0.00
Spiked Amount	50.000		Recovery	=	66.48%	
53) 2-Fluorobiphenyl	7.763	172	269987	34.16	ng	-0.02
Spiked Amount	50.000		Recovery	=	68.32%	
78) 2,4,6-Tribromophenol	9.109	330	88083	89.96	ng	-0.02
Spiked Amount	100.000		Recovery	=	89.96%	
92) Terphenyl-d14	11.658	244	358462	46.34	ng	0.00
Spiked Amount	50.000		Recovery	=	92.68%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

h

## Form1

## ORGANICS SEMIVOLATILE REPORT

Sample Number: AC91273-002

Client Id: SB02 COMP

Data File: 7M76925.D

Analysis Date: 05/13/16 18:54

Date Rec/Extracted: 05/11/16-05/13/16

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D

Matrix: Soil

Initial Vol: 30g

Final Vol: 0.5ml

Dilution: 1

Solids: 88

## Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
91-57-6	2-Methylnaphthalene	0.038	U	218-01-9	Chrysene	0.038	U
83-32-9	Acenaphthene	0.038	U	53-70-3	Dibenzo[a,h]anthracene	0.038	U
208-96-8	Acenaphthylene	0.038	U	206-44-0	Fluoranthene	0.038	U
120-12-7	Anthracene	0.038	U	86-73-7	Fluorene	0.038	U
56-55-3	Benzo[a]anthracene	0.038	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.038	U
50-32-8	Benzo[a]pyrene	0.038	U	91-20-3	Naphthalene	0.0095	U
205-99-2	Benzo[b]fluoranthene	0.038	U	85-01-8	Phenanthrene	0.038	U
191-24-2	Benzo[g,h,i]perylene	0.038	U	129-00-0	Pyrene	0.038	U
207-08-9	Benzo[k]fluoranthene	0.038	U				

Worksheet #: 383732

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff&gt;40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of  $\alpha$ -Chlordane and  $\gamma$ -Chlordane.

**Semi-Volatile Data**



## FORM8

## Internal Standard Areas

Evaluation Std Data File: 6M39077.D

Method: EPA 8260C

Analysis Date/Time: 05/13/16 09:20

Lab File ID: CAL @ 50 PPB

Eval File Area/RT:	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
	391610	4.35	233053	5.91	124496	7.13						
Eval File Area Limit:	195805-783220		116526-466106		62248-248992							
Eval File Rt Limit:	3.85-4.85		5.41-6.41		6.63-7.63							

## Data File Sample

6M39076.D 50 PPB	368713	4.35	236700	5.91	119579	7.13				
6M39079.D BLK	302392	4.35	188642	5.91	90139	7.13				
6M39080.D DAILY BLANK	363584	4.35	224234	5.91	106707	7.13				
6M39081.D BLK	338802	4.35	224740	5.91	100364	7.14				
6M39082.D AC91319-002	333430	4.35	220356	5.91	99166	7.14				
6M39083.D AC91319-001	351086	4.35	168021	5.91	164442	7.22				
6M39084.D STD	384950	4.35	244245	5.91	119341	7.13				
6M39085.D BLK	381461	4.36	242065	5.92	122017	7.14				
6M39086.D AC91274-009	307359	4.35	204165	5.91	100233	7.14				
6M39087.D AC91274-010	346059	4.35	237475	5.91	103472	7.14				
6M39088.D MBS53464	399715	4.35	236115	5.91	123319	7.13				
6M39089.D BLK	328566	4.35	220891	5.91	105199	7.14				
6M39090.D AC91289-004	299075	4.35	214136	5.91	93025	7.14				
6M39091.D AC91289-005	361169	4.35	234062	5.91	100659	7.14				
6M39092.D AC91289-006	368594	4.35	221588	5.91	101029	7.14				
6M39093.D AC91287-001	306850	4.35	218361	5.91	98584	7.14				
6M39094.D AC91287-002	331716	4.36	190207	5.91	95044	7.14				
6M39095.D AC91289-002	347385	4.35	236909	5.91	96902	7.13				
6M39096.D AC91289-003	341842	4.35	218923	5.91	105519	7.14				
6M39097.D AC91289-001	326261	4.36	226121	5.91	104041	7.14				
6M39098.D AC91273-001	333556	4.35	215898	5.91	104252	7.14				
6M39099.D AC91273-003	351413	4.36	228180	5.92	102465	7.14				
6M39100.D AC91288-001	298123	4.35	152881	5.91	115129	7.16				
6M39101.D AC91283-002	405827	4.36	247970	5.91	130026	7.13				
6M39102.D AC91283-002	383640	4.35	240782	5.91	123550	7.13				
6M39103.D BLK	331453	4.36	234183	5.91	111488	7.14				
6M39104.D BLK	290674	4.36	191811	5.91	86669	7.14				
6M39105.D AC91346-001	312247	4.35	226421	5.91	113465	7.14				
6M39106.D AC91346-002	365538	4.36	234747	5.91	130828	7.22				
6M39107.D MBS53466	403097	4.36	269080	5.91	139221	7.13				
6M39108.D 91325-001/5X	268200	4.36	188464	5.91	95085	7.14				
6M39109.D AC91270-014	366970	4.35	238585	5.91	101786	7.14				

I1 = Fluorobenzene  
 I2 = Chlorobenzene-d5  
 I3 = 1,4-Dichlorobenzene-d4

I4 =  
 I5 =  
 I6 =

625/8270 Internal Standard concentration = 40 mg/L (in final extract)  
 624/8260 Internal Standard concentration = 30ug/L  
 524 Internal Standard concentration = 5ug/L

## QC Limits:

## Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

## Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

HAZ. - 135

## Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

## FORM8

## Internal Standard Areas

Evaluation Std Data File: 6M39020.D

Method: EPA 8260C

Analysis Date/Time: 05/12/16 08:35

Lab File ID: CAL @ 50 PPB

Eval File Area/RT:	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area Limit:	371475	4.34	250401	5.90	129527	7.12						
Eval File Rt Limit:	185738-742950		125200-500802		64764-259054							
	3.84-4.84		5.4-6.4		6.62-7.62							

## Data File Sample

6M39018.D BLK	229296	4.34	184676	5.91	100380	7.13
6M39019.D 50 PPB	387859	4.34	250464	5.91	128172	7.13
6M39021.D BLK	315249	4.34	215628	5.91	104086	7.13
6M39022.D DAILY BLANK	323532	4.34	220953	5.91	105585	7.13
6M39023.D BLK	340630	4.35	229429	5.91	106171	7.14
6M39024.D AC91283-004	319177	4.34	211330	5.91	112397	7.13
6M39025.D AC91283-002	326686	4.34	219332	5.91	100163	7.13
6M39026.D AC91283-001	376643	4.34	197769	5.91	167501	7.22
6M39027.D MBS53447	356605	4.34	239179	5.91	121828	7.13
6M39028.D AC91283-003	373395	4.34	197363	5.91	147105	7.20
6M39029.D AC91245-001	259522	4.34	154594	5.91	56926A	7.13
6M39030.D AC91283-004	356334	4.34	218787	5.91	116886	7.13
6M39031.D AC91283-004	358767	4.34	235557	5.91	126344	7.13
6M39032.D BLK	322329	4.34	234361	5.91	121183	7.13
6M39033.D AC91270-002	301960	4.34	212639	5.91	103137	7.13
6M39034.D AC91270-004	270106	4.34	175376	5.91	78056	7.13
6M39035.D AC91270-006	264034	4.34	167735	5.91	87316	7.13
6M39036.D AC91270-008	277145	4.35	191683	5.91	76669	7.13
6M39037.D AC91278-006	324097	4.34	211197	5.91	107244	7.13
6M39038.D AC91278-005	289137	4.34	187546	5.91	107334	7.13
6M39039.D AC91278-004	291811	4.34	230281	5.91	122519	7.13
6M39040.D AC91278-001	390849	4.34	234893	5.91	147415	7.13
6M39041.D AC91278-003	321054	4.34	217549	5.91	109381	7.13
6M39042.D BLK	318996	4.35	215763	5.91	104100	7.13
6M39043.D AC91255-001	330814	4.34	217778	5.91	104875	7.13
6M39044.D AC91278-003	369938	4.34	231217	5.91	104086	7.13
6M39045.D MBS53454	366378	4.34	221029	5.91	119261	7.13
6M39046.D AC91270-018	332253	4.34	233419	5.91	97157	7.13
6M39047.D AC91247-007	360925	4.34	229027	5.91	97034	7.13
6M39048.D AC91259-001	342043	4.34	255511	5.91	125758	7.13
6M39049.D AC91259-002	338364	4.34	249327	5.91	158811	7.13
6M39050.D AC91280-001	381580	4.35	240745	5.91	109819	7.13
6M39051.D AC91270-020	428289	4.35	252498	5.91	125591	7.13
6M39052.D AC91270-022	365789	4.34	213858	5.91	100181	7.13
6M39053.D AC91274-001	366808	4.34	241242	5.91	119191	7.13
6M39054.D AC91274-002	305012	4.34	193731	5.91	85705	7.13
6M39055.D AC91274-003	324698	4.34	213232	5.91	94690	7.13
6M39056.D AC91274-004	280974	4.35	192054	5.91	75579	7.13
6M39057.D AC91274-005	334607	4.34	225565	5.91	96832	7.13
6M39058.D AC91274-006	372394	4.34	242797	5.91	106917	7.13
6M39059.D AC91274-007	353857	4.35	219064	5.91	100584	7.14
6M39060.D AC91274-008	347748	4.35	223297	5.91	105676	7.13
6M39061.D AC91274-009	369664	4.35	246302	5.91	107793	7.13
6M39062.D AC91274-010	335582	4.35	218630	5.91	98047	7.13
6M39063.D STD	392153	4.34	252541	5.91	122300	7.13

I1 = Fluorobenzene  
I2 = Chlorobenzene-d5  
I3 = 1,4-Dichlorobenzene-d4

I4 =  
I5 =  
I6 =

625/8270 Internal Standard concentration = 40 mg/L (in final extract)  
624/8260 Internal Standard concentration = 30ug/L  
524 Internal Standard concentration = 5ug/L

## Limits:

## Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

## Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

## Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

## FORM8

## Internal Standard Areas

Evaluation Std Data File: 6M38862.D

Method: EPA 8260C

Analysis Date/Time: 05/09/16 16:16

Lab File ID: CAL @ 20 PPB

Eval File Area/RT:	I1		I2		I3		I4		I5		I6	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area Limit:	423098	4.35	295106	5.91	153942	7.13						
Eval File Rt Limit:	211549-846196		147553-590212		76971-307884							
	3.85-4.85		5.41-6.41		6.63-7.63							

## Data File Sample

6M38855.D 50 PPB	395862	4.35	265375	5.91	161349	7.13				
6M38858.D CAL @ 0.5 PF	391232	4.35	258954	5.91	128357	7.14				
6M38859.D CAL @ 1 PPB	395967	4.35	248596	5.91	127859	7.13				
6M38860.D CAL @ 2 PPB	344399	4.35	232921	5.91	122113	7.13				
6M38861.D CAL @ 5 PPB	394159	4.35	252541	5.91	139910	7.13				
6M38862.D CAL @ 20 PP	423098	4.35	295106	5.91	153942	7.13				
6M38863.D CAL @ 50 PP	453357	4.35	274009	5.91	155989	7.13				
6M38864.D CAL @ 500 P	517738	4.35	305625	5.91	161303	7.13				
6M38866.D CAL @ 250 P	491041	4.35	296743	5.91	168600	7.13				
6M38868.D CAL @ 100 P	464537	4.35	294231	5.91	165452	7.14				
6M38870.D ICV	454732	4.35	299182	5.91	156582	7.13				
6M38871.D ICV	500101	4.35	302359	5.91	163795	7.13				
6M38872.D BLK	338440	4.35	246163	5.91	108074	7.13				
6M38873.D BLK	361269	4.35	216575	5.91	109816	7.13				
6M38874.D DAILY BLANK	398741	4.35	258003	5.91	120864	7.13				
6M38875.D AC91224-010	378844	4.35	258276	5.91	140065	7.13				
6M38876.D MBS53022	492802	4.35	302683	5.91	157628	7.13				
6M38877.D BLK	340751	4.35	247302	5.91	115869	7.13				
6M38878.D AC91166-003	305855	4.34	116637 A	5.91	21191 A	7.14				
6M38879.D AC91166-001	295553	4.34	177232	5.91	66192 A	7.13				
6M38880.D AC91233-001	361428	4.34	234119	5.91	108462	7.13				
6M38881.D AC91233-003	324013	4.34	227783	5.91	99939	7.13				
6M38882.D AC91233-004	328159	4.34	208758	5.91	99410	7.13				
6M38883.D AC91233-005	298670	4.34	206146	5.91	90031	7.13				
6M38884.D AC91228-002	320854	4.34	214731	5.91	110256	7.13				
6M38885.D AC91228-006	333494	4.34	224633	5.91	120253	7.13				
6M38886.D AC91228-003	393533	4.34	241895	5.90	145065	7.13				
6M38887.D AC91228-004	407660	4.34	245922	5.90	134906	7.13				
6M38888.D BLK	327901	4.34	226770	5.91	106596	7.13				
6M38889.D AC91233-002	348961	4.34	216722	5.91	108235	7.13				
6M38890.D AC91224-006	332209	4.34	220556	5.91	77758	7.13				
6M38891.D AC91224-002	389381	4.34	233273	5.90	94551	7.12				
6M38892.D AC91228-001	360761	4.34	240690	5.91	115675	7.13				
6M38893.D AC91224-003	373918	4.34	238397	5.90	140211	7.12				
6M38894.D AC91228-005	731697	4.45	141211 A	5.91	90129	7.16				
6M38895.D BLK	348892	4.34	230099	5.91	119083	7.13				
6M38896.D BLK	342011	4.35	225209	5.91	132754	7.13				
6M38897.D BLK	366056	4.34	265740	5.91	141667	7.13				
6M38898.D BLK	360670	4.34	221697	5.91	118589	7.13				
6M38899.D BLK	320937	4.34	235740	5.91	117091	7.13				

I1 = Fluorobenzene  
 I2 = Chlorobenzene-d5  
 I3 = 1,4-Dichlorobenzene-d4

I4 =  
 I5 =  
 I6 =

625/8270 Internal Standard concentration = 40 mg/L (in final extract)  
 624/8260 Internal Standard concentration = 30ug/L  
 524 Internal Standard concentration = 5ug/L

## QC Limits:

## Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

## Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

## Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

## Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB  
Cont Calibration Date/Time 5/13/2016 9:20:00 AData File: 6M39077.D  
Method: EPA 8260C

Instrument: GCMS 6

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		4.95	55.85	50	20		0.096	0.110	11.69	
cis-1,3-Dichloropropene	1	0		5.04	59.32	50	20	0.2	0.688	0.816	18.63	
trans-1,3-Dichloropropene	1	0		5.31	58.74	50	20	0.1	0.453	0.533	17.48	
Ethyl methacrylate	1	0		5.35	59.88	50	20	0.5	0.285	0.341	19.76	
1,1,2-Trichloroethane	1	0		5.40	52.99	50	20	0.1	0.300	0.318	5.97	
1,2-Dibromoethane	1	0		5.67	54.86	50	20	0.1	0.291	0.320	9.72	
1,3-Dichloropropane	1	0		5.49	59.49	50	20		0.537	0.639	18.98	
4-Methyl-2-Pentanone	1	0		5.11	56.29	50	20	0.1	0.178	0.221	12.59	
2-Hexanone	1	0		5.52	56.20	50	20	0.1	0.112	0.135	12.39	
Tetrachloroethene	1	0		5.50	52.19	50	20	0.2	0.746	0.779	4.39	
Toluene-d8	1	0	S	5.18	32.77	75	**		1.442	1.576	9.24	
Toluene	1	0		5.22	59.88	50	20	0.4	1.474	1.765	19.77	
1,1,1,2-Tetrachloroethane	1	0		5.95	55.73	50	20		0.501	0.559	11.45	
Chlorobenzene	1	0		5.92	53.50	50	20	0.5	1.545	1.653	6.99	
1,4-Dichlorobenzene-d4	1	0	I	7.13	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.19	53.71	50	20	0.5	0.761	1.000	7.42	
n-Amyl acetate	1	0		6.30	58.87	50	20	0.5	0.672	0.937	17.74	
Bromoform	1	0		6.35	48.98	50	20	0.1	0.469	0.460	2.04	
Ethylbenzene	1	0		5.97	69.96	50	20	0.1	1.377	1.927	39.92	C1
1,1,2,2-Tetrachloroethane	1	0		6.56	57.39	50	20	0.1	0.642	0.737	14.78	
Bromofluorobenzene	1	0	S	6.51	28.36	75	**		0.818	0.773	5.47	
Styrene	1	0		6.24	66.70	50	20	0.3	2.250	3.002	33.40	C1
m&p-Xylenes	1	0		6.03	129.35	100	20	0.1	1.645	2.128	29.35	C1
o-Xylene	1	0		6.24	67.29	50	20	0.3	1.542	2.075	34.59	C1
trans-1,4-Dichloro-2-butene	1	0		6.58	59.97	50	20		0.459	0.550	19.94	
1,3-Dichlorobenzene	1	0		7.10	56.07	50	20	0.6	2.070	2.322	12.14	
1,4-Dichlorobenzene	1	0		7.15	51.87	50	20	0.5	2.127	2.206	3.73	
1,2-Dichlorobenzene	1	0		7.36	50.80	50	20	0.4	1.735	1.763	1.59	
Isopropylbenzene	1	0		6.42	67.54	50	20	0.1	4.513	6.096	35.09	C1
Cyclohexanone	1	0		6.58	285.68	250	20		0.040	0.046	14.27	
Camphene	1	0		6.58	59.18	50	20		1.681	1.989	18.37	
1,2,3-Trichloropropane	1	0		6.59	60.72	50	20		0.662	0.700	21.44	C1
2-Chlorotoluene	1	0		6.69	70.86	50	20		3.494	4.952	41.71	C1
p-Ethyltoluene	1	0		6.69	58.31	50	20		4.299	5.014	16.62	
4-Chlorotoluene	1	0		6.75	70.39	50	20		2.935	4.133	40.78	C1
n-Propylbenzene	1	0		6.64	70.59	50	20		5.778	8.157	41.18	C1
Bromobenzene	1	0		6.60	59.35	50	20		2.081	2.470	18.71	
1,3,5-Trimethylbenzene	1	0		6.72	54.30	50	20		3.395	3.687	8.61	
Butyl methacrylate	1	0		6.75	55.49	50	20	0.5	1.112	1.234	10.98	
t-Butylbenzene	1	0		6.91	59.45	50	20		3.467	4.122	18.89	
1,2,4-Trimethylbenzene	1	0		6.93	69.51	50	20		3.045	4.234	39.02	C1
sec-Butylbenzene	1	0		7.02	68.31	50	20		4.956	6.771	36.61	C1
4-Isopropyltoluene	1	0		7.10	69.74	50	20		3.694	5.153	39.49	C1
n-Butylbenzene	1	0		7.33	56.04	50	20		4.580	5.133	12.07	
p-Diethylbenzene	1	0		7.31	68.59	50	20		2.023	2.776	37.18	C1
1,2,4,5-Tetramethylbenzene	1	0		7.75	52.57	50	20		1.982	2.642	5.14	
1,2-Dibromo-3-Chloropropane	1	0		7.78	48.44	50	20	0.05	0.085	0.072	3.12	
Camphor	1	0		8.20	493.55	500	20		0.032	0.034	1.29	
Hexachlorobutadiene	1	0		8.35	46.92	50	20		1.055	0.990	6.16	
1,2,4-Trichlorobenzene	1	0		8.26	51.04	50	20	0.2	1.028	1.049	2.09	
1,2,3-Trichlorobenzene	1	0		8.55	52.06	50	20		0.705	0.734	4.11	
Naphthalene	1	0		8.41	58.33	50	20		0.772	0.900	16.65	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
C1-Compound %Diff exceeds limits

\*\*- No limit specified in method

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Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.HAZ. - 132  
625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB  
Cont Calibration Date/Time 5/13/2016 9:20:00 AData File: 6M39077.D  
Method: EPA 8260C

Instrument: GCMS 6

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.35	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.21	53.61	50	20	0.1	0.752	0.721	7.22	
Dichlorodifluoromethane	1	0		1.20	46.61	50	20	0.1	0.387	0.360	6.79	
Chloromethane	1	0		1.32	51.41	50	20	0.1	0.670	0.688	2.82	
Bromomethane	1	0		1.63	53.42	50	20	0.1	0.267	0.285	6.83	
Vinyl Chloride	1	0		1.40	54.96	50	20	0.1	0.472	0.519	9.92	
Chloroethane	1	0		1.70	54.84	50	20	0.1	0.293	0.321	9.68	
Trichlorofluoromethane	1	0		1.89	55.80	50	20	0.1	0.604	0.674	11.59	
Ethyl ether	1	0		2.09	41.39	50	20	0.5	0.170	0.141	17.22	
Furan	1	0		2.17	59.53	50	20	0.5	0.145	0.192	19.05	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.26	52.16	50	20	0.1	0.528	0.551	4.32	
Methylene Chloride	1	0		2.59	53.96	50	20	0.1	0.370	0.400	7.93	
Acrolein	1	0		2.17	258.55	250	20		0.016	0.015	3.42	
Acrylonitrile	1	0		2.76	48.24	50	20		0.051	0.046	3.52	
Iodomethane	1	0		2.36	52.10	50	20		0.565	0.589	4.19	
Acetone	1	0		2.27	258.38	250	20	0.1	0.044	0.045	3.35	
Carbon Disulfide	1	0		2.42	57.14	50	20	0.1	1.349	1.542	14.28	
t-Butyl Alcohol	1	0		2.64	242.69	250	20		0.006	0.005	2.92	
n-Hexane	1	0		3.02	65.21	50	20		0.725	0.946	30.42	C1
Di-isopropyl-ether	1	0		3.17	64.32	50	20		1.168	1.502	28.64	C1
1,1-Dichloroethene	1	0		2.25	53.90	50	20	0.1	0.754	0.813	7.79	
Methyl Acetate	1	0		2.52	54.12	50	20	0.1	0.137	0.148	8.24	
Methyl-t-butyl ether	1	0		2.80	55.45	50	20	0.1	0.302	0.335	10.89	
1,1-Dichloroethane	1	0		3.11	58.11	50	20	0.2	0.819	0.952	16.23	
trans-1,2-Dichloroethene	1	0		2.81	56.78	50	20	0.1	0.440	0.499	13.56	
Ethyl-t-butyl ether	1	0		3.45	56.04	50	20	0.5	0.523	0.587	12.08	
cis-1,2-Dichloroethene	1	0		3.56	59.03	50	20	0.1	0.713	0.842	18.06	
Bromochloromethane	1	0		3.75	58.41	50	20		0.391	0.456	16.81	
2,2-Dichloropropane	1	0		3.57	56.99	50	20		0.496	0.566	13.98	
Ethyl acetate	1	0		3.62	55.50	50	20		0.135	0.150	10.99	
1,4-Dioxane	1	0		4.74	2154.35	2500	20		0.001	0.001	13.83	
1,1-Dichloropropene	1	0		4.06	58.75	50	20		0.707	0.831	17.51	
Chloroform	1	0		3.80	55.03	50	20	0.2	0.677	0.745	10.06	
Dibromofluoromethane	1	0	S	3.92	27.15	75	**		0.223	0.202	9.51	
Cyclohexane	1	0		4.00	66.84	50	20	0.1	0.813	1.087	33.68	C1
1,2-Dichloroethane-d4	1	0	S	4.14	28.90	75	**		0.094	0.090	3.67	
1,2-Dichloroethane	1	0		4.19	55.60	50	20	0.1	0.321	0.357	11.20	
2-Butanone	1	0		3.57	54.99	50	20	0.1	0.082	0.091	9.98	
1,1,1-Trichloroethane	1	0		3.95	52.81	50	20	0.1	0.634	0.669	5.61	
Carbon Tetrachloride	1	0		4.07	53.60	50	20	0.1	0.539	0.578	7.21	
Vinyl Acetate	1	0		3.17	58.48	50	20		0.737	0.862	16.96	
Bromodichloromethane	1	0		4.80	57.61	50	20	0.2	0.428	0.493	15.22	
Methylcyclohexane	1	0		4.67	58.75	50	20	0.1	0.734	0.862	17.49	
Dibromomethane	1	0		4.73	43.72	50	20		0.179	0.156	12.56	
1,2-Dichloropropane	1	0		4.66	59.40	50	20	0.1	0.367	0.435	18.80	
Trichloroethene	1	0		4.55	55.37	50	20	0.2	0.460	0.509	10.73	
Benzene	1	0		4.19	59.82	50	20	0.5	1.582	1.893	19.63	
tert-Amyl methyl ether	1	0		4.25	51.91	50	20		0.302	0.313	3.82	
Chlorobenzene-d5	1	0	I	5.91	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.22	56.03	50	20	0.5	0.362	0.387	12.06	
Methyl methacrylate	1	0		4.72	55.64	50	20	0.5	0.225	0.251	11.28	
Dibromochloromethane	1	0		5.61	54.20	50	20	0.1	0.392	0.424	8.40	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
CI-Compound %Diff exceeds limits

\*\*- No limit specified in method

Page 1 of 2

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.

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625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB  
Cont Calibration Date/Time 5/12/2016 8:35:00 AData File: 6M39020.D  
Method: EPA 8260C

Instrument: GCMS 6

TxtCompd:	Co#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		4.94	47.37	50	20		0.096	0.093	5.26	
cis-1,3-Dichloropropene	1	0		5.02	44.15	50	20	0.2	0.688	0.607	11.70	
trans-1,3-Dichloropropene	1	0		5.30	46.37	50	20	0.1	0.453	0.420	7.26	
Ethyl methacrylate	1	0		5.34	48.14	50	20	0.5	0.285	0.274	3.72	
1,1,2-Trichloroethane	1	0		5.39	41.93	50	20	0.1	0.300	0.252	16.13	
1,2-Dibromoethane	1	0		5.66	41.14	50	20	0.1	0.291	0.240	17.72	
1,3-Dichloropropane	1	0		5.48	44.78	50	20		0.537	0.481	10.44	
4-Methyl-2-Pentanone	1	0		5.10	43.65	50	20	0.1	0.178	0.170	12.69	
2-Hexanone	1	0		5.52	52.10	50	20	0.1	0.112	0.125	4.20	
Tetrachloroethene	1	0		5.49	45.21	50	20	0.2	0.746	0.675	9.57	
Toluene-d8	1	0	S	5.17	29.40	75	**		1.442	1.413	2.01	
Toluene	1	0		5.20	46.96	50	20	0.4	1.474	1.384	6.08	
1,1,1,2-Tetrachloroethane	1	0		5.95	45.60	50	20		0.501	0.457	8.81	
Chlorobenzene	1	0		5.92	45.11	50	20	0.5	1.545	1.394	9.77	
1,4-Dichlorobenzene-d4	1	0	I	7.12	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.18	46.98	50	20	0.5	0.761	0.873	6.04	
n-Amyl acetate	1	0		6.30	55.06	50	20	0.5	0.672	0.875	10.11	
Bromoform	1	0		6.34	47.72	50	20	0.1	0.469	0.448	4.56	
Ethylbenzene	1	0		5.97	60.03	50	20	0.1	1.377	1.653	20.06	
1,1,2,2-Tetrachloroethane	1	0		6.55	42.27	50	20	0.1	0.642	0.543	15.47	
Bromofluorobenzene	1	0	S	6.50	29.09	75	**		0.818	0.793	3.03	
Styrene	1	0		6.23	52.10	50	20	0.3	2.250	2.345	4.19	
m&p-Xylenes	1	0		6.02	113.22	100	20	0.1	1.645	1.863	13.22	
o-Xylene	1	0		6.23	55.36	50	20	0.3	1.542	1.707	10.71	
trans-1,4-Dichloro-2-butene	1	0		6.57	55.95	50	20		0.459	0.513	11.90	
1,3-Dichlorobenzene	1	0		7.09	50.34	50	20	0.6	2.070	2.084	0.67	
1,4-Dichlorobenzene	1	0		7.14	46.21	50	20	0.5	2.127	1.966	7.58	
1,2-Dichlorobenzene	1	0		7.35	46.06	50	20	0.4	1.735	1.599	7.89	
Isopropylbenzene	1	0		6.42	57.86	50	20	0.1	4.513	5.222	15.71	
Cyclohexanone	1	0		6.57	283.74	250	20		0.040	0.046	13.50	
Camphene	1	0		6.57	55.97	50	20		1.681	1.881	11.94	
1,2,3-Trichloropropane	1	0		6.58	51.15	50	20		0.662	0.590	2.31	
2-Chlorotoluene	1	0		6.69	55.62	50	20		3.494	3.887	11.23	
p-Ethyltoluene	1	0		6.69	56.54	50	20		4.299	4.862	13.09	
4-Chlorotoluene	1	0		6.74	56.57	50	20		2.935	3.321	13.13	
n-Propylbenzene	1	0		6.63	57.79	50	20		5.778	6.678	15.57	
Bromobenzene	1	0		6.59	54.90	50	20		2.081	2.284	9.80	
1,3,5-Trimethylbenzene	1	0		6.72	56.28	50	20		3.395	3.821	12.56	
Butyl methacrylate	1	0		6.74	60.97	50	20	0.5	1.112	1.356	21.93	C1
t-Butylbenzene	1	0		6.90	56.63	50	20		3.467	3.927	13.27	
1,2,4-Trimethylbenzene	1	0		6.92	62.37	50	20		3.045	3.799	24.75	C1
sec-Butylbenzene	1	0		7.02	57.02	50	20		4.956	5.652	14.05	
4-Isopropyltoluene	1	0		7.09	58.53	50	20		3.694	4.325	17.06	
n-Butylbenzene	1	0		7.32	58.52	50	20		4.580	5.360	17.04	
p-Diethylbenzene	1	0		7.30	55.43	50	20		2.023	2.243	10.87	
1,2,4,5-Tetramethylbenzene	1	0		7.74	57.70	50	20		1.982	2.900	15.41	
1,2-Dibromo-3-Chloropropane	1	0		7.77	44.53	50	20	0.05	0.085	0.066	10.93	
Camphor	1	0		8.19	502.36	500	20		0.032	0.034	0.47	
Hexachlorobutadiene	1	0		8.35	52.34	50	20		1.055	1.105	4.68	
1,2,4-Trichlorobenzene	1	0		8.26	44.66	50	20	0.2	1.028	0.918	10.67	
1,2,3-Trichlorobenzene	1	0		8.54	52.18	50	20		0.705	0.735	4.35	
Naphthalene	1	0		8.40	53.04	50	20		0.772	0.819	6.08	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
C1-Compound %Diff exceeds limits

\*\* - No limit specified in method

Page 2 of 2

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found.

HAZ. - 130

625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

## Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB  
Cont Calibration Date/Time 5/12/2016 8:35:00 AData File: 6M39020.D  
Method: EPA 8260C

Instrument: GCMS 6

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.34	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.20	54.53	50	20	0.1	0.752	0.733	9.06	
Dichlorodifluoromethane	1	0		1.19	50.63	50	20	0.1	0.387	0.392	1.26	
Chloromethane	1	0		1.31	44.29	50	20	0.1	0.670	0.593	11.42	
Bromomethane	1	0		1.62	43.23	50	20	0.1	0.267	0.231	13.54	
Vinyl Chloride	1	0		1.39	44.66	50	20	0.1	0.472	0.421	10.68	
Chloroethane	1	0		1.69	46.41	50	20	0.1	0.293	0.272	7.19	
Trichlorofluoromethane	1	0		1.88	46.54	50	20	0.1	0.604	0.562	6.93	
Ethyl ether	1	0		2.07	37.86	50	20	0.5	0.170	0.129	24.27	C1
Furan	1	0		2.17	37.13	50	20	0.5	0.145	0.120	25.74	C1
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.25	45.15	50	20	0.1	0.528	0.477	9.70	
Methylene Chloride	1	0		2.58	45.10	50	20	0.1	0.370	0.334	9.79	
Acrolein	1	0		2.15	280.43	250	20		0.016	0.016	12.17	
Acrylonitrile	1	0		2.75	47.83	50	20		0.051	0.046	4.33	
Iodomethane	1	0		2.35	49.12	50	20		0.565	0.555	1.76	
Acetone	1	0		2.26	248.85	250	20	0.1	0.044	0.043	0.46	
Carbon Disulfide	1	0		2.41	47.63	50	20	0.1	1.349	1.285	4.74	
t-Butyl Alcohol	1	0		2.64	286.30	250	20		0.006	0.006	14.52	
n-Hexane	1	0		3.01	57.06	50	20		0.725	0.827	14.12	
Di-isopropyl-ether	1	0		3.16	56.34	50	20		1.168	1.316	12.68	
1,1-Dichloroethene	1	0		2.24	52.78	50	20	0.1	0.754	0.796	5.56	
Methyl Acetate	1	0		2.50	44.40	50	20	0.1	0.137	0.122	11.21	
Methyl-t-butyl ether	1	0		2.79	53.62	50	20	0.1	0.302	0.324	7.24	
1,1-Dichloroethane	1	0		3.10	50.68	50	20	0.2	0.819	0.830	1.36	
trans-1,2-Dichloroethene	1	0		2.79	48.49	50	20	0.1	0.440	0.426	3.03	
Ethyl-t-butyl ether	1	0		3.44	58.90	50	20	0.5	0.523	0.617	17.81	
cis-1,2-Dichloroethene	1	0		3.55	51.84	50	20	0.1	0.713	0.739	3.69	
Bromochloromethane	1	0		3.74	48.79	50	20		0.391	0.381	2.42	
2,2-Dichloropropane	1	0		3.56	53.64	50	20		0.496	0.532	7.27	
Ethyl acetate	1	0		3.62	54.85	50	20		0.135	0.148	9.69	
1,4-Dioxane	1	0		4.73	1855.68	2500	20		0.001	0.001	25.77	C1
1,1-Dichloropropene	1	0		4.05	53.43	50	20		0.707	0.755	6.87	
Chloroform	1	0		3.80	45.29	50	20	0.2	0.677	0.613	9.43	
Dibromofluoromethane	1	0	S	3.91	28.63	75	**		0.223	0.213	4.58	
Cyclohexane	1	0		3.99	58.57	50	20	0.1	0.813	0.953	17.14	
1,2-Dichloroethane-d4	1	0	S	4.13	30.95	75	**		0.094	0.097	3.16	
1,2-Dichloroethane	1	0		4.17	49.75	50	20	0.1	0.321	0.319	0.51	
2-Butanone	1	0		3.56	44.21	50	20	0.1	0.082	0.074	11.59	
1,1,1-Trichloroethane	1	0		3.94	49.11	50	20	0.1	0.634	0.622	1.78	
Carbon Tetrachloride	1	0		4.05	48.34	50	20	0.1	0.539	0.521	3.31	
Vinyl Acetate	1	0		3.16	56.21	50	20		0.737	0.829	12.43	
Bromodichloromethane	1	0		4.79	48.99	50	20	0.2	0.428	0.419	2.02	
Methylcyclohexane	1	0		4.66	53.45	50	20	0.1	0.734	0.784	6.89	
Dibromomethane	1	0		4.72	46.04	50	20		0.179	0.164	7.91	
1,2-Dichloropropane	1	0		4.66	51.57	50	20	0.1	0.367	0.378	3.14	
Trichloroethene	1	0		4.55	48.95	50	20	0.2	0.460	0.450	2.09	
Benzene	1	0		4.18	51.93	50	20	0.5	1.582	1.643	3.85	
tert-Amyl methyl ether	1	0		4.24	53.52	50	20		0.302	0.323	7.04	
Chlorobenzene-d5	1	0	I	5.90	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.21	48.38	50	20	0.5	0.362	0.332	3.23	
Methyl methacrylate	1	0		4.71	48.30	50	20	0.5	0.225	0.218	3.41	
Dibromochloromethane	1	0		5.60	45.63	50	20	0.1	0.392	0.357	8.74	

S-Surrogate Compound  
N/O or N/Q - Not applicable for this runI-Internal Standard Compound  
C1-Compound %Diff exceeds limits

\*\*- No limit specified in method

Page 1 of 2

Note: 8260/8270 limits are compared against the %DIFF/R.F.  
624 limits are compared against the concentration found. HAZ. - 129625 limits are compared against the %DIFF.  
524.2 limits are compared against the %DIFF

# Form 6

## Initial Calibration

Instrument: GCMS\_6

Method: EPA 8260C

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6M38862.D	CAL @ 20 PPB	05/09/16 16:16	2	6M38861.D	CAL @ 5 PPB	05/09/16 16:00
3	6M38860.D	CAL @ 2 PPB	05/09/16 15:43	4	6M38863.D	CAL @ 50 PPB	05/09/16 16:33
5	6M38868.D	CAL @ 100 PPB	05/09/16 17:56	6	6M38866.D	CAL @ 250 PPB	05/09/16 17:23
7	6M38864.D	CAL @ 500 PPB	05/09/16 16:50	8	6M38859.D	CAL @ 1 PPB	05/09/16 15:27
9	6M38856.D	CAL @ 0.5 PPB	05/09/16 15:10				

Compound	Col	Mr	Ft1	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Cor1	Cor2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	4.4903	4.0466	4.3825	4.9660	4.8157	4.0875	3.3053	---	---	4.30670	0.983	1.00	13	20.00	5.00	2.00	50.00	100.0	250.0	500.0			
4-Chlorotoluene	1	0	Avg	3.2926	2.6372	2.6699	3.5744	3.2594	2.8652	2.2494	---	---	2.94675	0.980	1.00	16	20.00	5.00	2.00	50.00	100.0	250.0	500.0			
n-Propylbenzene	1	0	Avg	6.3879	5.7779	6.4022	6.8044	6.5266	5.3394	3.5802	5.4040	---	5.78664	0.943	1.00	18	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00		
Bromobenzene	1	0	Avg	2.0252	2.0306	2.2473	2.2402	2.2430	1.9141	1.8628	---	---	2.08660	0.998	0.999	7.9	20.00	5.00	2.00	50.00	100.0	250.0	500.0			
1,3,5-Trimethylbenzen	1	0	Avg	3.3310	3.6480	3.4153	3.6731	3.7202	3.5581	2.6546	3.1558	---	3.39673	0.975	0.999	10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00		
Butyl methacrylate	1	0	Avg	0.9945	1.1350	0.7736	1.0880	1.2971	1.2700	1.2244	---	---	1.11675	0.989	1.00	16	20.00	5.00	2.00	50.00	100.0	250.0	500.0			
t-Butylbenzene	1	0	Avg	3.7225	3.1624	3.3668	4.0004	3.8983	3.7851	3.1129	2.6898	---	3.47691	0.989	1.00	13	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00		
1,2,4-Trimethylbenzen	1	0	Avg	3.0808	2.7273	2.7650	3.4372	3.6668	3.4574	2.8640	2.3639	---	3.05693	0.990	1.00	15	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00		
sec-Butylbenzene	1	0	Avg	5.4735	4.9553	5.1655	5.5843	5.6004	4.9337	3.4214	4.5138	---	4.96702	0.957	1.00	15	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00		
4-Isopropyltoluene	1	0	Avg	3.9240	3.3538	3.5164	4.2430	4.2069	3.8609	2.9582	3.4918	---	3.69710	0.978	1.00	12	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00		
n-Butylbenzene	1	0	Avg	5.1613	4.4671	4.3602	5.3876	5.5177	4.7486	3.5712	3.4235	---	4.58732	0.973	1.00	17	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00		
p-Diethylbenzene	1	0	Avg	1.7961	1.6959	1.7990	2.1341	2.4331	2.2895	2.0149	---	---	2.02731	0.995	1.00	14	20.00	5.00	2.00	50.00	100.0	250.0	500.0			
1,2,4,5-Tetramethylbe	1	0	Qua	1.5754	1.4866	1.4001	1.8688	2.4750	2.5764	2.4939	---	---	1.98775	0.999	0.999	26	20.00	5.00	2.00	50.00	100.0	250.0	500.0			
1,2-Dibromo-3-Chloro	1	0	Qua	0.0671	0.1274	0.0992	0.0629	0.0756	0.0801	0.0856	---	---	0.0855778	0.998	1.00	26	20.00	5.00	2.00	50.00	100.0	250.0	500.0			
Camphor	1	0	Qua	0.0187	0.0229	0.0434	0.0283	0.0339	0.0374	0.0399	---	---	0.0321820	0.998	1.00	28	20.00	50.00	20.00	500.0	1000.	2500.	5000.			
Hexachlorobutadiene	1	0	Avg	1.0080	0.9512	1.2346	1.0641	1.1195	1.0655	0.9426	---	---	1.06835	0.996	1.00	9.7	20.00	5.00	2.00	50.00	100.0	250.0	500.0			
1,2,4-Trichlorobenzen	1	0	Avg	0.8513	0.8962	1.3125	0.9335	1.1042	1.0435	1.0534	---	---	1.03827	1.00	1.00	15	20.00	5.00	2.00	50.00	100.0	250.0	500.0			
1,2,3-Trichlorobenzen	1	0	Avg	0.6134	0.5864	0.8408	0.6662	0.7572	0.7348	0.7338	---	---	0.705854	1.00	1.00	13	20.00	5.00	2.00	50.00	100.0	250.0	500.0			
Naphthalene	1	0	Avg	0.6019	0.5726	0.8855	0.6873	0.9110	0.9018	0.9290	0.6860	---	0.772841	0.999	0.999	19	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00		

AZ. - 128

HAZ. - 128

### Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria (if applicable)

### Note:

Avg Rsd: 13.7

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicate whether Avg RF, Linear, or Quadratic Curve was used for compound.



Data File:										Cal Identifier:										Analysis Date/Time															
Level #:	Data File:									Cal Identifier:									Analysis Date/Time																
1	6M38862.D	CAL @ 20 PPB	05/09/16 16:16	2	6M38861.D	CAL @ 5 PPB	05/09/16 16:00	3	6M38860.D	CAL @ 2 PPB	05/09/16 15:43	4	6M38863.D	CAL @ 50 PPB	05/09/16 16:33	5	6M38868.D	CAL @ 100 PPB	05/09/16 17:56	6	6M38866.D	CAL @ 250 PPB	05/09/16 17:23	7	6M38864.D	CAL @ 500 PPB	05/09/16 16:50	8	6M38859.D	CAL @ 1 PPB	05/09/16 15:27	9	6M38858.D	CAL @ 0.5 PPB	05/09/16 15:10
Compound	Col	Mt	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Cor1	Cor2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9									
Methylcyclohexane	1	0	Avg	0.7356	0.5793	0.8525	0.7683	0.8174	0.7662	0.6154	---	---	0.7344	67	0.985	1.00	14	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
Dibromomethane	1	0	Avg	0.1820	0.1772	0.2288	0.1621	0.1816	0.1581	0.1594	---	---	0.1784	73	0.999	0.999	14	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
1,2-Dichloropropane	1	0	Avg	0.3333	0.3636	0.3658	0.3887	0.4051	0.3784	0.3307	---	---	0.3674	66	0.994	1.00	7.5	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
Trichloroethene	1	0	Avg	0.4236	0.4125	0.4600	0.4886	0.5082	0.4859	0.4430	---	---	0.4604	55	0.997	1.00	7.7	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
Benzene	1	0	Avg	1.6436	1.5496	1.8165	1.6658	1.7774	1.5917	1.2058	1.4061	---	1.5843	49	0.976	1.00	13	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
tert-Amyl methyl ether	1	0	Avg	0.2629	0.2347	0.2995	0.2818	0.3354	0.3469	0.3305	---	---	0.3024	25	1.00	1.00	15	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
Iso-propylacetate	1	0	Qua	0.2412	0.2212	0.5767	0.2863	0.3626	0.3954	0.4519	---	---	0.3624	421	0.996	1.00	35	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
Methyl methacrylate	1	0	Avg	0.1794	0.1887	0.2062	0.2123	0.2504	0.2573	0.2828	---	---	0.2254	72	0.998	1.00	17	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
Dibromochloromethan	1	0	Avg	0.3612	0.3922	0.3216	0.3932	0.4235	0.4337	0.4152	---	---	0.3924	61	0.999	1.00	10	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
2-Chloroethylvinyl ether	1	0	Qua	0.0662	0.0968	0.1096	0.0660	0.0888	0.1179	0.1291	---	---	0.0964	495	0.995	0.999	25	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
trans-1,3-Dichloropropen	1	0	Avg	0.5238	0.5716	0.6585	0.6899	0.7720	0.8070	0.7908	---	---	0.6885	503	1.00	1.00	16	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
Ethyl methacrylate	1	0	Avg	0.3701	0.4009	0.3652	0.4458	0.4880	0.5452	0.5580	---	---	0.4535	30	0.999	1.00	18	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
1,1,2-Trichloroethane	1	0	Avg	0.2027	0.2577	0.3383	0.2480	0.2976	0.3176	0.3332	---	---	0.2855	34	0.999	1.00	18	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
1,2-Dibromomethane	1	0	Avg	0.2710	0.2782	0.3368	0.2969	0.3011	0.3138	0.3036	---	---	0.3005	40	1.00	1.00	7.3	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
1,3-Dichloropropane	1	0	Avg	0.2348	0.2889	0.3294	0.2950	0.2962	0.2991	0.2949	---	---	0.2915	68	1.00	1.00	9.7	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
4-Methyl-2-Pentanone	1	0	Avg	0.4770	0.5132	0.5251	0.5789	0.5916	0.5500	0.5241	---	---	0.5375	49	0.999	1.00	7.4	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
2-Hexanone	1	0	Qua	0.1267	0.1441	0.1378	0.1756	0.2025	0.2186	0.2427	---	---	0.1785	50	0.997	1.00	25	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
Tetrachloroethene	1	0	Qua	0.0839	0.0760	0.1051	0.1161	0.1205	0.1330	0.1458	---	---	0.1125	52	0.998	1.00	23	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
Toluene-d8	1	0	Avg	0.6862	0.7850	0.7333	0.8197	0.7914	0.7466	0.6614	---	---	0.7465	50	0.996	1.00	7.7	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
Toluene	1	0	Avg	1.3296	1.3972	1.3745	1.5249	1.4331	1.5638	1.5423	1.4671	1.3495	1.4453	58	1.00	1.00	6.0	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
1,1,2,2-Tetrachloroeth	1	0	Avg	1.2718	1.3567	1.6584	1.6210	1.5137	1.5051	1.3369	1.5283	---	1.4752	21	0.996	1.00	9.4	0.40	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
Chlorobenzene	1	0	Avg	0.4211	0.4501	0.5462	0.5098	0.5416	0.5446	0.4944	---	---	0.5015	96	0.997	1.00	9.9	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
n-Butyl acrylate	1	0	Avg	1.4229	1.5296	1.8510	1.5562	1.6338	1.4928	1.3270	---	---	1.5455	92	0.995	1.00	11	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
n-Amyl acetate	1	0	Qua	0.5762	0.4821	0.4750	0.7634	0.9165	1.0179	1.0746	---	---	0.7616	618	0.999	1.00	33	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
Bromoforn	1	0	Qua	0.5035	0.3961	0.5962	0.6157	0.7773	0.8807	0.9332	---	---	0.6726	30	0.998	1.00	30	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
Ethylbenzene	1	0	Avg	0.4296	0.4679	0.5149	0.4545	0.4782	0.4527	0.4873	---	---	0.4696	34	0.999	1.00	5.9	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
1,1,2,2-Tetrachloroeth	1	0	Avg	1.5814	1.2923	1.0973	1.6527	1.6524	1.4543	1.3516	0.9333	---	1.3855	97	0.997	1.00	19	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
Bromofluorobenzene	1	0	Avg	0.5915	0.6158	0.8565	0.6116	0.6411	0.5841	0.5960	---	---	0.6426	56	1.00	1.00	15	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
Styrene	1	0	Avg	0.8575	0.8612	0.8297	0.7969	0.7585	0.7900	0.8739	0.8028	---	0.8186	51	1.00	1.00	4.8	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
m,p-Xylenes	1	0	Avg	2.1675	1.9217	2.4497	2.3148	2.4454	2.3721	2.0797	---	---	2.2562	24	0.995	1.00	8.9	0.30	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
o-Xylene	1	0	Avg	1.7721	1.5575	1.6867	1.8666	1.8253	1.6047	1.3371	1.8010	---	1.6560	303	0.991	1.00	12	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
trans-1,4-Dichloro-2-b	1	0	Avg	1.5875	1.3394	1.4387	1.8251	1.7204	1.6118	1.3926	1.4200	---	1.5466	24	0.994	1.00	11	0.30	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
1,3-Dichlorobenzene	1	0	Avg	0.4178	0.4194	0.5766	0.4537	0.4781	0.4523	0.4131	---	---	0.4586	59	0.997	1.00	12	0.60	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
1,4-Dichlorobenzene	1	0	Avg	2.1031	2.0824	2.4233	2.1906	2.1408	1.9383	1.6130	---	---	2.0771	10	0.989	1.00	11	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
1,2-Dichlorobenzene	1	0	Avg	2.0122	2.3344	2.5454	2.0538	2.0400	2.0193	1.8730	---	---	2.1371	14	0.999	1.00	11	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
isopropylbenzene	1	0	Avg	1.7618	1.9169	1.8284	1.7099	1.7261	1.6367	1.5679	---	---	1.7473	35	0.999	1.00	6.7	0.40	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
Cyclohexanone	1	0	Avg	4.9098	4.2923	4.2656	5.2581	5.3203	4.6363	4.1196	---	---	4.5164	42	0.992	1.00	15	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
Camphorene	1	0	Avg	0.0382	0.0422	0.0331	0.0423	0.0447	0.0418	0.0404	---	---	0.0404	68	0.999	1.00	9.3	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
1,2,3-Trichloropropane	1	0	Qua	1.6504	1.3464	1.7501	1.7997	1.8061	1.8012	1.6110	---	---	1.6866	58	0.997	1.00	9.9	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
2-Chlorotoluene	1	0	Qua	0.5584	0.7275	1.0030	0.6387	0.6196	0.5447	0.5426	---	---	0.6626	59	0.999	0.999	25	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0										
1	0	Avg	3.8110	3.5944	3.7303	4.2468	3.9626	2.9696	2.1435	---	---	---	3.4966	69	0.953	0.998	20	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0										

## Flags

a - failed the min of criteria

c - failed the minimum correlation coeff criteria (if applicable)

## Note:

Corr 1 = Correlation Coefficient for linear Eq.  
Corr 2 = Correlation Coefficient for quad Eq.  
Fit = Indicates whether Avg R<sup>2</sup>, Linear, or Quadratic Curve was used for compound.

Avg Rsd: 13.7

		Data File:		Cal Identifier:		Analysis Date/Time				Data File:		Cal Identifier:		Analysis Date/Time											
Level #:																									
1	6M38862.D	CAL @ 20 PPB				05/09/16 16:16				2	6M38861.D	CAL @ 5 PPB			05/09/16 16:00										
3	6M38860.D	CAL @ 2 PPB				05/09/16 15:43				4	6M38863.D	CAL @ 50 PPB			05/09/16 16:33										
5	6M38868.D	CAL @ 100 PPB				05/09/16 17:56				6	6M38866.D	CAL @ 250 PPB			05/09/16 17:23										
7	6M38864.D	CAL @ 500 PPB				05/09/16 16:50				8	6M38869.D	CAL @ 1 PPB			05/09/16 15:27										
9	6M38866.D	CAL @ 0.5 PPB				05/09/16 15:10																			
Compound	Col Mtr. FID	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Cor1	Cor2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9	
Chlorodifluoromethane	1	0	Qua	0.6903	0.8459	1.1935	0.6344	0.6667	0.6399	0.5950	---	---	0.752	1.20	0.999	1.00	28	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0
Dichlorodifluorometha	1	0	Avg	0.3966	0.3889	0.4661	0.3550	0.3663	0.3754	0.3562	---	---	0.387	1.20	0.999	1.00	10	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0
Chloromethane	1	0	Avg	0.6890	0.6686	0.9239	0.6070	0.6249	0.6015	0.5716	---	---	0.670	1.31	0.999	1.00	18	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0
Bromomethane	1	0	Avg	0.2736	0.2861	0.3081	0.2503	0.2570	0.2446	0.2468	---	---	0.267	1.62	1.00	1.00	8.9	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0
Vinyl Chloride	1	0	Avg	0.4987	0.4515	0.5486	0.4525	0.4630	0.4517	0.4364	---	---	0.472	1.39	1.00	1.00	8.3	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0
Chloroethane	1	0	Avg	0.2731	0.3354	0.3778	0.2670	0.2750	0.2667	0.2561	---	---	0.283	1.69	1.00	1.00	16	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0
Trichlorofluoromethan	1	0	Avg	0.5842	0.5988	0.6520	0.6151	0.6082	0.5917	0.5773	---	---	0.604	1.88	1.00	1.00	4.1	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0
Ethyl ether	1	0	Avg	0.1741	0.1506	0.1493	0.1727	0.1866	0.1807	0.1756	---	---	0.170	2.08	1.00	1.00	8.5	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0
Furan	1	0	Qua	0.1347	0.0748	0.1520	0.1652	0.1680	0.1590	0.1598	---	---	0.145	2.17	1.00	1.00	23	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0
1,1,2-Trichloro-1,2,2-tr	1	0	Avg	0.4973	0.5941	0.7009	0.4881	0.5050	0.4825	0.4287	---	---	0.528	2.25	0.996	1.00	17	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0
Methylene Chloride	1	0	Avg	0.3570	0.3957	0.4865	0.3459	0.3448	0.3341	0.3267	---	---	0.370	2.58	1.00	1.00	15	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0
Acetone	1	0	Qua	0.0165	0.0154	0.0256	0.0155	0.0147	0.0131	0.0127	---	---	0.016	2.17	0.999	1.00	27		100.0	25.00	10.00	250.0	500.0	250.0	
Acetonitrile	1	0	Qua	0.0388	0.0731	0.0544	0.0463	0.0495	0.0474	0.0473	---	---	0.050	2.75	1.00	1.00	21		20.00	5.00	2.00	50.00	100.0	250.0	500.0
Iodoethane	1	0	Avg	0.5212	0.5612	0.6611	0.5305	0.5767	0.5537	0.5510	---	---	0.565	2.35	1.00	1.00	8.2		20.00	5.00	2.00	50.00	100.0	250.0	500.0
Acetone	1	0	Avg	0.0432	0.0508	0.0554	0.0372	0.0418	0.0395	0.0372	---	---	0.043	2.27	0.999	1.00	16	0.10	100.0	25.00	10.00	250.0	500.0	1250.0	250.0
Carbon Disulfide	1	0	Avg	1.3693	1.3562	1.4679	1.3459	1.3542	1.3065	1.2394	---	---	1.352	2.41	0.999	1.00	5.1	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0
t-Butyl Alcohol	1	0	Qua	0.0039	0.0065	0.0079	0.0045	0.0056	0.0053	0.0052	---	---	0.006	2.64	0.999	0.999	24		100.0	25.00	10.00	250.0	500.0	1250.0	250.0
n-Hexane	1	0	Avg	0.7266	0.5955	0.6549	0.7798	0.8186	0.7713	0.7282	---	---	0.725	3.02	0.999	1.00	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0
Diisopropyl ether	1	0	Avg	1.0345	0.8987	1.1804	1.1966	1.3513	1.3121	1.1998	---	---	1.173	3.16	0.997	1.00	13		20.00	5.00	2.00	50.00	100.0	250.0	500.0
1,1-Dichloroethene	1	0	Avg	0.7589	0.8037	0.6520	0.8010	0.7854	0.7593	0.7174	---	---	0.754	2.25	0.999	1.00	7.2	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0
Methyl Acetate	1	0	Avg	0.1330	0.1052	0.1093	0.1541	0.1607	0.1582	0.1377	---	---	0.137	2.50	0.994	1.00	17	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0
Methyl-t-butyl ether	1	0	Avg	0.2634	0.2496	0.3791	0.2882	0.3475	0.3327	0.3300	0.2262	---	0.302	2.79	1.00	1.00	18	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0
1,1-Dichloroethane	1	0	Avg	0.7578	0.7176	0.9780	0.8305	0.8653	0.8243	0.7674	---	---	0.819	3.10	0.998	1.00	10	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0
trans-1,2-Dichloroeths	1	0	Avg	0.4404	0.4514	0.4123	0.4321	0.4564	0.4554	0.4283	---	---	0.440	2.80	0.999	1.00	3.7	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0
Ethyl-t-butyl ether	1	0	Avg	0.4377	0.3734	0.4750	0.5218	0.6278	0.6180	0.6095	---	---	0.523	3.45	1.00	1.00	19	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0
cis-1,2-Dichloroethene	1	0	Avg	0.6756	0.6444	0.7636	0.7120	0.7498	0.7551	0.6912	---	---	0.713	3.56	0.998	1.00	6.3	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0
Bromochloromethane	1	0	Avg	0.3900	0.3753	0.4904	0.3662	0.3888	0.3688	0.3539	---	---	0.391	3.74	0.999	1.00	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0
2,2-Dichloropropane	1	0	Avg	0.4827	0.4564	0.4823	0.4693	0.5409	0.5417	0.5004	---	---	0.486	3.57	0.998	1.00	6.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0
Ethyl acetate	1	0	Avg	0.1423	0.1097	0.1309	0.1241	0.1393	0.1433	0.1575	---	---	0.135	3.62	0.998	1.00	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0
1,4-Dioxane	1	0	Qua	0.0009	0.0007	0.0007	0.0011	0.0013	0.0013	0.0010	---	---	0.001	2.47	0.988	0.999	25		100.0	25.00	10.00	250.0	500.0	1250.0	250.0
1,1-Dichloropropene	1	0	Avg	0.6953	0.6071	0.7159	0.7743	0.7863	0.7344	0.6341	---	---	0.707	4.06	0.993	1.00	9.5		20.00	5.00	2.00	50.00	100.0	250.0	500.0
Chloroform	1	0	Avg	0.6364	0.6577	0.8567	0.6671	0.6875	0.6399	0.6029	---	---	0.677	3.80	0.999	1.00	12	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0
Dibromofluoromethan	1	0	Avg	0.2317	0.2515	0.2412	0.2286	0.1973	0.1989	0.1906	0.2433	0.2229	0.223	3.91	-1	-1	9.9		30.00	30.00	30.00	30.00	30.00	30.00	30.00
Cyclohexane	1	0	Avg	0.7908	0.7528	0.6794	0.8347	0.9198	0.9157	0.7998	---	---	0.813	4.00	0.995	1.00	11	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0
1,2-Dichloroethane-d4	1	0	Avg	0.1007	0.1032	0.0974	0.0833	0.0947	0.0829	0.0808	0.0965	0.1030	0.093	4.13	-1	-1	9.6		30.00	30.00	30.00	30.00	30.00	30.00	30.00
1,2-Dichloroethane	1	0	Avg	0.3201	0.3288	0.3526	0.3201	0.3262	0.3084	0.2899	---	---	0.321	4.19	0.999	1.00	6.0	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0
2-Butanone	1	0	Qua	0.0930	0.0784	0.1128	0.0807	0.0798	0.0727	0.0586	---	---	0.082	3.56	0.986	1.00	21	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0
1,1,1-Trichloroethane	1	0	Avg	0.5842	0.5978	0.7018	0.6271	0.6731	0.6536	0.5968	---	---	0.634	3.95	0.998	1.00	7.0	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0
Carbon Tetrachloride	1	0	Avg	0.4945	0.4624	0.6951	0.5398	0.5467	0.5491	0.4863	---	---	0.539	4.07	0.996	1.00	14	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0
Vinyl Acetate	1	0	Avg	0.6668	0.6296	0.6384	0.7256	0.8540	0.8306	0.8161	---	---	0.737	3.16	1.00	1.00	13		20.00	5.00	2.00	50.00	100.0	250.0	500.0
Bromodichloromethan	1	0	Avg	0.3933	0.4200	0.4238	0.4451	0.4691	0.4406	0.4026	---	---	0.428	4.80	0.997	1.00	6.1	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0

HAZ. - 126

## Flags

a - failed the min. rj criteria

## Note:

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

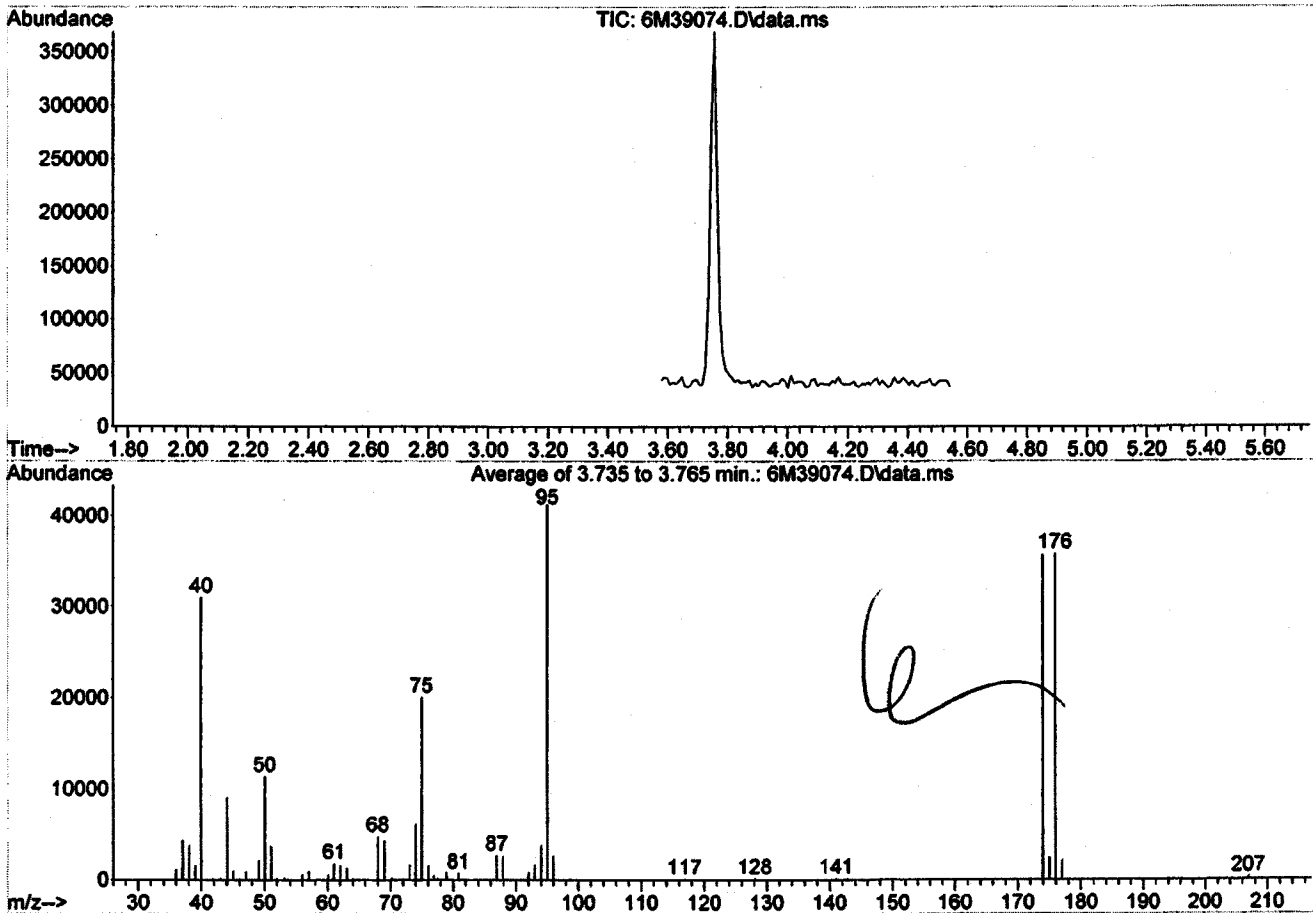
c - failed the minimum correlation coeff. criteria (if applicable)

FID = Indicates whether Avg. RF, Linear, or Quadratic Curve was used for compound.

Data Path : G:\GcMsData\2016\GCMS\_6\Data\05-13-16\  
 Data File : 6M39074.D  
 Acq On : 13 May 2016 8:37  
 Operator : SG  
 Sample : BFB TUNE  
 Misc : S,5G  
 ALS Vial : 6 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2016\GCMS\_6\MethodQt\6M\_S0509.M  
 Title : @GCMS\_6,ug,624,8260  
 Last Update : Mon May 09 19:47:28 2016



Spectrum Information: Average of 3.735 to 3.765 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	27.6	11376	PASS
75	95	30	60	48.8	20134	PASS
95	95	100	100	100.0	41264	PASS
96	95	5	9	6.5	2692	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	86.5	35699	PASS
175	174	5	9	6.9	2451	PASS
176	174	95	101	100.3	35801	PASS
177	176	5	9	6.1	2188	PASS

## Form 5

Tune Name: BFB TUNE  
Instrument: GCMS 6

Data File: 6M39074.D  
Analysis Date: 05/13/16 08:37  
Method: EPA 8260C

Tune Scan/Time Range: Average of 3.735 to 3.765 min

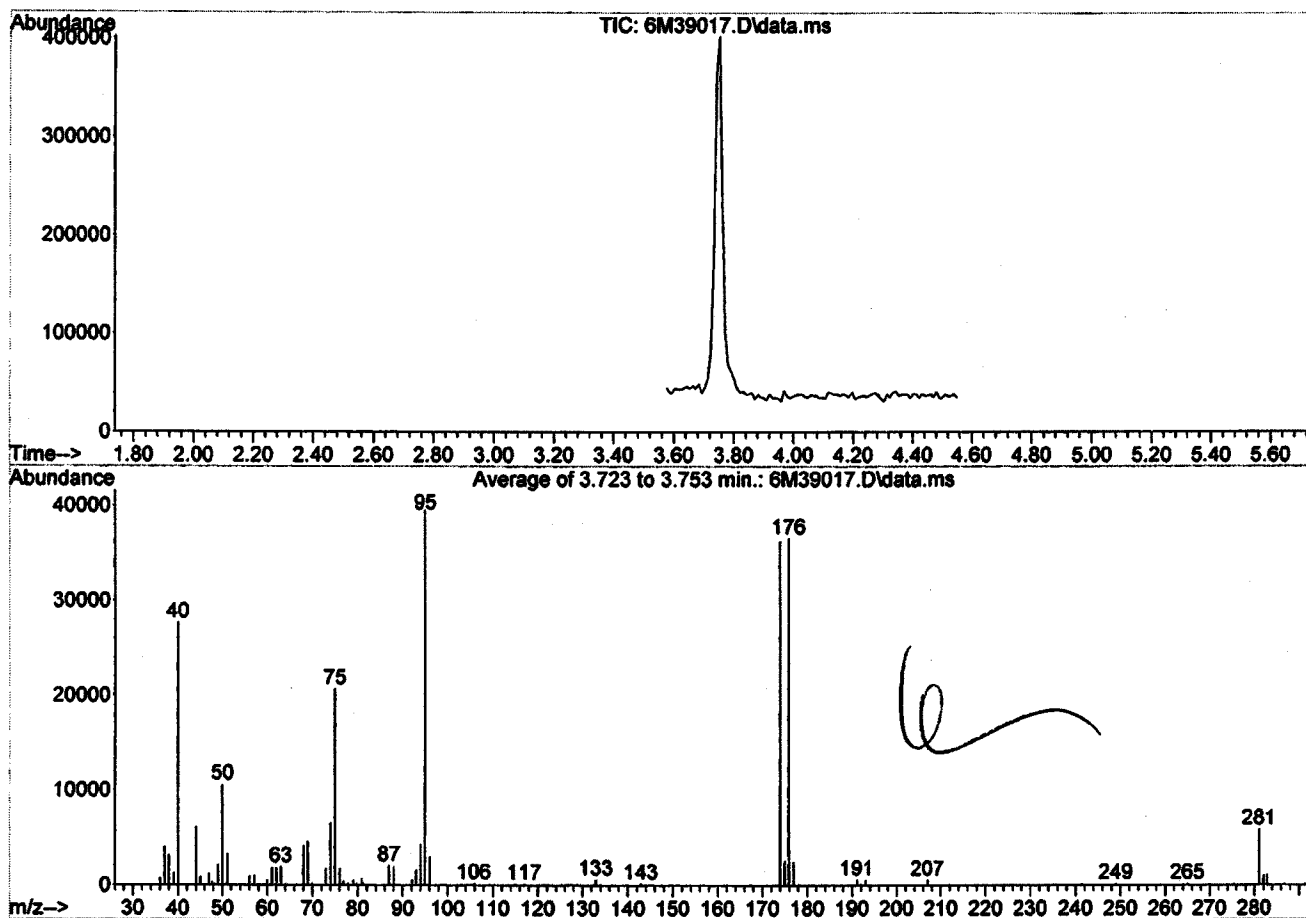
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	27.6	11376	PASS
75	95	30	60	48.8	20134	PASS
95	95	100	100	100.0	41264	PASS
96	95	5	9	6.5	2692	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	86.5	35699	PASS
175	174	5	9	6.9	2451	PASS
176	174	95	101	100.3	35801	PASS
177	176	5	9	6.1	2188	PASS

Data File	Sample Number	Analysis Date:
6M39076.D	50 PPB	05/13/16 09:04
6M39077.D	CAL @ 50 PPB	05/13/16 09:20
6M39079.D	BLK	05/13/16 09:43
6M39080.D	DAILY BLANK	05/13/16 10:00
6M39081.D	BLK	05/13/16 10:17
6M39082.D	AC91319-002	05/13/16 10:34
6M39083.D	AC91319-001(5X)	05/13/16 10:51
6M39084.D	STD	05/13/16 11:07
6M39085.D	BLK	05/13/16 11:24
6M39086.D	AC91274-009	05/13/16 11:40
6M39087.D	AC91274-010	05/13/16 11:57
6M39088.D	MBS53464	05/13/16 12:14
6M39089.D	BLK	05/13/16 12:30
6M39090.D	AC91289-004	05/13/16 12:47
6M39091.D	AC91289-005	05/13/16 13:04
6M39092.D	AC91289-006	05/13/16 13:20
6M39093.D	AC91287-001	05/13/16 13:37
6M39094.D	AC91287-002	05/13/16 13:54
6M39095.D	AC91289-002	05/13/16 14:11
6M39096.D	AC91289-003	05/13/16 14:27
6M39097.D	AC91289-001	05/13/16 14:44
6M39098.D	AC91273-001	05/13/16 15:00
6M39099.D	AC91273-003	05/13/16 15:17
6M39100.D	AC91288-001	05/13/16 15:34
6M39101.D	AC91283-002(MS)	05/13/16 15:51
6M39102.D	AC91283-002(MSD)	05/13/16 16:07
6M39103.D	BLK	05/13/16 16:24
6M39104.D	BLK	05/13/16 16:41
6M39105.D	AC91346-001	05/13/16 16:57
6M39106.D	AC91346-002	05/13/16 17:14
6M39107.D	MBS53466	05/13/16 17:30
6M39108.D	91325-001(5X)	05/13/16 17:47
6M39109.D	AC91270-014	05/13/16 18:04

Data Path : G:\GcMsData\2016\GCMS\_6\Data\05-12-16\  
Data File : 6M39017.D  
Acq On : 12 May 2016 7:52  
Operator : SG  
Sample : BFB TUNE  
Misc : S,5G  
ALS Vial : 4 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2016\GCMS\_6\MethodQt\6M\_S0509.M  
Title : @GCMS\_6,ug,624,8260  
Last Update : Mon May 09 19:47:28 2016



Spectrum Information: Average of 3.723 to 3.753 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	26.7	10596	PASS
75	95	30	60	52.3	20711	PASS
95	95	100	100	100.0	39613	PASS
96	95	5	9	7.6	3011	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	91.7	36329	PASS
175	174	5	9	7.2	2607	PASS
176	174	95	101	100.8	36617	PASS
177	176	5	9	6.8	2474	PASS

## Form 5

Tune Name: BFB TUNE

Data File: 6M39017.D

Instrument: GCMS 6

Analysis Date: 05/12/16 07:52

Method: EPA 8260C

Tune Scan/Time Range: Average of 3.723 to 3.753 min

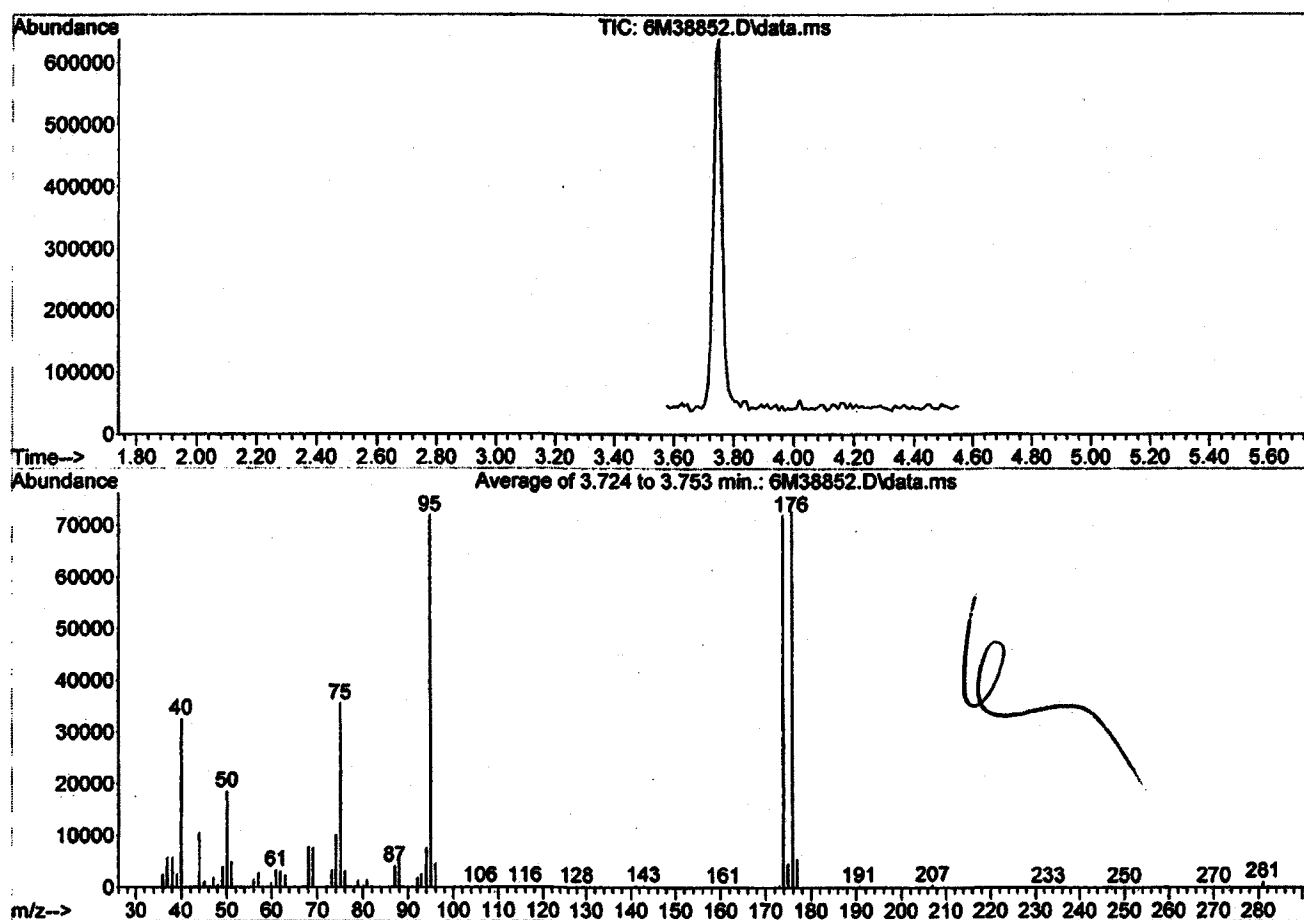
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	26.7	10596	PASS
75	95	30	60	52.3	20711	PASS
95	95	100	100	100.0	39613	PASS
96	95	5	9	7.6	3011	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	91.7	36329	PASS
175	174	5	9	7.2	2607	PASS
176	174	95	101	100.8	36617	PASS
177	176	5	9	6.8	2474	PASS

Data File	Sample Number	Analysis Date:
6M39018.D	BLK	05/12/16 08:02
6M39019.D	50 PPB	05/12/16 08:19
6M39020.D	CAL @ 50 PPB	05/12/16 08:35
6M39021.D	BLK	05/12/16 08:52
6M39022.D	DAILY BLANK	05/12/16 09:09
6M39023.D	BLK	05/12/16 09:26
6M39024.D	AC91283-004	05/12/16 09:42
6M39025.D	AC91283-002	05/12/16 09:59
6M39026.D	AC91283-001(5X)	05/12/16 10:15
6M39027.D	MBS53447	05/12/16 10:32
6M39028.D	AC91283-003(5X)	05/12/16 10:49
6M39029.D	AC91245-001(5X)	05/12/16 11:05
6M39030.D	AC91283-004(MS)	05/12/16 11:22
6M39031.D	AC91283-004(MSD)	05/12/16 11:39
6M39032.D	BLK	05/12/16 11:55
6M39033.D	AC91270-002	05/12/16 12:12
6M39034.D	AC91270-004	05/12/16 12:29
6M39035.D	AC91270-006	05/12/16 12:45
6M39036.D	AC91270-008	05/12/16 13:02
6M39037.D	AC91278-006	05/12/16 13:18
6M39038.D	AC91278-005	05/12/16 13:35
6M39039.D	AC91278-004	05/12/16 13:52
6M39040.D	AC91278-001	05/12/16 14:08
6M39041.D	AC91278-003	05/12/16 14:25
6M39042.D	BLK	05/12/16 14:42
6M39043.D	AC91255-001	05/12/16 14:59
6M39044.D	AC91278-003	05/12/16 15:15
6M39045.D	MBS53454	05/12/16 15:32
6M39046.D	AC91270-018	05/12/16 15:48
6M39047.D	AC91247-007	05/12/16 16:05
6M39048.D	AC91259-001	05/12/16 16:22
6M39049.D	AC91259-002	05/12/16 16:38
6M39050.D	AC91280-001	05/12/16 16:55
6M39051.D	AC91270-020(MS)	05/12/16 17:12
6M39052.D	AC91270-022(MSD)	05/12/16 17:28
6M39053.D	AC91274-001	05/12/16 17:45
6M39054.D	AC91274-002	05/12/16 18:02
6M39055.D	AC91274-003	05/12/16 18:17
6M39056.D	AC91274-004	05/12/16 18:35
6M39057.D	AC91274-005	05/12/16 18:51
6M39058.D	AC91274-006	05/12/16 19:08
6M39059.D	AC91274-007	05/12/16 19:24
6M39060.D	AC91274-008	05/12/16 19:41
6M39061.D	AC91274-009	05/12/16 19:58
6M39062.D	AC91274-010	05/12/16 20:14
6M39063.D	STD	05/12/16 20:31

Data Path : G:\GCMSDATA\2016\GCMS\_6\DATA\05-09-16\  
 Data File : 6M38852.D  
 Acq On : 9 May 2016 13:47  
 Operator : WP  
 Sample : BFB TUNE  
 Misc : S,5G  
 ALS Vial : 18 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2016\GCMS\_6\MethodQt\6M\_S0505.M  
 Title : @GCMS\_6,ug,624,8260  
 Last Update : Thu May 05 15:23:18 2016



Spectrum Information: Average of 3.724 to 3.753 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	25.7	18511	PASS
75	95	30	60	49.2	35495	PASS
95	95	100	100	100.0	72076	PASS
96	95	5	9	6.5	4666	PASS
173	174	0.00	2	0.5	347	PASS
174	95	50	100	99.9	72028	PASS
175	174	5	9	6.5	4710	PASS
176	174	95	101	100.9	72666	PASS
177	176	5	9	7.7	5575	PASS

Data Path : G:\GcMsData\2016\GC\_13\Data\05-13-16\  
Data File : 13M02181.D  
Signal(s) : FID1A.CH  
Acq On : 13 May 2016 11:29  
Operator : SG  
Sample : DAILY BLANK  
Misc : M,MEOH  
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e  
Quant Time: May 16 04:17:39 2016  
Quant Method : G:\GcMsData\2016\GC\_13\MethodQt\13M\_G0421.M  
Quant Title : @GC\_13,ug,8015  
QLast Update : Thu Apr 21 14:02:29 2016  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. :  
Signal Phase :  
Signal Info :

Compound	R.T.	Response	Conc	Units
-----				
System Monitoring Compounds				
1)S 1,4-Dichlorobenzene-d4	9.540	24370	25.169	m
Target Compounds				
-----				

(f)=RT Delta > 1/2 Window

(m)=manual int.

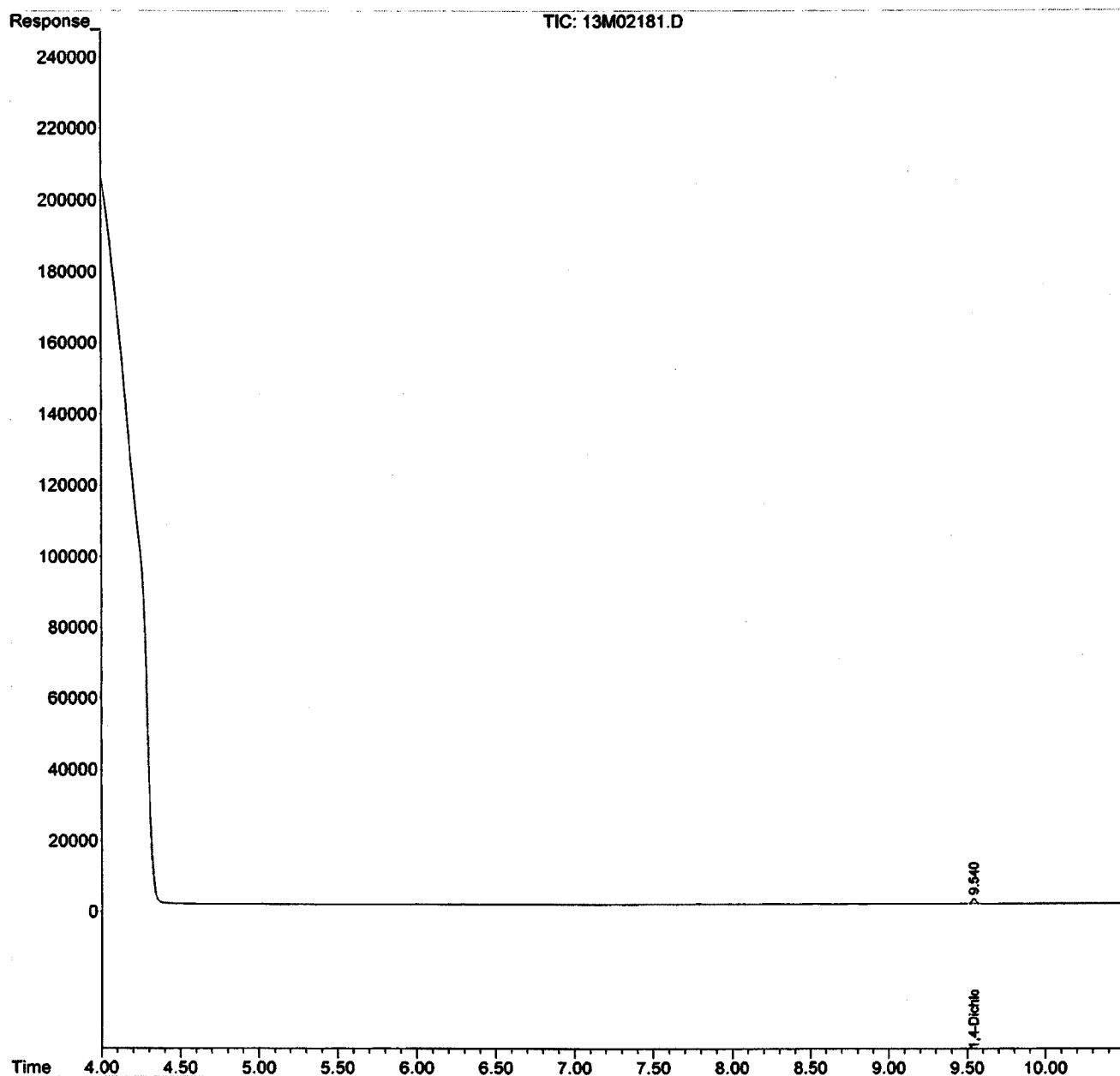
*h*



Data Path : G:\GcMsData\2016\GC\_13\Data\05-13-16\  
Data File : 13M02181.D  
Signal(s) : FID1A.CH  
Acq On : 13 May 2016 11:29  
Operator : SG  
Sample : DAILY BLANK  
Misc : M,MEOH  
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e  
Quant Time: May 16 04:17:39 2016  
Quant Method : G:\GcMsData\2016\GC\_13\MethodQt\13M\_G0421.M  
Quant Title : @GC\_13,ug,8015  
QLast Update : Thu Apr 21 14:02:29 2016  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. :  
Signal Phase :  
Signal Info :



## FORM2

## Surrogate Recovery

Method: EPA 8015D

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column0 S2 Recov	Column0 S3 Recov	Column0 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
13M02084.D	DAILY BLANK	M	05/03/16 09:18	1		86					
13M02181.D	DAILY BLANK	M	05/13/16 11:29	1		84					
13M02184.D	AC91273-002	M	05/13/16 12:25	1		86					
13M02185.D	AC91273-004	M	05/13/16 12:44	1		89					
13M02085.D	MBS52960	M	05/03/16 09:39	1		129					
13M02087.D	AC91009-003	M	05/03/16 10:21	1		96					
13M02088.D	AC91009-003(MS)	M	05/03/16 10:38	1		127					
13M02089.D	AC91009-003(MSD)	M	05/03/16 10:55	1		130					
13M02182.D	MBS53465	M	05/13/16 11:48	1		109					

Flags: SD=Surrogate diluted out

\*=Surrogate out

Method: EPA 8015D

## Soil Limits

Compound	Spike Amt	Limits
S1=1,4-Dichlorobenzene-d4	30	50-150

**Form3**  
**Recovery Data**  
**QC Batch: MBS52960**

**6051104 0144**

Data File		Sample ID:			Analysis Date		
Spike or Dup: 13M02085.D		MBS52960			5/3/2016 9:39:00 AM		
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 8015		Matrix: Methanol			QC Type: MBS		
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	2345.27	0	2000	117	11	181

\* - Indicates outside of limits

# - Indicates outside of standard limits but within method exceedance limits

**Form3**  
**Recovery Data**  
 QC Batch: MBS53465

**6051104 0145**

<b>Data File</b>		<b>Sample ID:</b>		<b>Analysis Date</b>			
Spike or Dup: 13M02182.D		MBS53465		5/13/2016 11:48:00 AM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
<b>Method: 8015</b>		<b>Matrix: Methanol</b>		<b>QC Type: MBS</b>			
<b>Analyte:</b>	<b>Col</b>	<b>Spike Conc</b>	<b>Sample Conc</b>	<b>Expected Conc</b>	<b>Recovery</b>	<b>Lower Limit</b>	<b>Upper Limit</b>
Gasoline Range Organics	1	1631.52	0	2000	82	11	181

\* - Indicates outside of limits

# - Indicates outside of standard limits but within method exceedance limits

**Form3**  
**Recovery Data**  
 QC Batch: MBS52960

6051104 0146

<b>Data File</b>	<b>Sample ID:</b>	<b>Analysis Date</b>
Spike or Dup: 13M02088.D	AC91009-003(MS)	5/3/2016 10:38:00 AM
Non Spike(If applicable): 13M02087.D	AC91009-003	5/3/2016 10:21:00 AM
Inst Blank(If applicable):		
<b>Method: 8015</b>	<b>Matrix: Methanol</b>	<b>QC Type: MS</b>

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	1904.31	0	2000	95	11	181

<b>Data File</b>	<b>Sample ID:</b>	<b>Analysis Date</b>
Spike or Dup: 13M02089.D	AC91009-003(MSD)	5/3/2016 10:55:00 AM
Non Spike(If applicable): 13M02087.D	AC91009-003	5/3/2016 10:21:00 AM
Inst Blank(If applicable):		
<b>Method: 8015</b>	<b>Matrix: Methanol</b>	<b>QC Type: MSD</b>

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	1879.7	0	2000	94	11	181

\* - Indicates outside of limits

# - Indicates outside of standard limits but within method exceedance limits

**Form3  
RPD DATA**

**6051104 0147**

**QC Batch: MBS52960**

<b>Data File</b>	<b>Sample ID:</b>	<b>Analysis Date</b>
Spike or Dup: 13M02089.D	AC91009-003(MSD)	5/3/2016 10:55:00 AM
Duplicate(If applicable): 13M02088.D	AC91009-003(MS)	5/3/2016 10:38:00 AM
Inst Blank(If applicable):		
<b>Method: 8015</b>	<b>Matrix: Methanol</b>	<b>QC Type: MSD</b>

<b>Analyte:</b>	<b>Column</b>	<b>Dup/MSD/MSD Conc</b>	<b>Sample/MS/MBS Conc</b>	<b>RPD</b>	<b>Limit</b>
Gasoline Range Organics	1	1879.7	1904.31	1.3	40
* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated					

**FORM 4**  
Blank Summary

Blank Number: DAILY BLANK  
Blank Data File: 13M02084.D  
Matrix: Methanol

Blank Analysis Date: 05/03/16 09:18  
Blank Extraction Date: NA  
(If Applicable)  
Method: EPA 8015D

Sample Number	Data File	Analysis Date
AC91009-003(MSD)	13M02089.D	05/03/16 10:55
AC91009-003(MS)	13M02088.D	05/03/16 10:38
AC91009-003	13M02087.D	05/03/16 10:21
MBS52960	13M02085.D	05/03/16 09:39

**FORM 4**  
Blank Summary

Blank Number: DAILY BLANK  
Blank Data File: 13M02181.D  
Matrix: Methanol

Blank Analysis Date: 05/13/16 11:29  
Blank Extraction Date: NA  
(If Applicable)  
Method: EPA 8015D

Sample Number	Data File	Analysis Date
AC91273-002	13M02184.D	05/13/16 12:25
AC91273-004	13M02185.D	05/13/16 12:44
MBS53465	13M02182.D	05/13/16 11:48



## Form 5

Method: EPA 8015D

Instrument: GC\_13

Column: DB-624 25M 0.200mm ID 1.12um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
13M01914.D	BLK	04/21/16 09:09	Aqueous					
13M01915.D	CAL @ 250 PPB	04/21/16 09:29	Aqueous	13M0192	9.5465	0.109		
13M01917.D	CAL @ 500 PPB	04/21/16 10:08	Aqueous	13M0192	9.5335	0.0273		
13M01919.D	CAL @ 750 PPB	04/21/16 10:47	Aqueous	13M0192	9.5370	0.0094		
13M01921.D	CAL @ 1000 PPB	04/21/16 11:25	Aqueous	13M0192	9.5488	0.1331		
13M01923.D	CAL @ 1500 PPB	04/21/16 12:04	Aqueous	13M0192	9.5424	0.066		
13M01925.D	CAL @ 2000 PPB	04/21/16 12:42	Aqueous	13M0192	9.5484	0.1289		
13M01927.D	CAL @ 4000 PPB	04/21/16 13:21	Aqueous	13M0192	9.5361	0		
13M01930.D	2000 PPB	04/21/16 14:24	Aqueous	13M0192	9.5275	0.0902		

Drift Compound: 1,4-Dichloroben

Drift Limit(s): 0.5 (Pest/Pcb) 1.5 (Herb/Tph)

\* - Values outside of limits for this column/run

## Form 5

Method: EPA 8015D  
Instrument: GC\_13

Column: DB-624 25M 0.200mm ID 1.12um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
13M02079.D BLK		05/03/16 07:49	Aqueous	13M0210	0.0000	200		
13M02081.D CAL @ 2000 PPB		05/03/16 08:25	Aqueous	13M0208	9.5522	0		
13M02083.D BLK		05/03/16 09:01	Methanol	13M0208	9.5384	0.1446		
13M02084.D DAILY BLANK		05/03/16 09:18	Methanol	13M0208	9.5380	0.1488		
13M02085.D MBS52960		05/03/16 09:39	Methanol	13M0208	9.5414	0.1131		
13M02086.D BLK		05/03/16 09:59	Methanol	13M0208	9.5447	0.0786		
13M02087.D AC91009-003		05/03/16 10:21	Methanol	13M0208	9.5201	0.3366		
13M02088.D AC91009-003(MS)		05/03/16 10:38	Methanol	13M0208	9.5190	0.3482		
13M02089.D AC91009-003(MSD)		05/03/16 10:55	Methanol	13M0208	9.5175	0.3639		
13M02091.D AC91074-007		05/03/16 11:33	Methanol	13M0208	9.5133	0.4081		
13M02093.D AC91085-001		05/03/16 12:10	Methanol	13M0208	9.5122	0.4196		
13M02094.D AC91102-001		05/03/16 12:31	Methanol	13M0208	9.5150	0.3902		
13M02097.D AC91107-001		05/03/16 13:11	Methanol	13M0208	9.5108	0.4343		
13M02098.D AC91102-001		05/03/16 13:33	Methanol	13M0208	9.5127	0.4144		
13M02099.D 2000 PPB		05/03/16 13:55	Aqueous	13M0208	9.5127	0.4144		
13M02102.D CAL @ 2000 PPB		05/03/16 15:02	Aqueous	13M0208	9.5122	0.4196		

Drift Compound: 1,4-Dichloroben

Drift Limit(s): 0.5 (Pest/Pcb) 1.5 (Herb/Ph)

\* - Values outside of limits for this column/run

## Form 5

Method: EPA 8015D

Instrument: GC\_13

Column: DB-624 25M 0.200mm ID 1.12um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
13M02179.D CAL @ 2000 PPB		05/13/16 10:49	Aqueous	13M0217	9.5447	0		
13M02181.D DAILY BLANK		05/13/16 11:29	Methanol	13M0217	9.5399	0.0503		
13M02182.D MBS53465		05/13/16 11:48	Methanol	13M0217	9.5444	0.0031		
13M02184.D AC91273-002		05/13/16 12:25	Methanol	13M0217	9.5202	0.257		
13M02185.D AC91273-004		05/13/16 12:44	Methanol	13M0217	9.5267	0.1888		
13M02186.D AC91280-002		05/13/16 13:05	Methanol	13M0217	9.5408	0.0409		
13M02187.D CAL @ 2000 PPB		05/13/16 13:23	Aqueous	13M0217	9.5427	0.021		

Drift Compound: 1,4-Dichloroben

Drift Limit(s): 0.5 (Pest/Pcb) 1.5 (Herb/Tox)

\* - Values outside of limits for this column/run

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Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	13M01927.	CAL @ 4000 PPB	04/21/16 13:21	2	13M01925.	CAL @ 2000 PPB	04/21/16 12:42
3	13M01923.	CAL @ 1500 PPB	04/21/16 12:04	4	13M01921.	CAL @ 1000 PPB	04/21/16 11:25
5	13M01919.	CAL @ 750 PPB	04/21/16 10:47	6	13M01917.	CAL @ 500 PPB	04/21/16 10:08
7	13M01915.	CAL @ 250 PPB	04/21/16 09:29				

Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRt	RT	Corr1	Corr2	%Rsd	LV1	LV2	LV3	LV4	LV5	LV6	LV7	LV8
1,4-Dichlorobenzene-d4	1	0	Avg	---	0.1193	0.1058	0.0969	0.0913	0.0860	0.0814	---	0.0968	9.54	-1	-1	14	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
2-Methylpentane	1	0	Avg	0.0054	0.0059	0.0053	0.0061	0.0068	0.0078	0.0041	---	0.0059	5.50	0.992	0.993	20	4000.	2000.	1500.	1000.	750.0	500.0	250.0	250.0
1,2,4-Trimethylbenzene	1	0	Avg	0.0008	0.0009	0.0008	0.0009	0.0008	0.0008	0.0008	---	0.0008	9.26	0.999	0.999	3.0	4000.	2000.	1500.	1000.	750.0	500.0	250.0	250.0
Gasoline Range Organics	1	0	Avg	0.0983	0.0847	0.0849	0.0879	0.0908	0.0962	0.1092	---	0.0935	7.78	0.992	1.00	9.6	4000.	2000.	1500.	1000.	750.0	500.0	250.0	250.0

## Flags

c - failed the initial calibration criteria (if applicable)

## Notes:

Col = Column Number

Mr = Molar Mass Analyte (0=single peak analyte, &gt;0=multi peak analyte (i.e. nch/chlorofane etc..))

Fit = Indicates whether Ave RF, Linear, or Quadratic Curve was used for compound.

Corr 1 = Correlation Coefficient for linear Fit.

Corr 2 = Correlation Coefficient for anal Fit.

LV1: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Avg Rsd Col 1: 23.3

Avg Rsd Col 2: -1

All Response Factors = Response Factors / 10000

Initial Calibration Criteria: either %RSD &lt;=20 or Corr &gt;= .995

Columns: Signal #1 db-1701 : Signal #2 db-608

**Form7**  
Continuing Calibration

Method: EPA 8015D

6051104 0154

		<b>Data File:</b>		13M02081.D	13M02102.D	13M02179.D	13M02187.D	
		<b>Method:</b>		8015	8015	8015	8015	
		<b>Calibration Name:</b>		CAL @ 2000 PPB	CAL @ 2000 PPB	CAL @ 2000 PPB	CAL @ 2000 PPB	
		<b>Calibration Date/Time</b>		05/03/16 08:25	05/03/16 15:02	05/13/16 10:49	05/13/16 13:23	
		<b>Conc</b>						<b>Conc</b>
<b>Compound</b>	<b>Limit Col Mr</b>	<b>Conc</b>	<b>Exp %Diff</b>	<b>Conc</b>	<b>Exp %Diff</b>	<b>Conc</b>	<b>Exp %Diff</b>	<b>Conc</b>
		<b>Conc</b>	<b>Exp %Diff</b>	<b>Conc</b>	<b>Exp %Diff</b>	<b>Conc</b>	<b>Exp %Diff</b>	<b>Conc</b>
Gasoline Range Orga	20 1 0	2045 2000	2.3	2141 2000	7.1	2147 2000	7.4	1979 2000 1.0

**TCLP Metal Data**

# Form1

## Inorganic Analysis Data Sheet

Sample ID: AC91273-002  
 Client Id: SB02 COMP  
 Matrix: TCLP  
 Level: LOW

% Solid: 0  
 Units: MG/L  
 Date Rec: 5/11/2016

Lab Name: Veritech  
 Lab Code:  
 Contract:

Nras No:  
 Sdg No:  
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	05/14/16	52412	T19372A3	15	P	PEICP3A
7440-39-3	Barium	0.25	0.45	1	50	50	05/14/16	52412	T19372A3	15	P	PEICP3A
7440-43-9	Cadmium	0.050	ND	1	50	50	05/14/16	52412	T19372A3	15	P	PEICP3A
7440-47-3	Chromium	0.10	ND	1	50	50	05/14/16	52412	T19372A3	15	P	PEICP3A
7439-92-1	Lead	0.050	ND	1	50	50	05/14/16	52412	T19372A3	15	P	PEICP3A
7439-97-6	Mercury	0.00070	ND	1	25	25	05/16/16	52412	H19372T	14	CV	HGCV2A
7440-02-0	Nickel	0.10	ND	1	50	50	05/14/16	52412	T19372A3	15	P	PEICP3A
7782-49-2	Selenium	0.10	ND	1	50	50	05/14/16	52412	T19372A3	15	P	PEICP3A
7440-22-4	Silver	0.050	ND	1	50	50	05/14/16	52412	T19372A3	15	P	PEICP3A

Comments:

### Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit  
 P - ICP-AES  
 CV - Cold Vapor  
 MS - ICP-MS

# Form1

## Inorganic Analysis Data Sheet

Sample ID: AC91273-004  
 Client Id: SB01 COMP  
 Matrix: TCLP  
 Level: LOW

% Solid: 0  
 Units: MG/L  
 Date Rec: 5/11/2016

Lab Name: Veritech  
 Lab Code:  
 Contract:

Nras No:  
 Sdg No:  
 Case No:

Cas No.	Analyte	RL	Conc.	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.10	ND	1	50	50	05/14/16	52412	T19372A3	23	P	PEICP3A
7440-39-3	Barium	0.25	0.60	1	50	50	05/14/16	52412	T19372A3	23	P	PEICP3A
7440-43-9	Cadmium	0.050	ND	1	50	50	05/14/16	52412	T19372A3	23	P	PEICP3A
7440-47-3	Chromium	0.10	ND	1	50	50	05/14/16	52412	T19372A3	23	P	PEICP3A
7439-92-1	Lead	0.050	0.058	1	50	50	05/14/16	52412	T19372A3	23	P	PEICP3A
7439-97-6	Mercury	0.00070	ND	1	25	25	05/16/16	52412	H19372T	17	CV	HGCV2A
7440-02-0	Nickel	0.10	ND	1	50	50	05/14/16	52412	T19372A3	23	P	PEICP3A
7782-49-2	Selenium	0.10	ND	1	50	50	05/14/16	52412	T19372A3	23	P	PEICP3A
7440-22-4	Silver	0.050	ND	1	50	50	05/14/16	52412	T19372A3	23	P	PEICP3A

Comments: \_\_\_\_\_

### Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit  
 P - ICP-AES  
 CV - ColdVapor  
 MS - ICP-MS



# Form1

## Inorganic Analysis Data Sheet

Sample ID: MB 52412 (1)  
 Client Id: MB 52412 (1)  
 Matrix: TCLP  
 Level: LOW

% Solid: 0  
 Units: MG/L

Lab Name: Veritech  
 Lab Code:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File	Seq Num	M	Instr
7429-90-5	Aluminum	1.0	ND	1	50	50	05/14/16	52412	T19372A3	12	P	PEICP3A
7440-36-0	Antimony	0.070	ND	1	50	50	05/14/16	52412	T19372A3	12	P	PEICP3A
7440-38-2	Arsenic	0.10	ND	1	50	50	05/14/16	52412	T19372A3	12	P	PEICP3A
7440-39-3	Barium	0.25	ND	1	50	50	05/14/16	52412	T19372A3	12	P	PEICP3A
7440-41-7	Beryllium	0.012	ND	1	50	50	05/14/16	52412	T19372A3	12	P	PEICP3A
7440-43-9	Cadmium	0.050	ND	1	50	50	05/14/16	52412	T19372A3	12	P	PEICP3A
7440-70-2	Calcium	5.0	ND	1	50	50	05/14/16	52412	T19372A3	12	P	PEICP3A
7440-47-3	Chromium	0.10	ND	1	50	50	05/14/16	52412	T19372A3	12	P	PEICP3A
7440-48-4	Cobalt	0.10	ND	1	50	50	05/14/16	52412	T19372A3	12	P	PEICP3A
7440-50-8	Copper	0.10	ND	1	50	50	05/14/16	52412	T19372A3	12	P	PEICP3A
7439-89-6	Iron	1.0	ND	1	50	50	05/14/16	52412	T19372A3	12	P	PEICP3A
7439-92-1	Lead	0.050	ND	1	50	50	05/14/16	52412	T19372A3	12	P	PEICP3A
7439-95-4	Magnesium	5.0	ND	1	50	50	05/14/16	52412	T19372A3	12	P	PEICP3A
7439-96-5	Manganese	0.10	ND	1	50	50	05/14/16	52412	T19372A3	12	P	PEICP3A
7439-97-6	Mercury	0.00070	ND	1	25	25	05/16/16	52412	H19372T	11	CV	HGCV2A
7439-98-7	Molybdenum	0.10	ND	1	50	50	05/14/16	52412	T19372A3	12	P	PEICP3A
7440-02-0	Nickel	0.10	ND	1	50	50	05/14/16	52412	T19372A3	12	P	PEICP3A
7782-49-2	Selenium	0.10	ND	1	50	50	05/14/16	52412	T19372A3	12	P	PEICP3A
7440-22-4	Silver	0.050	ND	1	50	50	05/14/16	52412	T19372A3	12	P	PEICP3A
7440-28-0	Thallium	0.10	ND	1	50	50	05/14/16	52412	T19372A3	12	P	PEICP3A
7440-31-5	Tin	0.10	ND	1	50	50	05/14/16	52412	T19372A3	12	P	PEICP3A
7440-32-6	Titanium	0.10	ND	1	50	50	05/14/16	52412	T19372A3	12	P	PEICP3A
7440-62-2	Vanadium	0.10	ND	1	50	50	05/14/16	52412	T19372A3	12	P	PEICP3A
7440-66-6	Zinc	0.10	ND	1	50	50	05/14/16	52412	T19372A3	12	P	PEICP3A

Comments:

### Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit  
 P - ICP-AES  
 CV - Cold Vapor  
 MS - ICP-MS

# FORM 2 (ICV/CCV Summary)

Date Analyzed: 05/14/16  
 Data File: T19372A3  
 Prep Batch: 52412  
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A  
 Instrument: PEICP3A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 6051104

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICV/CCV SOURCE: VH G LABS

Analyte	ICV/CC V Amt	ICV (1) V- 231730- 7	Rec	CCV V- 231730- 20	Rec	CCV V- 231730- 29	Rec	Rec	Rec	Rec	Rec
Arsenic	1/5	0.47869	96	0.47108	94	0.48415	97				
Barium	1/5	0.48854	98	0.47119	94	0.49100	98				
Cadmium	1/5	0.49397	99	0.49048	98	0.50127	100				
Chromium	1/5	0.49197	98	0.47852	96	0.50021	100				
Lead	1/5	0.48272	97	0.47657	95	0.48562	97				
Nickel	1/5	0.50373	101	0.49920	100	0.51156	102				
Selenium	1/5	0.47505	95	0.47075	94	0.47870	96				
Silver	0.2/0.1	0.09671	97	0.09450	95	0.09874	99				

**Notes:** a-indicates analyte failed the ICV limits for 6010B/6010C, 6020/6020A  
 b-indicates analyte failed the ICV limits for 200.7 or 200.8  
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B/6010C (Except Hg 7470/7470A,7471A/7471B),6020/6020A  
 d-indicates analyte failed the CCV limits Hg 7470A/7471A/7471B

**Qc Limits:** ICV - 200.7 : 95-105  
 CCV - 200.7/200.8/6010B/6010C/245.1 : 90-110 (Except Hg 7470/7470A/ 7471A/7471B=80-120)  
 ICV -6010B/6010C/6020/6020A/200.8 : 90-110

CLP ICP ICV/CCV: 90-110  
 CLP Hg ICV/CCV: 80-120

# FORM 2 (LLICV/LLCCV Summary)

Date Analyzed: 05/14/16

Data File: T19372A3

Prep Batch: 52412

Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Instrument: PEICP3A

Units: All units in ppm except Hg and icp-rs in ppb

Project Number: 6051104

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

ICV/CCV SOURCE: VHG LABS

Analyte	LLICV/ LLCCV Amt	LLICV [leach] V- 231031- Rec	LLCCV [leach] V- 231031- 21 Rec	LLCCV [leach] V- 231031- 30 Rec	Rec	Rec	Rec	Rec	Rec	Rec
Arsenic	0.1/0.1	0.0946742	95	0.0934746	93	0.0914553	91			
Barium	0.25/0.25	0.260983	104	0.257582	103	0.261315	105			
Cadmium	0.05/0.05	0.0501684	100	0.0488719	98	0.0501326	100			
Chromium	0.1/0.1	0.104180	104	0.104004	104	0.106650	107			
Lead	0.05/0.05	0.0501762	100	0.0489730	94	0.0507242	101			
Nickel	0.1/0.1	0.0983383	98	0.0971157	97	0.0986522	99			
Selenium	0.1/0.1	0.104306	104	0.103117	103	0.101318	101			
Silver	0.05/0.05	0.0491217	98	0.0493182	99	0.0497276	99			

**Notes:** a-indicates analyte failed the LLICV limits for 6010B, 6010C, 6020, 6020A  
c-indicates analyte failed the LLCCV limits for 6010B, 6010C, 6020, 6020A

**Qc Limits:** LLCCV- 6010B/6010C/6020/6020A (70-130)  
LLICV -6010B/6010C/6020/6020A :70-130

# FORM 2 (ICV/CCV Summary)

Date Analyzed: 05/16/16  
 Data File: H19372T  
 Prep Batch: 52412  
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A  
 Instrument: HGCV2A  
 Units: All units in ppm except Hg and icp-ms in ppb  
 Project Number: 6051104

Lab Name: Veritech  
 Lab Code:  
 Contract:  
 Nras No:  
 Sdg No:  
 Case No:  
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV (2)-9		CCV-20															
	ICV/CC	V Amt	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Mercury	20/10	20.47000	102	9.56100	96													

**Notes:** a-indicates analyte failed the ICV limits for 6010B/6010C, 6020/6020A  
 b-indicates analyte failed the ICV limits for 200.7 or 200.8  
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B/6010C (Except Hg 7470/7470A,7471A/7471B),6020/6020A  
 d-indicates analyte failed the CCV limits Hg 7470A/7471A/7471B

**Qc Limits:** ICV - 200.7 : 95-105  
 CCV- 200.7/200.8/6010B/6010C/245.1 : 90-110 (Except Hg 7470/7470A/ 7471A/7471B=80-120)  
 ICV -6010B/6010C/6020/6020A/200.8 : 90-110

CLP ICP ICV/CCV: 90-110  
 CLP Hg ICV/CCV: 80-120

# FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 05/14/16

Data File: T19372A3

Prep Batch: 52412

Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Instrument: PEICP3A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 6051104

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-228950- 9	CCB V-228950- 22	CCB V-228950- 31	MB 52412 (1)- 12	EF-V-232543- 26
Arsenic	.1 U	.1 U	.1 U	.1 U	.1 U
Barium	.25 U	.25 U	.25 U	.25 U	.25 U
Cadmium	.05 U	.05 U	.05 U	.05 U	.05 U
Chromium	.1 U	.1 U	.1 U	.1 U	.1 U
Lead	.05 U	.05 U	.05 U	.05 U	.05 U
Nickel	.1 U	.1 U	.1 U	.1 U	.1 U
Selenium	.1 U	.1 U	.1 U	.1 U	.1 U
Silver	.05 U	.05 U	.05 U	.05 U	.05 U

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB  
u-indicates result below reporting limit

**FORM 3**  
**(ICB/CCB/MB Summary)**

Date Analyzed: 05/16/16

Data File: H19372T

Prep Batch: 52412

Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Instrument: HGCV2A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 6051104

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB-10	CCB-21	MB 52412 (1)- 11	EF1 V-232543 5/13-19
Mercury	.7 U	.7 U	7 U	7 U

**Notes:** a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB  
u-indicates result below reporting limit

# **FORM 4** **(ICSA/ICSAB Summary)**

Date Analyzed: 05/14/16

Data File: T19372A3

Prep Batch: 52412

Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Instrument: PEICP3A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 6051104

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V- 232168-10		ICSAB V- 232169-11		ICSA V- 232168-27		ICSAB V- 232169-28		Rec	Rec	Rec	Rec
			Rec		Rec		Rec		Rec				
Aluminum	500	494.524	99	508.26200	102	512.595	103	514.86600	103				
Arsenic	1	U		1.04305	104	U		1.03494	103				
Barium	.5	U		0.55591	111	U		0.55305	111				
Cadmium	1	U		1.07883	108	U		1.06877	107				
Calcium	500	489.939	98	491.39600	98	499.229	100	494.62300	99				
Chromium	.5	U		0.53565	107	U		0.53596	107				
Iron	200	195.982	98	194.50100	97	198.046	99	198.49700	99				
Lead	1	U		0.99748	100	U		0.98857	99				
Magnesium	500	511.719	102	507.61900	102	520.816	104	520.80500	104				
Nickel	1	U		1.02672	103	U		1.02163	102				
Selenium	1	U		0.99261	99	U		1.00034	100				
Silver	1	U		1.10342	110	U		1.11847	112				

**Notes:** a-indicates absolute value of the concentration > 2 \* Reporting Limits in the ICSA

b-indicates absolute value of the concentration above Reporting Limits but &lt; 2 \* Reporting Limits in the ICSA

c-indicates the recovery failed the Qc Criteria in the ICSAB

u-indicates the absolute value of the concentration was below the reporting limit

**FORM5/FORM7**  
**SPIKE RECOVERY DATA**  
 PREP BATCH: 52412

**6051104 0165**

ment Type: ICP/HG

Analytical Method(s): 6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR		Matrix: TCLP		SampleID: LCSW MR 52412							
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim	
Arsenic	52412	1	T19372A3	14	0.4667	0.50	93		80	120	
Barium	52412	1	T19372A3	14	0.4799	0.50	96		80	120	
Cadmium	52412	1	T19372A3	14	0.4881	0.50	98		80	120	
Chromium	52412	1	T19372A3	14	0.4807	0.50	96		80	120	
Lead	52412	1	T19372A3	14	0.4735	0.50	95		80	120	
Mercury	52412	1	H19372T	13	9.8080	10	98		80	120	
Nickel	52412	1	T19372A3	14	0.4955	0.50	99		80	120	
Selenium	52412	1	T19372A3	14	0.4663	0.50	93		80	120	
Silver	52412	1	T19372A3	14	0.0964	0.100	96		80	120	

TxtQcType: LCS		Matrix: TCLP		SampleID: LCSW 52412							
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim	
Arsenic	52412	1	T19372A3	13	0.4656	0.50	93		80	120	
Barium	52412	1	T19372A3	13	0.4761	0.50	95		80	120	
Cadmium	52412	1	T19372A3	13	0.4938	0.50	99		80	120	
Chromium	52412	1	T19372A3	13	0.4782	0.50	96		80	120	
Lead	52412	1	T19372A3	13	0.4799	0.50	96		80	120	
Mercury	52412	1	H19372T	12	10.6900	10	107		80	120	
Nickel	52412	1	T19372A3	13	0.5006	0.50	100		80	120	
Selenium	52412	1	T19372A3	13	0.4707	0.50	94		80	120	
Silver	52412	1	T19372A3	13	0.0954	0.100	95		80	120	

cType: MS		Matrix: TCLP		SampleID: AC91273-002									
Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Arsenic	52412	1	T19372A3	17	T19372A3	15	0.4872	.1U	0.50	97		50	
Barium	52412	1	T19372A3	17	T19372A3	15	0.8520	0.4524	0.50	80		50	
Cadmium	52412	1	T19372A3	17	T19372A3	15	0.4868	.05U	0.50	97		50	
Chromium	52412	1	T19372A3	17	T19372A3	15	0.4738	.1U	0.50	95		50	
Lead	52412	1	T19372A3	17	T19372A3	15	0.4819	.05U	0.50	96		50	
Mercury	52412	1	H19372T	16	H19372T	14	9.5310	.70U	10	95		50	
Nickel	52412	1	T19372A3	17	T19372A3	15	0.4898	.1U	0.50	98		50	
Selenium	52412	1	T19372A3	17	T19372A3	15	0.4905	.1U	0.50	98		50	
Silver	52412	1	T19372A3	17	T19372A3	15	0.0965	0.05U	0.10	97		50	



**FORM5/FORM7**  
**SPIKE RECOVERY DATA**  
 PREP BATCH: 52412

**6051104 0166**

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS		Matrix: TCLP		SampleID: AC91273-002								
Analyte	DF	Data Fil	Seq#	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Arsenic	1	T19372A3	18	T19372A3	15	0.4812	.1U	0.5	96		80	120
Barium	1	T19372A3	18	T19372A3	15	0.8981	0.4524	0.5	89		80	120
Cadmium	1	T19372A3	18	T19372A3	15	0.4748	.05U	0.5	95		80	120
Chromium	1	T19372A3	18	T19372A3	15	0.4627	.1U	0.5	93		80	120
Lead	1	T19372A3	18	T19372A3	15	0.4717	.05U	0.5	94		80	120
Nickel	1	T19372A3	18	T19372A3	15	0.4793	.1U	0.5	96		80	120
Selenium	1	T19372A3	18	T19372A3	15	0.4826	.1U	0.5	97		80	120
Silver	1	T19372A3	18	T19372A3	15	0.0949	0.05U	0.1	95		80	120

**FORM6/FORM9**  
**RPD/%Difference Data**  
 PREP BATCH: 52412

**6051104 0167**

ment Type: ICP/HG

tical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR		Matrix: TCLP		SampleID: LCSW MR 52412					
Analyte	BatchId	Data Fil	Seq#	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	52412	T19372A3	14	T19372A3	13	0.4667	0.4656	.24	20
Barium	52412	T19372A3	14	T19372A3	13	0.4799	0.4761	.8	20
Cadmium	52412	T19372A3	14	T19372A3	13	0.4881	0.4938	1.2	20
Chromium	52412	T19372A3	14	T19372A3	13	0.4807	0.4782	.51	20
Lead	52412	T19372A3	14	T19372A3	13	0.4735	0.4799	1.3	20
Mercury	52412	H19372T	13	H19372T	12	9.8080	10.6900	8.6	20
Nickel	52412	T19372A3	14	T19372A3	13	0.4955	0.5006	1	20
Selenium	52412	T19372A3	14	T19372A3	13	0.4663	0.4707	.93	20
Silver	52412	T19372A3	14	T19372A3	13	0.0964	0.0954	.98	20

TxtQcType: MR		Matrix: TCLP		SampleID: AC91273-002					
Analyte	BatchId	Data Fil	Seq#	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	52412	T19372A3	16	T19372A3	15	.1U	.1U	---	20
Barium	52412	T19372A3	16	T19372A3	15	0.4443	0.4524	1.8	20
Cadmium	52412	T19372A3	16	T19372A3	15	.05U	.05U	---	20
Chromium	52412	T19372A3	16	T19372A3	15	.1U	.1U	---	20
Lead	52412	T19372A3	16	T19372A3	15	.05U	.05U	---	20
Mercury	52412	H19372T	15	H19372T	14	.70U	.70U	---	20
Nickel	52412	T19372A3	16	T19372A3	15	.1U	.1U	---	20
Selenium	52412	T19372A3	16	T19372A3	15	.1U	.1U	---	20
Silver	52412	T19372A3	16	T19372A3	15	0.05U	0.05U	---	20

QcType: SD		Matrix: TCLP		SampleID: AC91273-002						
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Arsenic	52412	T19372A3	19	T19372A3	15	5	-0.0014	0.0026	---	10
Barium	52412	T19372A3	19	T19372A3	15	5	0.0977	0.4524	8	10
Cadmium	52412	T19372A3	19	T19372A3	15	5	0.0003	0.0007	---	10
Chromium	52412	T19372A3	19	T19372A3	15	5	0.0030	0.0037	305	c 10
Lead	52412	T19372A3	19	T19372A3	15	5	0.0057	0.0249	15	c 10
Nickel	52412	T19372A3	19	T19372A3	15	5	-0.0002	0.0040	---	10
Selenium	52412	T19372A3	19	T19372A3	15	5	0.0080	0.0121	---	10
Silver	52412	T19372A3	19	T19372A3	15	5	0.0017	0.0016	420	c 10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5\*RL

c-Serial dilution Out but conc < 10 \* IDL

## Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\IT19372A3.txt

Analysis Date: 05/13/16

Instrument: PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-228950	1	CAL	23:55	1							V-228950(ICB/CCB)
CALST1 V-231078	1	CAL	23:58	2							V-231078(ICS1 - Lowest std)
CALST2 V-231724	1	CAL	00:01	3							V-231724(ICS2 - Low Std)
CALST3 V-231726	1	CAL	00:04	4							V-231726(ICS3 - Middle Std)
CALST4 V-232167	1	CAL	00:08	5							V-232167(ICS4 - High std)
ICS3 V-231726	1	ICS	00:12	6							V-231726(ICS3 - Middle Std)
ICV (1) V-231730	1	ICV	00:16	7							V-231730(CCV)
LLICV (leach) V-231031	1	LLICV	00:20	8		TCLP	TCLP	SW846	52412		V-231031(LLICV/CCV leachate)
ICB V-228950	1	ICB	00:23	9							V-228950(ICB/CCB)
ICSA V-232168	1	ICSA	00:26	10							V-232168(ICS4)
ICSAB V-232169	1	ICSAB	00:30	11							V-232169(ICSAB)
MB 52412 (1)	1	MB	00:34	12		TCLP	TCLP	SW846	52412		0
LCSW 52412	1	LCS	00:37	13		TCLP	TCLP	SW846	52412		0
LCSW MR 52412	1	LCS	00:41	14		TCLP	TCLP	SW846	52412		0
AC91273-002	1	SMP	00:45	15	METALS-TCLP	TCLP	TCLP	SW846	52412		0
AC91273-002	1	MR	00:48	16	METALS-TCLP	TCLP	TCLP	SW846	52412		0
AC91273-002	1	MS	00:52	17	METALS-TCLP	TCLP	TCLP	SW846	52412		0
AC91273-002	1	PS	00:56	18	METALS-TCLP	TCLP	TCLP	SW846	52412		0
AC91273-002	5	SD	00:59	19	METALS-TCLP	TCLP	TCLP	SW846	52412		0
CCV V-231730	1	CCV	01:03	20							V-231730(CCV)
LLCCV (leach) V-231031	1	LLCCV	01:07	21		TCLP	TCLP	SW846	52412		V-231031(LLICV/CCV leachate)
CCB V-228950	1	CCB	01:10	22							V-228950(ICB/CCB)
AC91273-004	1	SMP	01:13	23	METALS-TCLP	TCLP	TCLP	SW846	52412		0
AC91074-006	1	SMP	01:17	24	PB-TCLP	TCLP	TCLP	SW846	52412		0
AC91280-002	1	SMP	01:21	25	METALS-TCLP	TCLP	TCLP	SW846	52412		0
EF-V-232543	1	EF	01:24	26		TCLP	TCLP	SW846	52412		V-232543(EF-1)
ICSA V-232168	1	ICSA	01:28	27							V-232168(ICS4)
ICSAB V-232169	1	ICSAB	01:32	28							V-232169(ICSAB)
CCV V-231730	1	CCV	01:35	29							V-231730(CCV)
LLCCV (leach) V-231031	1	LLCCV	01:39	30		TCLP	TCLP	SW846	52412		V-231031(LLICV/CCV leachate)
CCB V-228950	1	CCB	01:42	31							V-228950(ICB/CCB)

Comments/Reviewed by:

olufemi  
192.168.1.85 5/16/2016 8:59:17 AMRUN IS OK  
All elements reported

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: \_\_\_\_\_

Standard/Batch/SnCl2 Lot #:

# Run Log

6051104 0169

Page 1 of 1

Data File: W:\METALS\FRMICPDATA\NewHGC2A\H19372T.txt

Analysis Date: 05/16/16

Instrument: HGC2A

Sample Id	Qc DF	Qc Type	Run Time	Test #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	15:01	1							0
2 PPB	1	CAL	15:03	2							0
5 PPB	1	CAL	15:04	3							0
1 PPB	1	CAL	15:06	4							0
2 PPB	1	CAL	15:07	5							0
5 PPB	1	CAL	15:09	6							0
10 PPB	1	CAL	15:10	7							0
25 PPB	1	CAL	15:12	8							0
ICV (2)	1	ICV	15:14	9							0
ICB	1	ICB	15:16	10							0
MB 52412 (1)	1	MB	15:17	11	HG-TCLP	TCLP	TCLP	SW846	52412		0
LCS 52412	1	LCS	15:19	12	HG-TCLP	TCLP	TCLP	SW846	52412		0
LCS MR 52412	1	LCS	15:21	13	HG-TCLP	TCLP	TCLP	SW846	52412		0
AC91273-002	1	SMP	15:23	14	HG-TCLP	TCLP	TCLP	SW846	52412		0
AC91273-002	1	MR	15:24	15	HG-TCLP	TCLP	TCLP	SW846	52412		0
AC91273-002	1	MS	15:26	16	HG-TCLP	TCLP	TCLP	SW846	52412		0
AC91273-004	1	SMP	15:28	17	HG-TCLP	TCLP	TCLP	SW846	52412		0
AC91280-002	1	SMP	15:29	18	HG-TCLP	TCLP	TCLP	SW846	52412		0
EF1 V-232543 5/13	1	EF	15:31	19	HG-TCLP	TCLP	TCLP	SW846	52412		V-232543 5/130
CCV	1	CCV	15:32	20							0
CCB	1	CCB	15:34	21							0

Comments/Reviewedby:

68.1.25 5/16/2016 3:44:13 PM

OK

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: \_\_\_\_\_

Standard/Batch/SnCl2 Lot #:

V-233313

HAZ. - 247

8 5/16/16

Hampton-Clarke

## ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A 3050B 200.7/200.8 OTHER \_\_\_\_\_Batch No.: 19372Analyst: CJAQC Number: 92412Prep Date: 5/13/16Matrix: TCLPReviewed By: at

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ML	50ML				--	Balance used: <u>N/A</u>
LCS						--	Pipettes used: <u>145</u>
LCSD						--	
1. <u>91273-002</u>					<u>5/13/16</u>	<u>91273-002</u>	Hot Block used: <u>1</u>
MR <u>↓ -002</u>							
MS <u>↓ -002</u>							
MSD <u>---</u>							
2. <u>91273-004</u>							
3. <u>91074-006</u>							
4. <u>91280-002</u>							
5. <u>91-1-232543</u>							<u>5/13</u>
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 92.9 C (90-95° C) Start Time: 10:00am End Time: 13:00

	Volume mL	Lot #
LCS, LCSD	<u>0.25</u>	<u>V-10074, 10075</u>
LLCS, LLLCSD		<u>V-</u>
MS, MSD	<u>0.25</u>	<u>V-10074, 10075</u>
LLMS, LLMSD		<u>V-</u>

Acid	Vol mL	Lot#
HNO <sub>3</sub>	<u>3</u>	<u>V-10138</u>
HCl		<u>V-</u>
H <sub>2</sub> O <sub>2</sub>		<u>V-</u>

Acid	Vol mL	Lot#
1:1 HNO <sub>3</sub>		<u>V-</u>
1:1 HCl	<u>5</u>	<u>V-280228</u>

Relinquished By: CJADate: 5/13/16Received By: atDate: 5/13/16

# HG SAMPLE PREPARATION LOG

6051104 0171

ANALYTICAL METHOD: 245.1 (7470A) 7471B OTHER \_\_\_\_\_

Batch No.: 19372

QC Number: 62412

Matrix: TOLP

Analyst: JLA

Prep Date: 10/13/16

Review By: AS

LAB ID#	MERCURY		COMMENTS	STANDARDS
	INITIAL	FINAL		
Method blank	20mL	20mL		CAL CURVE BLK 0ppb V- 233182
LCS				
LCSD				STD 0.2 ppb V- 233183
1 91293-002				STD 0.5 ppb V- 184
MR -002				STD 1.0 ppb V- 180
MS -002				STD 2.0 ppb V- 186
MSD				STD 5.0 ppb V- 187
2 91293-004				STD 10.0 ppb V- 188
3 91280-002				STD 25.0 ppb V- 189
4 PF-1-232543			9/13	ICV 10.0 ppb V- 233180
5				CCV 20.0 ppb V- 233181
6				
7				
8				Balance used: N/A
9				Pipettes used: 130, 135, 121
10				
11				Hot Block used: 7
12				
13				
14				
15				
16				
17				
18				
19				
20				

Lot Numbers	Acid	Volume (mL)	Lot #
K <sub>2</sub> Cr <sub>2</sub> O <sub>7</sub> V- 230556	HNO <sub>3</sub>	0.125mL	V- 10065
K <sub>2</sub> S <sub>2</sub> O <sub>8</sub> V- 230558	HCl		V-
NH <sub>4</sub> OH V- 230557	H <sub>2</sub> SO <sub>4</sub>	1.20mL	V- 9964
	Aqua Regia		V-

**B <sub>1</sub> Temp: 93.2 °C
Time In: 11:15
Time Out: 12:15

Spike Volume & Lot #

☐ LCS V- 233133 0.15mL

☐ MS V- 233133 0.250 mL

☐ Standards/Control Batch B- 21217

Start time: 10:00 End Time: 12:15

\*\*Temperature  
245.1 / 7470A: 90-95C  
7471B: 92-98C

Relinquished By: JLA

\*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veripro using the standard batch number and the corresponding V #s.

## **Wet Chemistry Data**

## VERITECH Wet Chem Form1 Analysis Summary

Lab#: AC91273-002

Matrix Soil

Client SampleID: SB02 COMP

Project Number: 6051104

Received Date: 5/11/2016

Collect Date: 5/11/2016

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide (Reactive)	CN-REACTIVE	1	ND	mg/Kg	0.50	05/13/16	05/13/16
Ignitability Screen (POS/NEG)	IGNIT-1030	1	NEG			05/12/16	05/12/16
Burning Rate (mm/sec)	IGNIT-1030	1	NA			05/12/16	05/12/16
Flame Propagation (POS/NEG)	IGNIT-1030	1	NA			05/12/16	05/12/16
Paint Filter Test	PAINT FILTER	1	NEG				05/12/16
pH	PH-SOIL	1	8	pH			05/12/16
Sulfide (Reactive)	S-REACTIVE	1	ND	mg/kg	100	05/13/16	05/13/16

Lab#: AC91273-004

Matrix Soil

Client SampleID: SB01 COMP

Project Number: 6051104

Received Date: 5/11/2016

Collect Date: 5/11/2016

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide (Reactive)	CN-REACTIVE	1	ND	mg/Kg	0.50	05/13/16	05/13/16
Ignitability Screen (POS/NEG)	IGNIT-1030	1	NEG			05/12/16	05/12/16
Burning Rate (mm/sec)	IGNIT-1030	1	NA			05/12/16	05/12/16
Flame Propagation (POS/NEG)	IGNIT-1030	1	NA			05/12/16	05/12/16
Paint Filter Test	PAINT FILTER	1	NEG				05/12/16
pH	PH-SOIL	1	9.2	pH			05/12/16
Sulfide (Reactive)	S-REACTIVE	1	ND	mg/kg	100	05/13/16	05/13/16



**VERITECH Wet Chem Form1 Analysis Summary**  
**% Solids****TestGroupName: % Solids SM2540G****Project #: 6051104****TestGroup: %SOLIDS**

Lab#	Client SampleID	Matrix	Dilution:	Result	Units:	RL	Prep Date	Analysis Date	Received Date	Collect Date
AC91273-001	SB02	Soil	1	90	Percent			05/12/16	05/11/16	05/11/16
AC91273-002	SB02 COMP	Soil	1	88	Percent			05/12/16	05/11/16	05/11/16
AC91273-003	SB01	Soil	1	88	Percent			05/12/16	05/11/16	05/11/16
AC91273-004	SB01 COMP	Soil	1	90	Percent			05/12/16	05/11/16	05/11/16

## Calibration Summary:

6051104 0175

Instrument: DA1

Analysis Meth: SW846 7.3.3

lyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide (Reactive)	20160513155	9	ICV	91	0.4	90-110
Cyanide (Reactive)	20160513155	21	CCV	91	0.4	90-110
Cyanide (Reactive)	20160513155	25	CCV	93	0.4	90-110

## Blank Summary

Instrument: DA1

Qc Type: Method Blank Summary				Prep Date: 5/13/16		
Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20160513155	5/13/16 16:22	MBS-916	11	Cyanide (	ND	0.50
Qc Type: ICB Summary				Prep Date: NA		
Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20160513155	5/13/16 16:20	CCB	10	Cyanide (	ND	0.020
Qc Type: CCB Summary				Prep Date: NA		
Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20160513155	5/13/16 16:47	CCB	22	Cyanide (	ND	0.020
20160513155	5/13/16 16:54	CCB	26	Cyanide (	ND	0.020

## LCS Recoveries

BatchRunID/RunID:====>		201605131559-12								
QcBatchID:====>		LCSS-916								
Date/Time:====>		05/13/16 16:25								
Analytical Method:====>		SW846 7.3.3								
Matrix:====>		Soil		Soil	Soil	Soil	Soil			
SW846 7.3.										
Analyte	Amt	Limits	Amt	Limits	% Rec	Flags	% Rec	Flags	% Rec	Flags
Cyanide (Res	0.4	75-125			110					

## MS/MSD/DUP Recovery

6051104 0178

Prep Batch: S-916

Sample ID: AC91234-001

Method: SW846 7.3.3

Matrix: Soil

Qc Type: MS									MS/MSD/DUP			Non Spike		
		Limits			MS	Sample								
Analyte	Amt	Recov	Dil	Conc	Conc	% Rec	Flag		Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide (Reactive)	0.4	75-125	1	0.4019	0	100			20160513155	13	05/13/16 16:27	20160513155	15	05/13/16 16:32

Qc Type: MSD										MS/MSD/DUP			Non Spike		
Analyte	Amt	Limits		Dil	MSD Conc	Sample Conc	% Rec	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
		Recov	Rpd												
Cyanide (Reactive)	0.4	75-125	20	1	0.4202	0	105	4.5		20160513155	14	05/13/16 16:29	20160513155	15	05/13/16 16:32

## Analysis Type: RS

Batch Number: RS-916

Units: mg/kg

## Qc Summary Results

## Calibration Curve Information

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
CAL-01	CAL-01-05/13/16	16	90-110	NA	15.62925	98	NA	
LCS	LCS	400	75-125	NA	390.73125	98	NA	
MS	AC91234-001	400	75-125	NA	400.75	100	NA	
MSD	AC91234-001	400	75-125	20	380.7125	95	5.1	

## Analytical Method(s)

SW846 7.3.4

Sam #	Type	MB	Result	RL	Per Sol	Full Titr Vol	Iod Vol	DF	Sam Wt (g)	Scrb Vol (ml)	Prep Date	Prep By	Anal Date	Anal By
CAL-01-05/13/16	CAL-01		16		100	15.629	6.1	10	1	250	250			05/13/16 BCT
MB-1-05/13/16	MB	MB-1-05/13/16	ND	100	100	20.038	9.8	10	1	10	250	05/13/16	BCT	05/13/16 BCT
LCS	LCS	MB-1-05/13/16	390	100	100	390.73	6.1	10	1	10	250	05/13/16	BCT	05/13/16 BCT
AC91234-001	MS	MB-1-05/13/16	400	100	92	400.75	6.0	10	1	10	250	05/13/16	BCT	05/13/16 BCT
AC91234-001	MSD	MB-1-05/13/16	380	100	92	380.71	6.2	10	1	10	250	05/13/16	BCT	05/13/16 BCT
AC91234-001	Sample	MB-1-05/13/16	ND	100	92	30.056	9.7	10	1	10	250	05/13/16	BCT	05/13/16 BCT
AC91273-002	Sample	MB-1-05/13/16	ND	100	88	10.019	9.9	10	1	10	250	05/13/16	BCT	05/13/16 BCT
AC91273-004	Sample	MB-1-05/13/16	ND	100	90	0	10.0	10	1	10	250	05/13/16	BCT	05/13/16 BCT
AC91280-002	Sample	MB-1-05/13/16	ND	100	93	30.056	9.7	10	1	10	250	05/13/16	BCT	05/13/16 BCT
AC91295-001	Sample	MB-1-05/13/16	ND	100	100	20.038	9.8	10	1	10	250	05/13/16	BCT	05/13/16 BCT
AC91315-001	Sample	MB-1-05/13/16	ND	100	80	30.056	9.7	10	1	10	250	05/13/16	BCT	05/13/16 BCT
1324-001	Sample	MB-1-05/13/16	ND	100	100	10.019	9.9	10	1	10	250	05/13/16	BCT	05/13/16 BCT
1325-001	Sample	MB-1-05/13/16	ND	100	90	20.038	9.8	10	1	10	250	05/13/16	BCT	05/13/16 BCT

AM  
5/13/16

DW  
5/14/16

Flag Codes: Ra - Recovery failed specified criteria (PVS/LCS/MS/MSD/ICV/CAL)

Rp - RPD failed specified criteria.

Na - Not Applicable

HAZ - 257

Nc - Not Checked ..either one or both values =ND

# Analysis Type: PAINT FILT

6051104 0180

Batch Number: PAINT FILT-702

Units:

## Qc Summary Results

### Calibration Curve Information

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
DUP	AC91273-002	0	NA	NA	#Error	NA	NA	

### Analytical Method(s)

EPA 9095A

Sam #	Type	MB	Result	RL	Per Sol	Full Pos/Ne	Result9	Prep Date	Prep By	Anal Date	Anal By
AC91273-002	DUP		NEG		100	0	NEG			05/12/16	SDL
AC91273-002	Sample		NEG		100	0	NEG			05/12/16	SDL
AC91273-004	Sample		NEG		100	0	NEG			05/12/16	SDL

*SKL*  
5/12/16

*SW*  
5/16/16

Flag Codes: Ra - Recovery failed specified criteria (PVS/LCS/MS/MSD/ICV/CAL)  
Na - Not Applicable

Rp - RPD failed specified criteria.  
HAZ 258  
NC - Not Checked ..either one or both values =ND

Analysis Type: PH-S

6051104 0181

Batch Number: PH-S-1315

Units: pH

## Calibration Curve Information

## Qc Summary Results

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
DUP	AC91273-002	0	NA	20	7.99	NA	0.5	
LCS	LCS	4.4	75-125	NA	4.38	100	NA	

## Analytical Method(s)

9040C/9045D

Sam #	Type	MB	Result	RL	Per Sol	Full PH Result	Prep Date	Prep By	Anal Date	Anal By
LCS	LCS		4.4		100	4.38 4.38			05/12/16	SDL
AC91273-002	DUP		8		100	7.99 7.99			05/12/16	SDL
AC91273-002	Sample		8		100	7.95 7.95			05/12/16	SDL
AC91234-001	Sample		8.7		100	8.72 8.72			05/12/16	SDL
AC91280-002	Sample		8.2		100	8.25 8.25			05/12/16	SDL
AC91273-004	Sample		9.2		100	9.17 9.17			05/12/16	SDL

8M  
5/12/16DW  
5/16/16Flag Codes: Ra - Recovery failed specified criteria (PVS/LCS/MS/MSD/ICV/CAL)  
Na - Not Applicable

Rp - RPD failed specified criteria.

HAZ - 259

Nc - Not Checked ..either one or both values =ND



## % Solids Report

Analysis Type: SOLIDS-SS  
BatchID: SOLIDS-SS-5438

QcType	SampleID:	Rounded Result	Raw Result	Units	Tare Weight	Wet Weight	Dry Weight	Analysis Date	Analyzed By	QC RPD	Rpd Limit
DUP	AC91255-001	93	92.75510	Percent	1.35	11.15	10.43	05/12/16	BEENA	1	5
Sample	AC91255-001	92	91.79031	Percent	1.36	11.47	10.64	05/12/16	BEENA		
Sample	AC91269-001	84	84.05379	Percent	1.35	11.76	10.10	05/12/16	BEENA		
Sample	AC91269-002	76	75.93840	Percent	1.36	11.75	9.25	05/12/16	BEENA		
Sample	AC91269-003	89	88.69295	Percent	1.36	11.00	9.91	05/12/16	BEENA		
Sample	AC91269-004	77	77.02465	Percent	1.37	12.73	10.11	05/12/16	BEENA		
Sample	AC91269-005	86	85.72835	Percent	1.36	11.52	10.07	05/12/16	BEENA		
Sample	AC91269-006	75	74.89837	Percent	1.36	11.20	8.73	05/12/16	BEENA		
Sample	AC91269-007	75	74.61883	Percent	1.38	12.53	9.70	05/12/16	BEENA		
Sample	AC91269-008	75	74.85876	Percent	1.38	12.00	9.33	05/12/16	BEENA		
Sample	AC91269-009	86	85.52279	Percent	1.36	12.55	10.93	05/12/16	BEENA		
Sample	AC91269-010	76	75.95978	Percent	1.36	12.30	9.67	05/12/16	BEENA		
Sample	AC91269-012	76	76.08906	Percent	1.37	11.70	9.23	05/12/16	BEENA		
Sample	AC91269-013	75	75.45825	Percent	1.36	11.18	8.77	05/12/16	BEENA		
Sample	AC91269-014	77	76.55786	Percent	1.36	11.47	9.11	05/12/16	BEENA		
Sample	AC91273-001	90	89.68655	Percent	1.36	11.25	10.23	05/12/16	BEENA		
Sample	AC91273-002	88	88.00000	Percent	1.36	11.61	10.38	05/12/16	BEENA		
Sample	AC91283-001	85	85.33569	Percent	1.35	12.67	11.01	05/12/16	BEENA		
Sample	AC91283-002	77	76.67585	Percent	1.35	12.24	9.70	05/12/16	BEENA		
Sample	AC91283-003	85	85.46296	Percent	1.38	12.18	10.59	05/12/16	BEENA		
Sample	AC91283-004	73	73.42222	Percent	1.37	12.62	9.62	05/12/16	BEENA		

\* - Indicates Failed Rpd Criteria

## % Solids Report

Analysis Type: SOLIDS-SS

BatchID: SOLIDS-SS-5439

QcType	SampleID:	Rounded Result	Raw Result	Units	Tare Weight	Wet Weight	Dry Weight	Analysis Date	Analyzed By	QC RPD	Rpd Limit
DUP	AC91273-004	89	89.34911	Percent	1.37	11.51	10.43	05/12/16	BEENA	0.83	5
Sample	AC91273-003	88	87.76786	Percent	1.37	12.57	11.20	05/12/16	BEENA		
Sample	AC91273-004	90	90.09709	Percent	1.38	11.68	10.66	05/12/16	BEENA		
Sample	AC91274-001	96	95.52920	Percent	1.38	12.34	11.85	05/12/16	BEENA		
Sample	AC91274-002	89	88.83929	Percent	1.36	12.56	11.31	05/12/16	BEENA		
Sample	AC91274-003	96	95.55757	Percent	1.39	12.42	11.93	05/12/16	BEENA		
Sample	AC91274-004	94	93.65639	Percent	1.36	12.71	11.99	05/12/16	BEENA		
Sample	AC91274-005	93	92.51578	Percent	1.35	12.44	11.61	05/12/16	BEENA		
Sample	AC91274-006	95	94.50980	Percent	1.36	11.56	11.00	05/12/16	BEENA		
Sample	AC91274-007	97	96.62162	Percent	1.36	11.72	11.37	05/12/16	BEENA		
Sample	AC91274-008	96	95.78736	Percent	1.37	11.34	10.92	05/12/16	BEENA		
Sample	AC91274-009	95	95.30651	Percent	1.38	11.82	11.33	05/12/16	BEENA		
Sample	AC91274-010	94	94.39421	Percent	1.40	12.46	11.84	05/12/16	BEENA		
Sample	AC91278-001	75	74.82143	Percent	1.36	12.56	9.75	05/12/16	BEENA		
Sample	AC91278-002	82	82.18391	Percent	1.35	11.79	9.93	05/12/16	BEENA		
Sample	AC91278-003	81	81.07287	Percent	1.38	11.26	9.38	05/12/16	BEENA		
Sample	AC91278-004	90	90.08264	Percent	1.36	12.25	11.19	05/12/16	BEENA		
Sample	AC91278-005	84	83.65019	Percent	1.38	11.90	10.18	05/12/16	BEENA		
Sample	AC91278-006	84	84.00000	Percent	1.36	11.36	9.77	05/12/16	BEENA		
Sample	AC91280-001	89	89.30636	Percent	1.37	11.75	10.62	05/12/16	BEENA		
Sample	AC91280-002	93	93.22034	Percent	1.37	11.99	11.26	05/12/16	BEENA		

\* - Indicates Failed Rpd Criteria

## **Miscellaneous Data**

**(TCLP, SPLP)**

Finish Date: 5/15/16

**TCLP Ex. Fluid #1 pH:	4.91	(reference: 4.58 ± 0.5)
**TCLP Ex. Fluid #2 pH:		(reference: 2.88 ± 0.05)
**SPLP Ex. Fluid #3 pH:		(reference: 4.20 ± 0.5)

**Hampton-Charney-Ventech**

[illegible]

\* Ext. Type: TCEP = Y (Method 1311) LAMP-L (Methods 1311/ANSHENMA CTR/L 1256-2003)  
SPLE = P (Method 1312) ME-P=M (Method 1320)  
ZPE = Z (Method 1311/1312)



**Last Page of Report**

**JB – PAGES (2.0)**

**JOINT BID**

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**NOTICE**

THE PAGES CONTAINED IN THIS JOINT BID (JB-PAGES) REPRESENT  
ADDITIONAL CONTRACT REQUIREMENTS APPLYING TO WORK  
PERFORMED IN THE PRESENCE OF PRIVATELY OWNED UTILITY  
FACILITIES.

JOINT BID

DATED: April 11, 2017

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1. The Contractor shall be responsible for compliance with all the provisions of the following Articles, Appendixes, Specifications, Sketches and Scope of Work, which are hereby made a part of the original contract documents:
  - A. The "JOINT BID WITH PRIVATE UTILITY COMPANIES SPECIAL PROVISIONS" (Pages JB-1 through JB-4); and the following Con Edison specialty work items (contained on Pages JB-5 through JB-23):
    - JB 6.02XHEC – Incremental cost for modifying work methods near (within 0 to less than 3 feet) of Con Edison existing building wall and foundations.
    - JB 6.02XSCW - Incremental cost for using special care work methods near (within 3 to 10 feet) of Con Edison existing building wall and foundations.
    - JB 7.06 – Perforated corrugated polyethylene underdrain tubing
    - JB 302 – Field coating of oil-o-static feeder pipes
    - JB 350 – Overhead accommodation protection of overhead facilities, poles and appurtenances.
    - JB 351 – Utility Pole Supports
    - JB 802 – Special modification of work for installation of new curbs and sidewalks.
    - JB 803 – Line cut by pneumatic tools in lieu of saw cut associated with roadway removal operations.
  - B. The Private Utilities reference document called "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN", dated August 1, 2005, and which 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;
  - C. Private Utility Participating List (Page JB-24)
  - D. Private Utilities Scope of Work and Sketches (Pages JB-25 through JB-38); and, Test Pits (Pages JB-39 through JB-41);
  - E. Private Utility drawings (3 Sheets) consisting of:
    - Drawing JB1, General Notes & Conditions (All Utilities) (1 Sheet).
    - Drawing JB2 to JB3, Overhead Electrical Condition Report (CONED) (2 Sheets).
    - Drawing JB4 to JB7, Existing Facility Plans (CONED) (4 Sheets).
    - Drawing JB8, Electric Capital Plan (CONED) (1 Sheet).
    - Drawing JB9, Special Care Exc. (CONED) (1 Sheet).
    - Drawing JB10 to JB11, Existing Facility Plans (ECS) (1 Sheet).
    - Drawing JB11 to JB12, Existing Facility Plans (Cable Vision) (1 Sheet).

2. Refer to the Private Utility reference document called "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN"; Specification for JB 450, pages 56, 57, and 58;  
Note: Items under JB 450 are task driven operation items and are not based on crew size. These items are divided into three unique types, each of which provides a description of applicability and typical use. The "Method of Measurement", on page 57, states that "The actual crew performing the operation will not be considered by the facility operator, in consultation with the Resident Engineer, when determining the applicable Unit Item Type, which shall be only as per the task performed."
3. Refer to the Private Utility reference document called "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN", Specification for JB 225, page 10, Article A. Description;  
Delete the last four lines of text in their entirety, beginning with the words: "accordance with Specification under Addendum #1, . . .";  
Substitute the following revised text: "accordance with Specification Section 7.18 – Controlled Low Strength Material (CLSM), in the Standard Highway Specification. All backfill within the maximum excavation limits shown in Sketch No. JB 225 shall be of controlled low strength material (CLSM) in compliance with requirements of Section 7.18, and its cost shall be deemed included in this item."
4. Refer to the Private Utility reference document called "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN", Specification for JB 225, page 10, Article B. Materials;  
Delete the first sentence in its entirety, beginning with the words: "Furnish Controlled Low Strength Material fill or backfill . . .";  
Substitute the following revised sentence: "Furnish Controlled Low Strength Material fill or backfill as required and specified in Section 7.18 – Controlled Low Strength Material (CLSM), of the Standard Highway Specification."
5. Refer to the Private Utility reference document called "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN", Specification for JB 226, page 12, Article A. Description;  
Delete the last five lines of text in their entirety, beginning with the words: "accordance with Specification under Addendum #1, . . .";  
Substitute the following revised text: "accordance with Specification Section 7.18 – Controlled Low Strength Material (CLSM), in the Standard Highway Specification. All backfill within the maximum excavation limits shown in Sketch No. JB 225 shall be of controlled low strength material (CLSM) backfill in compliance with Section 7.18 in the Standard Highway Specifications, and its cost shall be deemed included in this item."
6. Refer to the Private Utility reference document called "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN", Specification for JB 226, page 12, Article B. Materials;  
Delete the first sentence in its entirety, beginning with the words: "Furnish controlled low strength material fill or backfill . . .";



Substitute the following revised sentence: "Furnish controlled low strength material fill or backfill as required and specified in Section 7.18 – Controlled Low Strength Material (CLSM), of the Standard Highway Specification."

[NO FURTHER TEXT HERE.]

**Notices to Bidders**

The City is bidding jointly Project ID: HWXS511. The City has combined its Public Work, Interference Work, and Utility Work into one bid contract package. All prospective bidders should be alerted to the fact that the City prepared all specifications, drawings, and all other necessary contract documents for the Public Work, Interference Work, and Utility Work.

The City has prepared contract documents which include specifications, drawings and all other necessary contract documents for the Public Work, Interference Work, and Utility Work. The bid items, specifications, and estimated quantities have been designed to fully compensate the Contractor for its costs to perform the Public Work, Interference Work, and Utility Work.

The Contractor agrees that its bid items and prices for the Public Work, Interference Work, and Utility Work shall include all incremental costs and/ or additional compensation for performing Public Work including: coordination of its work with the Utilities, loss of productivity and efficiency, idle time, delays (including any delays occasioned by negotiation of a contract change), change in operations, mobilization, remobilization, demobilization, added cost or expense, loss of profit, other damages or impact costs that may be suffered by the Contractor because of direct or indirect obstructions due to the presence of Utility Facilities, such as conduits, ducts or duct banks containing conductors for live and/or abandoned electric, telephone, cable TV, any type of communication cables, "Non Cost Sharing" gas mains and services, steam mains, and various non-hazardous encasement materials or utility structures located within the Public Work project area.

In the bid solicitation documents, the City has provided estimates of quantities for both Specific Public Work Items and Specific Utility Work Items. Bidders shall be required to bid a unit price on Items. For the purposes of identifying the lowest responsive and responsible bidder, a bidder's unit prices bid shall be calculated on the City's Specific Public Work Items and estimates and the Utilities' Specific Utility Work Items and estimates.

**[NO FURTHER TEXT HERE.]**

## **Con Edison specialty work items**

**[NO FURTHER TEXT HERE.]**

**JB 6.02 XHEC – (CUSTOM FOR HWXS511) – INCREMENTAL COST FOR MODIFYING WORK METHODS  
NEAR (WITHIN 0 FEET TO LESS THAN 3 FEET) CON EDISON EXISTING BUILDING WALLS  
AND FOUNDATIONS**

**A. DESCRIPTION**

Under this section, the Contractor shall be required to modify his work methods of construction (i.e. roadways, step streets, retaining walls, sidewalks, malls, plazas, sewers, water mains, traffic signals, etc.) when performing work under other scheduled contract items within zero (0) to less than three (3) feet of Con Edison Existing Building Walls and Foundations. Modification of work methods shall include, but not be limited to, hand excavation, extra care preparation of subgrade, placement and compaction of backfill, and providing all materials and methods required to maintain, support, and protect the integrity of Con Edison Existing Building Walls and Foundations, as directed by the Engineer, in consultation with the Facility Operator.

**B. MATERIALS – N/A**

**C. METHOD OF OPERATION/CONSTRUCTION**

Modification of work methods within zero (0) to less than three (3) feet of Con Edison Existing Building Walls and Foundations and building vaults shall be defined as including, but not limited to, the following:

- A. Excavation of all materials of any nature whatsoever encountered, through the use of hand held pick axes, hand held shovels, and/or other approved type hand-held tools within the limits defined herein.
- B. Providing extra care preparation of subgrade, placement and compaction of backfill, and all materials and methods required to maintain, support, and protect the integrity of Con Edison Existing Building Walls and Foundations and building vaults, through the use of hand-held tool for compaction, and the use of sheeting, bracing, etc., as may be required.

All Hand Excavation and Extra Care work shall be performed in accordance with the contract plans, the specifications, and the directions of the Engineer, in consultation with the Facility Operator.

**D. METHOD OF MEASUREMENT**

The quantity of "Incremental Cost for Modifying Work Methods Near (Within 0 Feet to Less Than 3 Feet of) Con Edison Existing Building Walls and Foundations" to be measured for payment shall be the actual number of cubic yards of material excavated under other contract items from within zero (0) to less than three (3) feet of a Con Edison Existing Building Walls and Foundations in compliance with the requirements of this Section.

**E. PRICE TO COVER**

The contract price per cubic yard for the "Incremental Cost for Modifying Work Methods Near (Within 0 Feet to Less Than 3 Feet of) Con Edison Existing Building Walls and Foundations" shall be the incremental cost difference of all labor, material, equipment, and incidentals required to complete all work under other scheduled contract items within zero (0) to less than three (3) feet of Con Edison

Existing Building Walls and Foundations, using hand excavation and extra-care work methods in order to maintain, support, and protect the integrity of Con Edison Existing Building Walls and Foundations and building vaults.

This item will be paid only in conjunction with other scheduled contract items (e.g. Payment would be made under the unit price for Item No. 4.11AS for the volume of excavation plus payment would be made under Item No. JB 6.02 XHEC – Incremental Cost for Modifying Work Methods Near (Within 0 Feet to Less Than 3 Feet of) Con Edison Existing Building Walls and Foundations, for the quantity of excavation made within the zone of protection in order to adjust work methods for special care. However, no payment will be made under this bid item for the same location more than one time.

The incremental cost for modifying work methods within curb and sidewalk areas will be paid for under Item Nos. 802A and 802B, as applicable.

**JB 6.02 XSCW – (CUSTOM FOR HWXS511) – INCREMENTAL COST FOR USING SPECIAL CARE WORK  
METHODS NEAR (WITHIN 3 TO 10 FEET OF) CON EDISON EXISTING BUILDING WALLS  
AND FOUNDATIONS**

**A. DESCRIPTION**

Under this section, the Contractor shall be required to modify his work methods of construction (i.e. roadways, step streets, retaining walls, sidewalks, malls, plazas, sewers, water mains, traffic signals, etc.) when performing work, under other scheduled contract items, anywhere within a zone of protection consisting of the area over and up to ten (10) feet adjacent to Con Edison Existing Building Walls and Foundations or up to the curb line, whichever is closer, and from the top of pavement down to the bottom of the required excavation, but no closer than three (3) feet of the Con Edison Existing Building Walls and Foundations. Using special care work methods shall include, but not be limited to, a combination of probing or digging carefully done with hand labor using hand held tools only, and machine excavating with mechanized earth moving equipment when hand probing clearly indicates that machine excavating is permissible, special care preparation of subgrade, placement and compaction of backfill, and providing all materials and methods required to maintain, support, and protect the integrity of Con Edison Existing Building Walls and Foundations, as directed by the Engineer in consultation with the Facility Operator.

**B. MATERIALS – N/A**

**C. METHODS OF OPERATION/CONSTRUCTION**

Special care work methods near Con Edison Existing Building Walls and Foundations, excluding work within zero (0) to less than three (3) feet of Con Edison Existing Building Walls and Foundations which will be paid for under Item JB 6.02 XSCW, shall be defined as including, but not limited to, the following:

- A. Full depth saw cutting of Existing pavement to be removed by lifting from the adjacent pavement, where and when directed; and, below the pavement, a combination of probing or digging carefully done with hand labor using hand held tools only, and machine excavating with mechanized earth moving equipment when hand probing clearly indicates that machine excavating is permissible the excavation, within the limits defined herein.
- B. Providing special care preparation of subgrade, placement and compaction of backfill, and the use of materials and methods required to maintain, support, and protect the integrity of Con Edison Existing Building Walls and Foundations, through the use of approved compaction tools, the use of sheathing, bracing, etc.

All special care work shall be performed in accordance with the contract plans, the specifications, and the directions of the Engineer in consultation with the Facility Operator.

**D. METHOD OF MEASUREMENT**

The quantity of "Incremental Cost for Using Special Care Work Methods Near Con Edison Existing Building Walls and Foundations" to be measured for payment shall be the actual number of cubic yards

of material excavated using special care operations to perform construction work under other Scheduled contract items, from within the limits specified in Subsection JB 6.02XSCW.A, above.

**E. PRICE TO COVER**

The contract price per cubic yard for the "Incremental Cost for Using Special Care Work Methods Near Con Edison Existing Building Walls and Foundations" shall be the incremental cost difference of all labor, material, equipment, and incidentals required to complete all work under other scheduled contract items using special care operations in order to maintain, support, and protect the integrity of Con Edison Existing Building Walls and Foundations.

This item will be paid only in conjunction with other scheduled contract items (e.g. Payment would be made under the unit price for Item No. 4.11AS for the volume of excavation plus payment would be made under Item No. JB 6.02 XSCW – Incremental Cost for Modifying Work Methods Near (Within 3 to 10 Feet of) Con Edison Existing Building Walls and Foundations, for the quantity of excavation made within the zone of protection in order to adjust work methods for special care. However, no payment will be made under this bid item for the same location more than one time.

The incremental cost for modifying work methods within curb and sidewalk areas will be paid for under Item Nos. JB 802A and JB 802B, as applicable.

**JB 7.06 - PERFORATED CORRUGATED POLYETHYLENE UNDERDRAIN TUBING  
(CUSTOM FOR HWXS511)**

**A. Description**

This specification covers the material and the quality requirements for corrugated polyethylene tubing and fittings.

**B. Materials**

The corrugated polyethylene tubing and fittings 4 thru 10 inches in diameter shall meet the requirements of AASHTO Designation: M252, Corrugated Polyethylene Drainage Tubing except that tubing manufactured from material meeting A.S.T.M. Designation D1248, Class B, shall also be acceptable.

Corrugated polyethylene tubing and fittings 12 inches in diameter shall meet the requirements of AASHTO M252 except the pipe stiffness requirement shall be 45 psi at 5% deflection.

A material certification must be provided to confirm that the product used meets the aforementioned specifications.

**C. Method of Measurement**

Underdrain pipe will be measured in feet, measured to the nearest whole foot, installed in accordance with the contract documents.

**D. Price to Cover**

The unit price per foot shall include the cost of all labor, materials, and equipment necessary to satisfactorily complete the work. The unit price per foot for perforated corrugated polyethylene underdrain tubing and perforated PVC underdrain pipe installations that are daylighted through the side slope shall include the shield pipe. Excavation, granular fill, backfill, all types of stone, and filter fabric will be paid for separately.



**JB 302 – FIELD COATING OF OIL-O-STATIC FEEDER PIPES (CUSTOM FOR HWXS511)****A. Description**

Under this section, the Contractor shall provide all labor, tools, equipment, insurance and incidentals required to apply field coating and wrapping on Oil-O-Static feeder pipes at various locations within the contract limits in accordance with the specifications and as directed by the facility operator. The Oil-O-Static system consists of steel pipes containing high voltage cables and cooling oil. All work shall be in accordance with the Con Edison requirement G-8209, System B.

**B. Materials**

All materials required to apply coatings and wrappings as referenced in G-8209 shall be supplied by Con Edison.

**C. Method of Construction**

Some of the existing coatings on Oil-O-Static pipes may consist of coal tar wrap and may contain asbestos and/or PCB's. The Con Edison representative prior to backfilling must visually inspect all Oil-O-Static lines that are exposed during the performance of this contract. The Contractor shall notify the Con Edison representative to perform this inspection. Con Edison shall be allowed to perform an electrical spark test (jeeping) inspection of these pipes and obtain a sample of the coating for testing. The electrical spark test will indicate the amount of coating required to be applied and the sample test will determine the coating materials. If the tests are negative, the Con Edison representative will direct the Contractor to perform the required amount of coating prior to the pipes being backfilled. If the tests reveal the presence of asbestos and/or PCB's, the work will be considered "specialty work" and be performed by Con Edison forces or by a specialty Contractor hired by Con Edison. The Contractor will coordinate his operations to allow this work to be performed.

The work shall be performed in accordance with Con Edison specification G-8209, which is included within this section. System B will be the only method that will be allowed. The coating shall be verified and accepted by the Con Edison representative prior to backfilling.

**D. Method of Measurement**

The quantity to be measured for payment shall be the actual number of linear feet (L.F.) of each Oil-O-Static pipe for which coating is applied by the Contractor as prescribed.

**E. Price to Cover**

The price shall cover the cost of all labor, tools, equipment, insurance and incidentals necessary to unload, store and handle the necessary material and to perform all associated work to coat and wrap the Oil-O-Static lines as outlined in Con Edison specification G-8209, System B. The price shall also include the cost of all difficulties encountered to apply the coating in the area of other underground facilities and the

2016-11-03

additional excavation that may be required to obtain the necessary clearances to apply the coating; coordination with Con Edison forces or their Specialty Contractor; modifications to work methods or construction sequencing, any impact with maintenance and protection of traffic, and loss of productivity.

Payment for all work herein specified shall be made on a one-time basis only; no payment for work herein specified shall be made for the same area more than one time. If the Contractor subsequently damages any coatings paid for under this contract, the pipe shall be recoated in accordance with this item at the Contractor's expense.

**F. References**

1. Con Edison Gas Operations Standard G-8209 – Field Coating of Steel Pipe and Fittings Installed Underground and in Subsurface Structures

**JB 350 – ACCOMMODATION OF CON EDISON OVERHEAD UTILITY FACILITIES, POLES AND APPURTENANCES****A. Description**

Under this section, the Contractor shall provide all supervision, labor, materials, tools, equipment and incidentals required to perform its work in the presence of overhead utilities, including, but not limited to, electric facilities (primary, aerial, secondary and service conductors) fiber optic communications facilities, utility poles and equipment on the poles and related appurtenances. These utilities are subsequently referred to in this specification as "overhead facilities". Tree pruning and removal work under JB 352 and JB 353 as well as utility pole supports under JB 351 are not included in this specification.

**B. Materials – N/A****C. Method of Construction**

The Contractor shall inspect the site prior to bidding and shall utilize sketches JB-350A, JB-350B, to evaluate the potential impact, if any, of overhead facilities upon performance of the work. The Contractor shall employ a method of operation, including use of appropriate equipment and tools that will enable him to maintain adequate clearances from the overhead facilities during all phases of construction as directed by the facility operator. The Contractor is responsible for performing the work in accordance with all applicable Federal, New York State and Local regulations. The Contractor and/or his agents shall be solely responsible for damages to any overhead lines and appurtenances due to failure to comply with applicable rules, procedures, and practices.

**D. Method of Measurement**

The quantity to be measured for payment shall be a lump sum measurement to complete the work in the presence of crossing and paralleling overhead facilities.

**Crossing Overhead Facilities**

Overhead crossing encountered during the installation of City facilities. Any and all contractor operations associated with the complete installation of a City facility including final restoration shall be considered as one utility crossing. Multiple stacked overhead lines/conductors in the same vertical space shall be considered as one utility crossing.

**Paralleling Overhead Facilities**

Parallel span between two poles within the project limits encountered during the installation of a City facility that parallels the overhead facilities and requires the Contractor to change its operation in order to maintain adequate clearance as directed by the facility operator and as described in sketch JB 350A and JB 350B. Any and all contractor operations associated with the complete installation of a City facility including final restoration shall be considered as one parallel span. All overhead lines/conductors within a span between two poles shall be considered as one parallel span.

**E. Price to Cover**

The price shall be a lump sum for all supervision, labor, materials, tools, equipment and incidentals required to perform the work in the presence of overhead utilities and to maintain adequate clearance from the overhead facilities during all phases of construction. The price includes, but is not limited, to modification of any methods of operation, use of appropriate equipment, maintenance of traffic, extended performance, loss of productivity, protective measures, delays, change in sequencing and scheduling, breakdown and build up for pile driving equipment (manual and hydraulic) in direct interference with overhead facilities and any other costs that may be incurred by the Contractor.

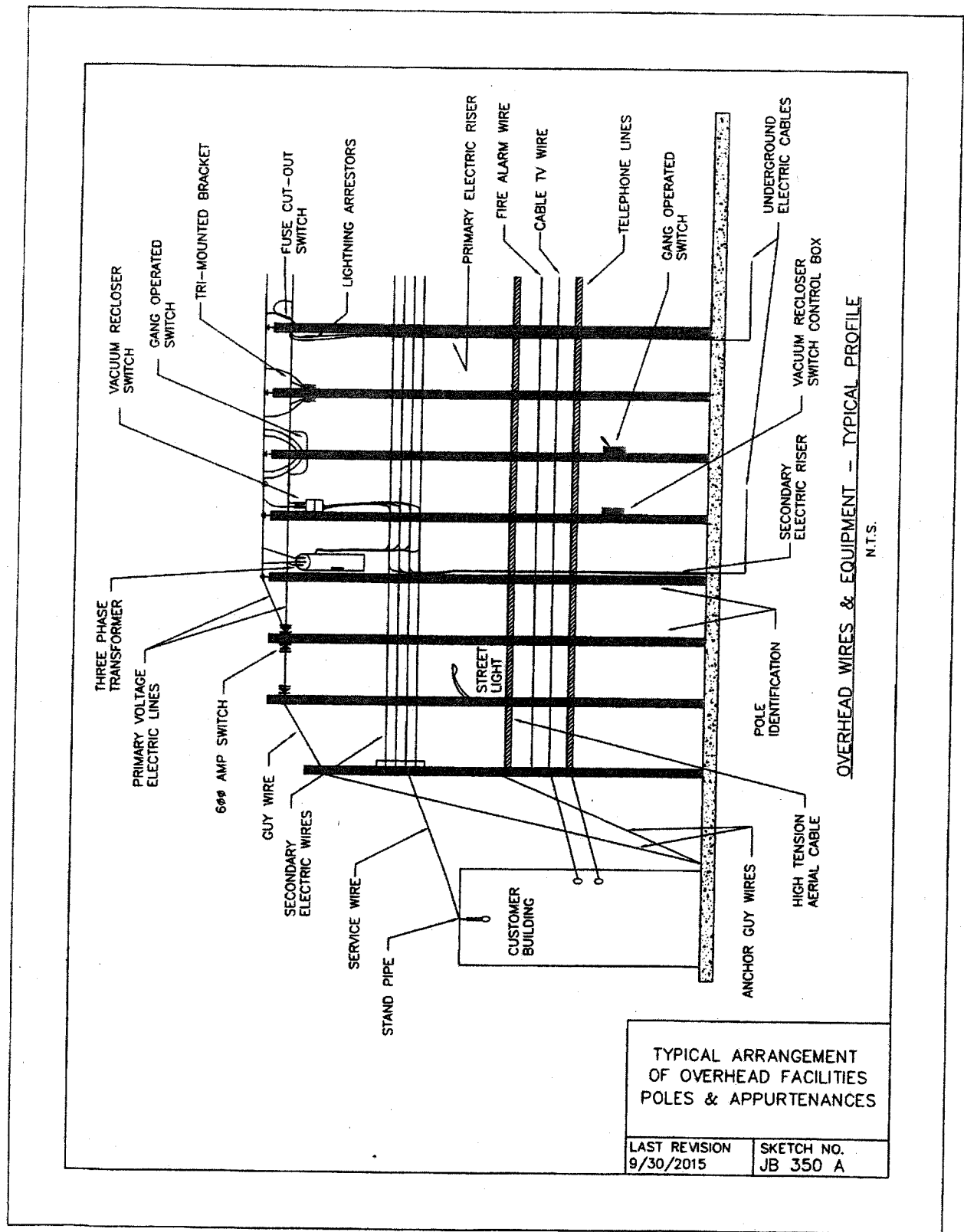
Partial payments shall be made in proportion to the percentage (%) of contract completion as determined by the facility operator.

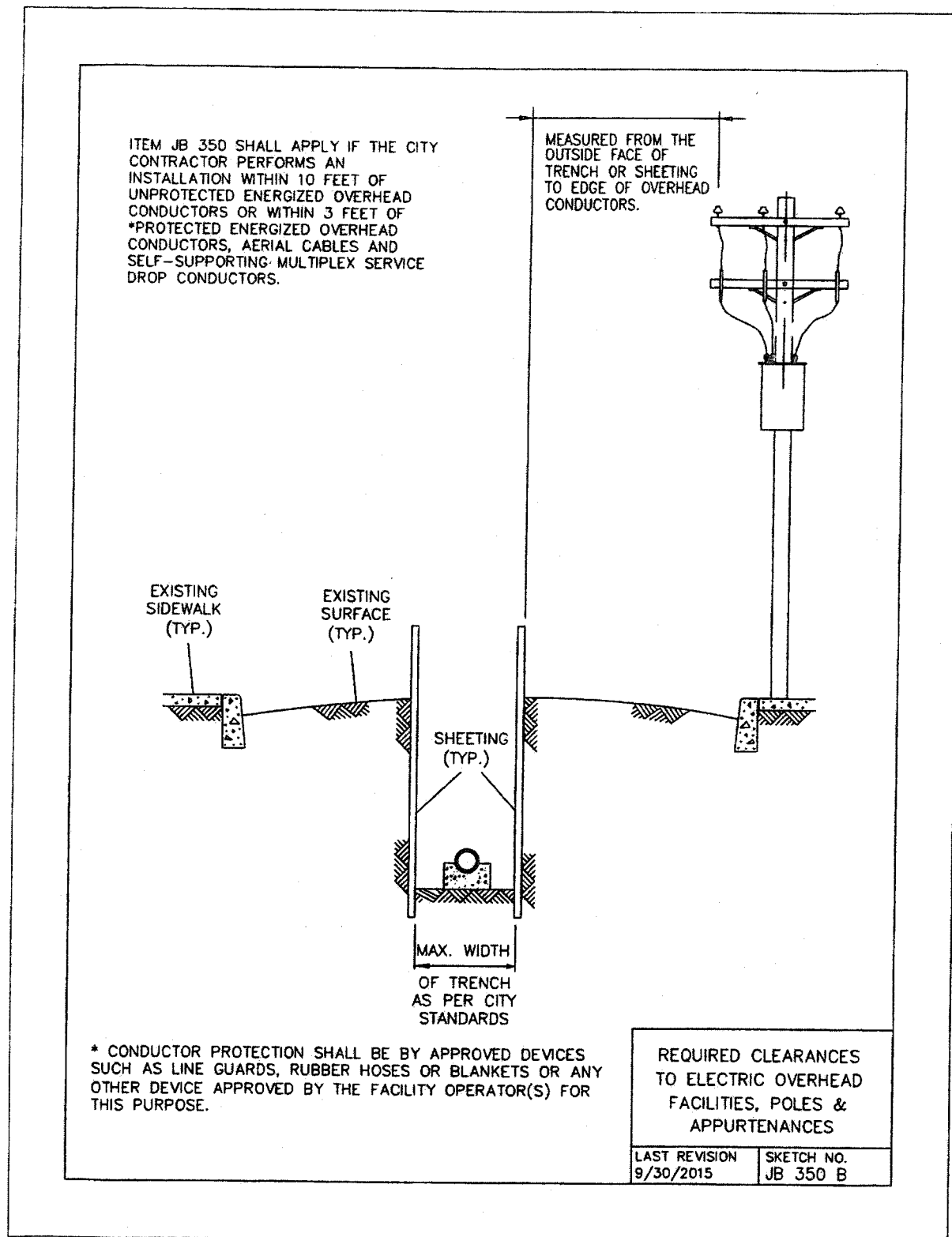
**F. Reference Drawings**

JB-350A-1

JB-350B-1

JB





## **JB 351 - UTILITY POLE SUPPORTS**

### **A. Description**

Under this section, the Contractor shall provide all labor, material, equipment, insurance, and incidentals required to construct, install and maintain an effective temporary support system for utility poles at locations directed by the facility operator(s), in order to maintain such poles in their existing upright position without disturbing attached wires and equipment.

### **B. Materials**

All materials required to construct and maintain an effective support system shall be supplied by the Contractor and approved by the facility operator.

### **C. Method of Construction**

Where directed by the utility representative, the Contractor shall furnish, install and remove utility pole supports and maintain utility poles as shown on sketch JB 351. Alternate methods proposed by the Contractor will be permitted if approved by the facility operator.

### **D. Method of Measurement**

The quantity of utility pole supports to be measured for payment shall be the number of utility poles supported. The Contractor will be paid only once for each utility pole supported and maintained no matter how many different construction operations have an impact on the pole.

### **E. Price to Cover**

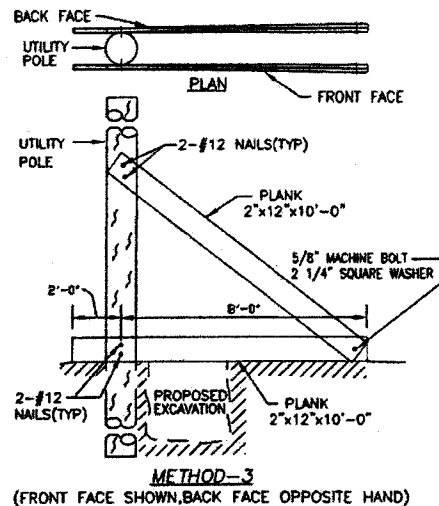
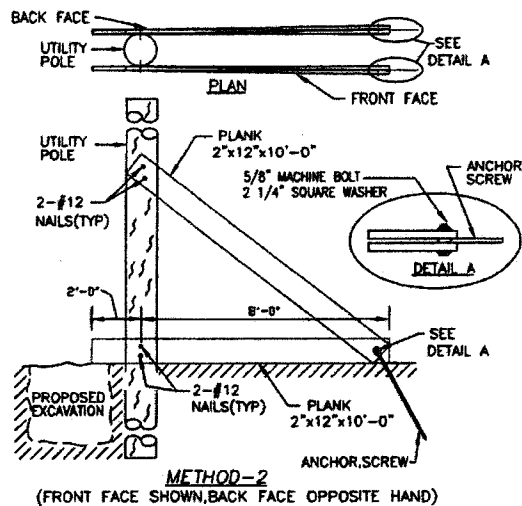
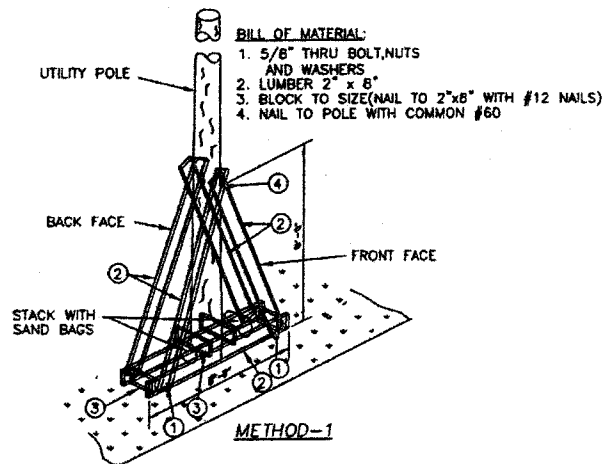
The price shall cover the cost of all labor, material, equipment, insurance, and incidentals necessary to furnish, install, maintain and remove utility pole supports to completely support, maintain, protect, and accommodate the integrity of utility poles without disruption of service to customers. The price bid shall also include all additional impact cost associated with working around utility pole supports, poles and appurtenances.

Separate payment will be made for the protection of overhead facilities under the Item JB 360.

### **F. References**

1. Sketch JB 351
2. JB 350

## METHODS OF SHORING UTILITY POLES

**NOTES:**

1. THESE METHODS OF SHORING ARE GENERAL GUIDES. FIELD CONDITIONS WILL DICTATE WHICH METHOD WILL BE USED. VARIATIONS OF THESE METHODS WHICH ACCOMPLISH THE SAME PURPOSE MAY ALSO BE UTILIZED WHEN APPROVED BY OVERHEAD CONSTRUCTION DEPARTMENT.
2. ANY INFORMATION NOT SHOWN WILL BE DETERMINED IN THE FIELD TO SUIT THE FIELD CONDITIONS WHEN APPROVED BY THE OVERHEAD CONSTRUCTION DEPARTMENT.

METHODS OF SHORING  
UTILITY POLESLAST REVISION  
9/30/2015SKETCH NO.  
JB 351



**JB 802 - SPECIAL MODIFICATION OF WORK FOR INSTALLATION OF NEW CURBS AND SIDEWALKS****A. Description**

Under this Section, the Contractor shall be required to modify work methods of installing new curb and sidewalk in order to maintain, protect and accommodate the integrity of private Utility Facilities located within a zone of protection immediately beneath existing sidewalk and curb designated to be replaced under other Contract items. The zone of protection shall define an area of curb and sidewalk where: work is within the vicinity of private Utility Facilities as shown on the Special Care Excavation Plan or where utilities are encountered during construction that are within 18 inches of either face of curb and/or 12 inches of the base material of proposed curb and/or sidewalk.

**B. Materials – N/A****C. Method of Operation/Construction**

Once clearances have been verified by available records to the satisfaction of the facility operator, the Contractor shall exercise extreme caution to install new curb and sidewalks within zoned areas of protection. Exercising extreme caution shall mean utilizing appropriate methods of operation/construction, special operations and sequencing, and by employing hand labor, using hand held tools only, under the personal direction of the appropriate facility operator. The work shall incorporate, but not be limited by, the following restrictions:

**1. Removal of Existing Curb and Sidewalk**

Removal of existing curb and sidewalk material shall be performed by saw cutting the curb and sidewalk, for a depth of not less than 2", to assist the Contractor in breaking up the concrete curb and sidewalk for removal by hand. Curb and sidewalk removal shall be done with hand labor, using hand held tools only while working from adjacent undisturbed sidewalk and/or pavement. Furthermore, it shall be understood to mean that digging and/or excavating directly with power-mechanized earth moving equipment will not be permitted. Power mechanized earth moving equipment may only be used as a depository of material removed from the excavation by hand as described above. All equipment, methods, and maintenance and protection provisions shall require full authorization by the facility operator.

**2. Preparation and Installation of New Curb and Temporary and New Sidewalk**

Backfilling, filling, grading of sub base, and installation of new curb and both temporary and new sidewalk, as required under other Contract Items, shall be performed utilizing materials, equipment and methods of construction that will insure the integrity of the private utility facilities and at the same time meet all requirements for this work as specified in other sections of this contract.

**3. Compaction**

The Contractor shall compact all sub-grade and new sub-base materials by utilizing native and/or blended fill material, equipment and methods of construction that will ensure integrity of private Utility Facilities and at the same time meet all requirements for compaction as specified in Section 4.11 of the Standard Highway Specifications.

#### **4. Powered Excavating Equipment Limitations**

The Contractor shall not employ powered or mechanical excavating equipment within the zone of protection. Powered or mechanical excavating equipment may only be used as a depository for material removed from the excavation by hand as described above.

The Contractor shall not be permitted to store, stand and/or travel equipment/vehicles on specified unpaved zoned protection areas.

#### **D. Method of Measurement**

##### **1. JB 802A**

The quantity of "Special Care Excavation and Restoration for Sidewalk Work" to be measured for payment shall be the number of square feet (S.F.) of new sidewalk actually installed under other contract items within the zone of protection areas requested by the facility operator. For payment purposes, the horizontal limits for a zone of protection area shall be defined as the area designated on the plans or an area equal to the length of the designated facility multiplied by its width plus 18 inches on each side. Where overlapping of zones occur due to multiple facilities, the area will be modified to one zone measured from the outside limits. Where the 18-inch area falls beyond the curb line the outside boundary shall be the curb line.

##### **2. JB 802B**

The quantity of "Special Care Excavation and Restoration for Curb Work" to be measured for payment shall be equal to the number of linear feet (L.F.) of new curb actually installed under other contract items within the zone of protection areas requested by the facility operator.

**E. Price to Cover****1. JB 802A**

The contract price per square foot for "Special Care Excavation and Restoration for Sidewalk Work" shall be the incremental cost difference of all labor, materials, equipment, insurance and incidentals required for excavation and disposal of pavement, base and all other material to new sub-grade within and adjacent to zone of protection areas; saw cutting, grading, preparation of sub-grades, backfilling and compaction within zone of protection areas; all in accordance with the plans, the specifications and the directions of the facility operator. The price shall further include the cost of maintaining, protecting and accommodating the integrity of private Utility Facilities during the performance of sidewalk reconstruction (under other Contract Items) within zone of protection areas designated on the plans or as directed by the facility operator.

**2. JB 802B**

The contract price per linear foot for "Special Care Excavation and Restoration for Curb Work" shall be the incremental cost difference of all labor, materials, equipment, insurance and incidentals required to install new curbs and temporary restoration material under other Contract items, within and adjacent to zone of protection areas; all in accordance with the plans, the specifications and the directions of the facility operator. The price shall further include the cost of maintaining, protecting, and accommodating the integrity of private Utility Facilities during the performance of curb reconstruction (under other Contract Items) within zone of protection areas designated on the plans or as directed by the facility operator.

Payment for all work specified herein shall be made on a one-time basis only; no payment will be made for the same area of sidewalk or length of curb more than one time. When the installation of curb and sidewalk are performed as separate operations on the same location, payment shall be made separately for each operation. In addition, work under these items shall not be paid in combination with other utility items.

**F. References****1. Section 4.11 Standard Highway Specification**

**JB 803 - LINE CUT BY PNEUMATIC TOOLS IN LIEU OF SAW CUT ASSOCIATED WITH ROADWAY REMOVAL OPERATIONS****A. Description**

Under this section, the Contractor shall provide all incremental labor, equipment, insurance and incidentals required to maintain, protect, support and accommodate the integrity of utility facilities that include but are not limited to oil or static facilities, and any other facilities of various sizes and configurations paralleling or crossing proposed saw cut areas located within a zone of protection associated with roadway removal operations, as determined by the utility operator. Utility facilities which cross under and between the saw cut area are included within this item. The work shall be performed in accordance with the contract plans, the specifications, and as encountered during construction and determined by the facility operator(s).

**B. Materials – N/A****C. Method of Construction**

The Contractor shall maintain, protect, support and accommodate the integrity of all utility facilities of various sizes and configurations paralleling or crossing the saw cut area within a zone of protection as determined by the Facility Operator, during the roadway saw cut. The facility operator(s) shall identify the locations of all utilities within the contract area as required by New York State Industrial Code Rule 753. As provided by the Rule, the Contractor shall use pneumatic tools to line cut the pavement in lieu of saw cut by machine. It is the sole discretion of the facility operator(s) to determine relationships and/or dimensions, and advise the Contractor to proceed with pneumatic tools to line cut existing roadway structure.

**D. Method of Measurement**

The quantity to be measured for payment shall be the number of linear feet of line cut performed by pneumatic tools measured along the length of cut. The contract item specified under this section shall not be measured for payment in conjunction with other types of utility items. Modifications to work methods required in areas between zones of protection for multiple utilities or JB facilities shall not be measured for payment and are included in the price bid for this item.

JB 803.1 Line cut Asphalt Roadway (LF)

JB 803.2 Line cut any combination of Asphalt and Concrete Roadway (LF)

JB 803.3 Line cut any combination of Asphalt, Concrete, and Belgium Block (LF)

**E. Price to Cover**

The unit price per linear foot shall include the incremental cost for all labor, equipment, insurance and incidentals required to maintain, protect, support and accommodate the integrity of utility facilities paralleling or crossing the saw cut area associated with the removal of roadway designated for protection of utilities by the facility operator(s).

The unit price shall also include any additional cutting, removing and disposing of roadway materials; and any backfill that may be required to support, protect, maintain and accommodate the integrity of utility facilities. The price shall also include the incremental cost for providing all vehicular and pedestrian traffic maintenance necessary to perform the work.

The Contractor shall be responsible for any and all damages resulting from and/or due to saw cutting operations that are not performed in accordance with the specifications.

**F. References**

1. NYS Industrial Code Rule 753

**LISTING OF COMPANY (IES) NAMED FOR THIS CONTRACT**

<b><u>COMPANY NAME</u></b>	<b><u>CONTACT NAME</u></b>	<b><u>CONTACT TELEPHONE</u></b>
CON EDISON	THERESA KONG	212-460-4834
VERIZON	AUBREY MAKHANLALL	718-977-8165
CABLEVISION	GEORGE DJUARSEVIC	718-861-7164

PRIVATE UTILITY  
SCOPE OF WORK

(NO TEXT IN THIS SECTION)

**JOINT BID WORKSHEET**  
**HWXS511 - RECONSTRUCTION OF**  
**WEST TREMONT AVE STEP STREET**  
**FOR INFORMATION ONLY**

**ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE**  
**FOR CONSOLIDATED EDISON OF NEW YORK, INC.**  
**BOROUGH OF THE BRONX**

JOINT BID ITEM NUMBER	DESCRIPTION	Unit of Measure	Estimated Quantity
JB 6.02 XHEC	INCREMENTAL COST FOR MODIFYING WORK METHODS NEAR (WITHIN 0 TO LESS THAN 3 FEET OF ) EXISTING BUILDING WALLS AND FOUNDATIONS	C.Y.	90.00
JB 6.02 XSCW	INCREMENTAL COST FOR USING SPECIAL CARE WORK METHODS NEAR (WITHIN 3 FEET TO 10 FEET OF ) EXISTING BUILDING WALLS AND FOUNDATIONS	C.Y.	200.00
JB 7.06	PERFORATED CORRUGATED POLYETHYLENE UNDERDRAWIN TUBING (CUSTOM FOR HWXS511)	L.F.	110.00
JB 100.2	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .2)	EA.	1.00
JB 101.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .1)	EA.	1.00
JB 101.2	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .2)	EA.	6.00
JB 101.3	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .3)	EA.	1.00
JB 226	INSTALLATION OF CATCH BASINS WITH INTERFERENCES	EA.	1.00
JB 300.0	SPECIAL CARE EXCAVATION & BACKFILLING	C.Y.	5.00
JB 301.0	SPECIAL CARE HAND EXCAVATION OIL-O-STATIC ENCROACHMENT	C.Y.	43.00
JB 302.0	FIELD COATING OF OIL-O-STATIC FEEDER PIPES	L.F.	227.00
JB 303.0	FURNISH, DELIVER AND INSTALL TYPE 3/8" CLEAN SAND BACKFILL	C.Y.	88.00
JB 330E.1	SUPPORT & PROTECTION OF ELECTRIC, GAS AND STEAM FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS (TYPE .1)	L.F.	65.00
JB 350	OVERHEAD ACCOMMODATION, PROTECTION OF OH FACILITIES & APPURTENANCES	L.S.	1.00
JB 351	INSTALL AND REMOVE "A" FRAMES ON UTILITY POLES	EA.	2.00
JB 400	TEST PITS	C.Y.	50.00
JB 401.0	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITIES	C.Y.	12.00
JB 402.1	EXIST. CONCR. ENCASED CONDUITS PLCD. IN FINAL POS. W/O CONCR. ENCSMNT	L.F.	120.00
JB 403.0	PLACING STEEL PROTECTION PLATES FOR UTILITIES	S.F.	1500.00
JB 405.1	TRENCH EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES.	C.Y.	230.00

4/7/2017

HWXS511 - Con Edison JB Package - ESTIMATED QUANTITIES



**JOINT BID WORKSHEET**  
**HWXS511 - RECONSTRUCTION OF**  
**WEST TREMONT AVE STEP STREET**

**FOR INFORMATION ONLY**

**ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE**  
**FOR CONSOLIDATED EDISON OF NEW YORK, INC.**  
**BOROUGH OF THE BRONX**

JOINT BID ITEM NUMBER	DESCRIPTION	Unit of Measure	Estimated Quantity
JB 406	EXCAVATION FOR INSTALLATION OF UTILITY STRUCTURES.	C.Y.	24.00
JB 450.2	CONSTRUCTION FIELD SUPPORT - SMALL CREW	Crhrs.	94.00
JB 450.3	CONSTRUCTION FIELD SUPPORT - MEDIUM CREW	Crhrs.	98.00
JB 500	RMVL. OF ABNDND MASONRY FOR ELEC. AND TEL. CONDUITS NON- CONC. ENCS	L.F.	120.00
JB 603E.1	INSTALL UTILITY CONDUIT IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	L.F.	100.00
JB 603E.2	INSTALL UTILITY CONDUIT IN FINAL POSITION WITH CONCRETE ENCASEMENT	L.F.	340.00
JB 636 EA	ADJUSTMENT OF UTILITY HARWARE ( UNDER 7" WIDTH )	EA.	1.00
JB 636 EC	ADJUSTMENT OF UTILITY HARWARE ( 14" TO UNDER 30" WIDTH )	EA.	1.00
JB 638 N	INSTALLATION OF FIELD CONSTRUCTED UTILITY STRUCTURE	C.Y.	6.00
JB 700.0	SPECIAL MOD. OF WORK MTHDS TO ACCOM./PROTECT U.G. FACIL. W. LMTD CVR.	C.Y.	102.00
JB 710.1	REM. OF ABND. UTILITY STEEL/CAST IRON PIPE, UP TO & INCL. 12" DIAM. PIPES	L.F.	350.00
JB 800	MODIFICATION OF TROLLEY STRUCTURE REMOVAL	L.F.	100.00
JB 801	MODIFICATION OF TROLLEY STRUCTURE REMOVAL PARALLEL TO UTILITY FACILITIES	L.F.	100.00
JB 802A	SPECIAL MODIFICATION OF WORK METHODS FOR INSTALLATION OF NEW SIDEWALKS	S.F.	1064.00
JB 802B	SPECIAL MODIFICATION OF WORK METHODS FOR INSTALLATION OF NEW CURB	L.F.	178.00
JB 803.2	LINE CUT ANY COMBINATION OF ASPHALT AND CONCRETE ROADWAY	L.F.	163.00
JB 803.3	LINE CUT ANY COMBINATION OF ASPHALT, CONCRETE, AND BELGIUM BLOCK	L.F.	222.00
JB 900	EXTRA UTILITY WORK ALLOWANCE	F.S.	1.00

4/7/2017

HWXS511 - Con Edison JB Package - ESTIMATED QUANTITIES

CONSOLIDATED EDISON OF NEW YORK, INC. JOINT BIDDING SCOPE OF WORKSUPPORT & PROTECTIONHWXS511 - RECONSTRUCTION OFWEST TREMONT AVE STEP STREETBOROUGH OF THE BRONX**JB 6.02 XHEC INCREMENTAL COST FOR MODIFYING WORK METHODS NEAR (WITHIN 0 TO LESS THAN 3 FEET C.Y. OF ) EXISTING BUILDING WALLS AND FOUNDATIONS**

At the following locations:

S/S OF WEST TREMONT AVENUE BETWEEN FORDHAM PLACE AND SEDGWICK AVE.

Total quantity for JB 6.02 XHEC = 90.00

**JB 6.02 XSCW INCREMENTAL COST FOR USING SPECIAL CARE WORK METHODS NEAR (WITHIN 3 FEET TO 10 C.Y. FEET OF ) EXISTING BUILDING WALLS AND FOUNDATIONS**

At the following locations:

S/S OF WEST TREMONT AVENUE BETWEEN FORDHAM PLACE AND SEDGWICK AVE.

Total quantity for JB 6.02 XSCW = 200.00

**JB 7.06 PERFORATED CORRUGATED POLYETHYLENE UNDERDRAWIN TUBING (CUSTOM FOR HWXS511) L.F.**

At the following locations:

AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 7.06 = 110.00

**JB 100.2 UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .2) EA.**

At the following locations:

N/S OF WEST TREMONT AVENUE E/O CEDAR AVENUE

Total quantity for JB 100.2 = 1.00

**JB 101.1 UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .1) EA.**

At the following locations:

S/E/C OF CEDAR AVENUE AND WEST TREMONT AVENUE

Total quantity for JB 101.1 = 1.00

**JB 101.2 UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .2) EA.**

At the following locations:

S/E/C OF CEDAR AVENUE AND WEST TREMONT AVENUE

N/S OF WEST TREMONT AVENUE E/O FORDHAM PLACE

S/S OF WEST TREMONT AVENUE W/O FORDHAM PLACE

Total quantity for JB 101.2 = 6.00

**JB 101.3 UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .3) EA.**

4/7/2017

HWXS511 - Con Edison JB Package - SCOPE OF WORK

**CONSOLIDATED EDISON OF NEW YORK, INC. JOINT BIDDING SCOPE OF WORK****SUPPORT & PROTECTION****HWXS511 - RECONSTRUCTION OF  
WEST TREMONT AVE STEP STREET  
BOROUGH OF THE BRONX**

At the following locations:

S/S OF WEST TREMONT AVENUE W/O FORDHAM PLACE

Total quantity for JB 101.3 = 1.00

JB 226 INSTALLATION OF CATCH BASINS WITH INTERFERENCES EA.

At the following locations:

N/S OF WEST TREMONT AVENUE E/O CEDAR AVENUE

Total quantity for JB 226 = 1.00

JB 300.0 SPECIAL CARE EXCAVATION &amp; BACKFILLING C.Y.

At the following locations:

AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 300.0 = 5.00

JB 301.0 SPECIAL CARE HAND EXCAVATION OIL-O-STATIC ENCROACHMENT C.Y.

At the following locations:

S/E/C OF CEDAR AVENUE AND WEST TREMONT AVENUE  
S/S OF WEST TREMONT AVENUE W/O FORDHAM PLACE  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 301.0 = 43.00

JB 302.0 FIELD COATING OF OIL-O-STATIC FEEDER PIPES L.F.

At the following locations:

S/E/C OF CEDAR AVENUE AND WEST TREMONT AVENUE  
S/S OF WEST TREMONT AVENUE W/O FORDHAM PLACE  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 302.0 = 227.00

CONSOLIDATED EDISON OF NEW YORK, INC. JOINT BIDDING SCOPE OF WORKSUPPORT & PROTECTIONHWXS511 - RECONSTRUCTION OFWEST TREMONT AVE STEP STREETBOROUGH OF THE BRONX

**JB 303.0 FURNISH, DELIVER AND INSTALL TYPE 3/8" CLEAN SAND BACKFILL C.Y.**

At the following locations:

S/E/C OF CEDAR AVENUE AND WEST TREMONT AVENUE  
S/S OF WEST TREMONT AVENUE W/O FORDHAM PLACE  
N/S OF WEST TREMONT AVENUE BETWEEN CEDAR AVENUE AND FORDHAM PLACE  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 303.0 = 88.00

**JB 330E.1 SUPPORT & PROTECTION OF ELECTRIC, GAS AND STEAM FACILITIES DURING EXCAVATION OF L.F.  
CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS (TYPE .1)**

At the following locations:

N/S OF WEST TREMONT AVENUE BETWEEN FORDHAM PLACE AND SEDGWICK AVE.

Total quantity for JB 330E.1 = 65.00

**JB 350 OVERHEAD ACCOMMODATION, PROTECTION OF OH FACILITIES & APPURTENANCES L.S.**

At the following locations:

AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 350 = 1.00

**JB 351 INSTALL AND REMOVE "A" FRAMES ON UTILITY POLES EA.**

At the following locations:

N/S OF WEST TREMONT AVENUE W/O SEDGWICK AVENUE

Total quantity for JB 351 = 2.00

**JB 400 TEST PITS C.Y.**

At the following locations:

AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 400 = 50.00

**JB 401.0 TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITIES C.Y.**

At the following locations:

AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 401.0 = 12.00

4/7/2017

HWXS511 - Con Edison JB Package - SCOPE OF WORK

**CONSOLIDATED EDISON OF NEW YORK, INC. JOINT BIDDING SCOPE OF WORK****SUPPORT & PROTECTION****HWXS511 - RECONSTRUCTION OF****WEST TREMONT AVE STEP STREET****BOROUGH OF THE BRONX**

**JB 402.1      EXIST. CONCR. ENCASED CONDUITS PLCD. IN FINAL POS. W/O CONCR. ENCSMNT      L.F.**

At the following locations:

AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for      JB 402.1      =      120.00

**JB 403.0      PLACING STEEL PROTECTION PLATES FOR UTILITIES      S.F.**

At the following locations:

WEST TREMONT AVENUE BETWEEN CEDAR AVENUE AND FORDHAM PLACE

Total quantity for      JB 403.0      =      1500.00

**JB 405.1      TRENCH EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES.      C.Y.**

At the following locations:

N/S OF WEST TREMONT AVENUE FROM FORDHAM PLACE TO SEDGWICK AVENUE  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for      JB 405.1      =      230.00

**JB 406      EXCAVATION FOR INSTALLATION OF UTILITY STRUCTURES.      C.Y.**

At the following locations:

N/E/C OF WEST TREMONT AVENUE AND FORDHAM PLACE  
N/S OF WEST TREMONT AVENUE W/O SEDGWICK AVENUE

Total quantity for      JB 406      =      24.00

**JB 450.2      CONSTRUCTION FIELD SUPPORT - SMALL CREW      Crhrs.**

At the following locations:

AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for      JB 450.2      =      94.00

**JB 450.3      CONSTRUCTION FIELD SUPPORT - MEDIUM CREW      Crhrs.**

At the following locations:

AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for      JB 450.3      =      98.00

4/7/2017

HWXS511 - Con Edison JB Package - SCOPE OF WORK

CONSOLIDATED EDISON OF NEW YORK, INC. JOINT BIDDING SCOPE OF WORKSUPPORT & PROTECTIONHWXS511 - RECONSTRUCTION OF  
WEST TREMONT AVE STEP STREET  
BOROUGH OF THE BRONX

JB 500 RMVL. OF ABNDND MASONRY FOR ELEC. AND TEL. CONDUITS NON-CONC. ENCS D L.F.

At the following locations:

N/S OF WEST TREMONT AVENUE E/O FORDHAM PLACE

Total quantity for JB 500 = 120.00

JB 603E.1 INSTALL UTILITY CONDUIT IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT L.F.

At the following locations:

AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 603E.1 = 100.00

JB 603E.2 INSTALL UTILITY CONDUIT IN FINAL POSITION WITH CONCRETE ENCASEMENT L.F.

At the following locations:

N/S OF WEST TREMONT AVENUE FROM FORDHAM PLACE TO SEDGWICK AVENUE  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 603E.2 = 340.00

JB 636 EA ADJUSTMENT OF UTILITY HARWARE ( UNDER 7" WIDTH ) EA.

At the following locations:

E/S OF CEDAR AVENUE S/O WEST TREMONT AVENUE

Total quantity for JB 636 EA = 1.00

JB 636 EC ADJUSTMENT OF UTILITY HARWARE ( 14" TO UNDER 30" WIDTH ) EA.

At the following locations:

N/S OF WEST TREMONT AVENUE E/O CEDAR AVENUE

Total quantity for JB 636 EC = 1.00

JB 638 N INSTALLATION OF FIELD CONSTRUCTED UTILITY STRUCTURE C.Y.

At the following locations:

N/E/C OF WEST TREMONT AVENUE AND FORDHAM PLACE  
N/S OF WEST TREMONT AVENUE W/O SEDGWICK AVENUE

Total quantity for JB 638 N = 6.00

4/7/2017

HWXS511 - Con Edison JB Package - SCOPE OF WORK

CONSOLIDATED EDISON OF NEW YORK, INC. JOINT BIDDING SCOPE OF WORKSUPPORT & PROTECTIONHWXS511 - RECONSTRUCTION OFWEST TREMONT AVE STEP STREETBOROUGH OF THE BRONX

JB 700.0 SPECIAL MOD. OF WORK MTHDS TO ACCOM./PROTECT U.G. FACIL. W. LMTD CVR. C.Y.

At the following locations:

WEST TREMONT AVENUE FROM CEDAR AVENUE TO FORDHAM PLACE

Total quantity for JB 700.0 = 102.00

JB 710.1 REM. OF ABND. UTILITY STEEL/CAST IRON PIPE, UP TO & INCL. 12" DIAM. PIPES L.F.

At the following locations:

WEST TREMONT AVENUE E/O FORDHAM PLACE

Total quantity for JB 710.1 = 350.00

JB 800 MODIFICATION OF TROLLEY STRUCTURE REMOVAL L.F.

At the following locations:

INTERSECTION OF WEST TREMONT AVENUE AND CEDAR AVENUE

Total quantity for JB 800 = 100.00

JB 801 MODIFICATION OF TROLLEY STRUCTURE REMOVAL PARALLEL TO UTILITY FACILITIES L.F.

At the following locations:

INTERSECTION OF WEST TREMONT AVENUE AND CEDAR AVENUE

Total quantity for JB 801 = 100.00

JB 802A SPECIAL MODIFICATION OF WORK METHODS FOR INSTALLATION OF NEW SIDEWALKS S.F.

At the following locations:

N/S OF WEST TREMONT AVENUE E/O CEDAR AVENUE

S/S OF WEST TREMONT AVENUE W/O FORDHAM PLACE

WEST TREMONT AVENUE E/O FORDHAM PLACE

N/W/C OF WEST TREMONT AVENUE AND SEDGWICK AVENUE

S/E/C OF WEST TREMONT AVENUE AND CEDAR AVENUE

Total quantity for JB 802A = 1064.00

4/7/2017

HWXS511 - Con Edison JB Package - SCOPE OF WORK

CONSOLIDATED EDISON OF NEW YORK, INC. JOINT BIDDING SCOPE OF WORKSUPPORT & PROTECTIONHWXS511 - RECONSTRUCTION OF  
WEST TREMONT AVE STEP STREET  
BOROUGH OF THE BRONX

JB 802B SPECIAL MODIFICATION OF WORK METHODS FOR INSTALLATION OF NEW CURB L.F.

At the following locations:

N/S OF WEST TREMONT AVENUE E/O CEDAR AVENUE  
S/S OF WEST TREMONT AVENUE W/O FORDHAM PLACE  
WEST TREMONT AVENUE E/O FORDHAM PLACE  
S/E/C OF WEST TREMONT AVENUE AND CEDAR AVENUE

Total quantity for JB 802B = 178.00

JB 803.2 LINE CUT ANY COMBINATION OF ASPHALT AND CONCRETE ROADWAY L.F.

At the following locations:

N/S OF WEST TREMONT AVENUE BETWEEN CEDAR AVENUE AND FORDHAM PLACE  
S/S OF WEST TREMONT AVENUE W/O FORDHAM PLACE

Total quantity for JB 803.2 = 163.00

JB 803.3 LINE CUT ANY COMBINATION OF ASPHALT, CONCRETE, AND BELGIUM BLOCK L.F.

At the following locations:

N/S OF WEST TREMONT AVENUE BETWEEN CEDAR AVENUE AND FORDHAM PLACE  
S/S OF WEST TREMONT AVENUE W/O FORDHAM PLACE  
S/E/C OF WEST TREMONT AVENUE AND CEDAR AVENUE

Total quantity for JB 803.3 = 222.00

JB 900 EXTRA UTILITY WORK ALLOWANCE F.S.

At the following locations:

AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 900 = 1.00

4/7/2017

HWXS511 - Con Edison JB Package - SCOPE OF WORK



**ECS**

For Information Only

November 2016

**HWXS511**  
**Reconstruction of West Tremont Step Street**  
**Borough of The Bronx**  
**Estimate of Joint Bid Items**

JB ITEM	UNITS	TOTAL	DESCRIPTION
JB 500	LF	40	REMOVAL OF ABANDONED UTILITY CONDUITS (NON-CONCRETE ENCASED)
JB 802A	SF	100	SPECIAL MODIFICATION OF WORK METHODS FOR INSTALLATION OF NEW SIDEWALK
JB 802B	LF	35	SPECIAL MODIFICATION OF WORK METHODS FOR INSTALLATION OF NEW CURB
JB 900	FS	1	EXTRA UTILITY WORK COSTS ALLOWANCE

**ECS**

For Information Only

November 2016

**HWXS511**  
**Reconstruction of West Tremont Step Street**  
**Borough of The Bronx**  
**Scope of Work for Joint Bid Items**

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**JB 500**

**REMOVAL OF ABANDONED UTILITY CONDUITS**  
**(NON-CONCRETE ENCASED)**

AS ENCOUNTERED & DIRECTED BY THE ECS FIELD REPRESENTATIVE	QTY(LF)
	40

<b>JB 500</b>	<b>TOTAL</b>	<b>40</b>
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**JB 802A**

**SPECIAL MODIFICATION OF WORK METHODS FOR INSTALLATION**  
**OF NEW SIDEWALK**

@ THE FOLLOWING LOCATIONS

INTERSECTION OF SEDGWICK AVENUE & WEST TREMONT AVENUE	QTY(SF)
	100

<b>JB 802A</b>	<b>TOTAL</b>	<b>100</b>
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**JB 802B**

**SPECIAL MODIFICATION OF WORK METHODS FOR INSTALLATION**  
**OF NEW CURB**

@ THE FOLLOWING LOCATIONS

INTERSECTION OF SEDGWICK AVENUE & WEST TREMONT AVENUE	QTY(LF)
	35

<b>JB 802B</b>	<b>TOTAL</b>	<b>35</b>
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**JB 900**

**EXTRA WORK UTILITY COSTS ALLOWANCE**

@ THE FOLLOWING LOCATIONS

AS ENCOUNTERED & DIRECTED BY ECS FIELD REPRESENTATIVE	QTY(FS)
	1

<b>JB 900</b>	<b>TOTAL</b>	<b>1</b>
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**CABLEVISION**

For Information Only

January 2017

**JOINT BID WORKSHEET****CONTRACT NO. HWXS511 - RECONSTRUCTION OF WEST TREMONT STEP STREET****ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE****FOR CABLEVISION****BOROUGH OF THE BRONX**

JB ITEM	UNITS	TOTAL	DESCRIPTION
JB 350	LS	1	OVERHEAD ACCOMMODATION PROTECTION OF OVERHEAD FACILITIES, POLES AND APPURTENANCES
JB 900	FS	1	EXTRA UTILITY WORK COSTS ALLOWANCE

CABLEVISION

For Information Only

January 2017

**JOINT BID WORKSHEET****CONTRACT NO. HWXS511 - RECONSTRUCTION OF WEST TREMONT STEP STREET****ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE****FOR CABLEVISION****BOROUGH OF THE BRONX**

JB 350

**OVERHEAD ACCOMMODATION PROTECTION OF OVERHEAD  
FACILITIES, POLES AND APPURTENANCES****@ THE FOLLOWING LOCATIONS**

	QTY(LS)
AS ENCOUNTERED OR DIRECTED BY CABLEVISION FIELD REPRESENTATIVE	1
<b>JB 350</b>	<b>TOTAL 1</b>

JB 900

**EXTRA UTILITY WORK COSTS ALLOWANCE****@ THE FOLLOWING LOCATIONS**

	QTY(FS)
AS ENCOUNTERED OR DIRECTED BY CABLEVISION FIELD REPRESENTATIVE	1
<b>JB 900</b>	<b>TOTAL 1</b>

# TEST PITS

- (1) THESE TEST PITS DETAIL EXISTING CONDITIONS (AS OF BID DATE) OF UTILITIES AND OTHER SUBSURFACE FACILITIES AT LOCATIONS AS SHOWN ON THE TEST PIT LOCATIONS PLAN OF THE CONTRACT DRAWINGS.**
- (2) DEPTHS OF FACILITIES ARE FROM EXISTING ROADWAY AND SIDEWALK ELEVATIONS AS SHOWN, OFFSETS ARE FROM EXISTING CURB, PROPERTY AND BUILDING LINES, AS SHOWN.**
- (3) RELEVANT ITEMS ARE NOTED ON EACH TEST PIT DIAGRAM.**

(NO TEXT IN THIS SECTION)



Consolidated Edison  
Company of New York, Inc.

SHEET NO. 3 OF 4

conEdison  
a conEdison Inc. company

JOB: STEP STREET RECONSTRUCTION

PREPARED BY: PM

DATE: 07/28/2016

JOB NO: HWXS511

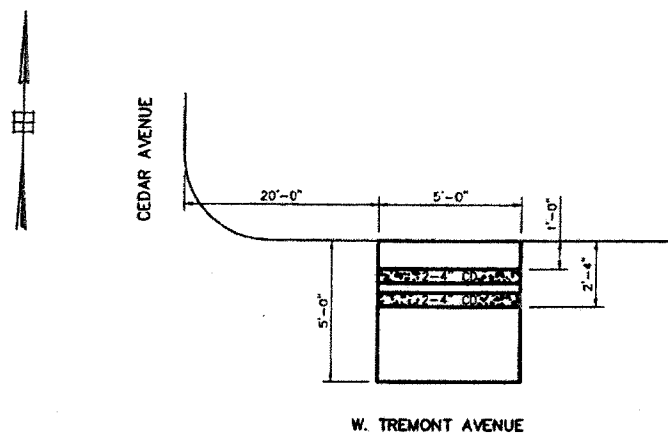
CHECKED BY: EB

DATE: 07/28/2016

TEST PIT # 1 LOCATION: N/S OF W. TREMONT AVE. 20' E/O CEDAR AVE.

PURPOSE: LOCATE FACILITIES

TEST PIT DIMENSION 5'-0"X5'-0"X5'-0"

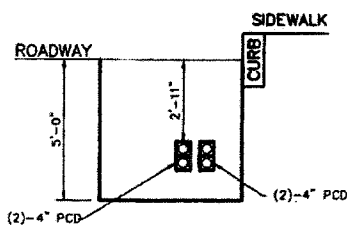


PLAN

NOTE:

1. ALL DRAWINGS SHOWING UTILITY SUPPORT AND PROTECT WORK ARE FOR REFERENCE ONLY.

CET  
ITEMS



SECTION LOOKING WEST



Consolidated Edison  
Company of New York, Inc.

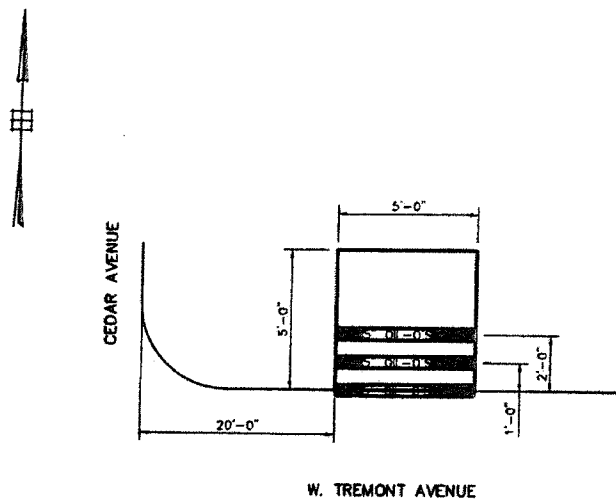
SHEET NO. 4 OF 4

conEdison  
a consolidated Edison company

JOB: STEP STREET RECONSTRUCTION PREPARED BY: PM DATE: 07/28/2016  
JOB NO: HWXS511 CHECKED BY: EB DATE: 07/28/2016

TEST PIT # 2 LOCATION: N/SW OF W. TREMONT AVE. 20' E/O CEDAR AVE.  
PURPOSE: LOCATE FACILITIES

TEST PIT DIMENSION 5'-0"X5'-0"X5'-0"

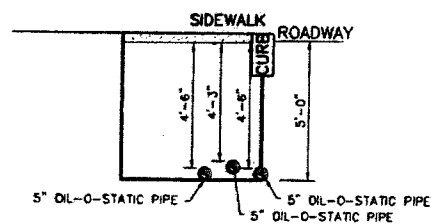


W. TREMONT AVENUE

PLAN

NOTE:  
1. ALL DRAWINGS SHOWING UTILITY  
SUPPORT AND PROTECT WORK ARE  
FOR REFERENCE ONLY.

CET  
ITEMS



SECTION LOOKING EAST

## END OF JB-PAGES

THE JB-PAGES CONSIST OF FORTY-TWO (42) PAGES AND  
TWELVE (12) SHEETS OF PRIVATE UTILITY DRAWINGS ARE  
ATTACHED TO THE CONTRACT PLANS





Department of  
Design and  
Construction

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INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN

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VOLUME 3 OF 3

PROJECT ID: HWXS511

RECONSTRUCTION OF  
WEST TREMONT STEP STREET

INCLUDING STREET LIGHTING, ROADWAY RECONSTRUCTION, SEWER,  
AND TRAFFIC WORK

Together With All Work Incidental Thereto

BOROUGH OF THE BRONX  
CITY OF NEW YORK

---

*Contractor.*

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Dated \_\_\_\_\_, 20\_\_\_\_

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