

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 www1.nyc.gov/site/ddc/index.page

LAW

VOLUME 1 OF 3.
BID BOOKLET

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED FOR:

PROJECT ID: SEK20068

FOR THE CONSTRUCTION OF STORM AND COMBINED SEWERS AND APPURTENANCES IN:

 9^{TH} STREET BETWEEN SMITH STREET AND 2^{ND} AVENUE 2^{ND} AVENUE BETWEEN 9^{TH} STREET AND 7^{TH} STREET

CAPITAL PROJECT WM-1 FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN:

2ND AVENUE BETWEEN 9TH STREET AND 7TH STREET

Together With All Work Incidental Thereto
BOROUGH OF BROOKLYN
CITY OF NEW YORK



FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION PREPARED BY IN-HOUSE DESIGN

18-107



August 02, 2018

CERTIFIED MAIL - RETURN RECEIPT REQUEST JR CRUZ CORP 675 LINE RD ABERDEEN, NJ 07747

RE:

FMS ID: SEK20068

E-PIN: 85018B0111001

DDC PIN: 8502013SE0024C

FOR THE CONSTRUCTION OF STORM

AND COMBINED SEWERS AND APPURTENANCES IN 9TH STREET BETWEEN SMITH ST & 2ND AVENUE,

ETC.-BOROUGH OF BROOKLYN

NOTICE OF AWARD

Dear Contractor:

You are hereby awarded the above referenced contract based upon your bid in the amount of \$22,802,911.25 submitted at the bid opening on May 31, 2018. 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, 1st 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.



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

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

PASSPort Disclosure Filing

All vendors that intend to do business with the City of New York must complete a disclosure process in order to be considered for a contract. This disclosure process was formerly completed using Vendor Information Exchange System (VENDEX) paper-based forms. The City of New York has moved collection of vendor disclosure information online. In early August 2017, the New York City Mayor's Office of Contract Services (MOCS) launched the **Procurement and Sourcing Solutions Portal (PASSPort)**, a new online procurement system that replaced the paper-VENDEX process. In anticipation of awards, all bidders must create online accounts in the new PASSPort system, and file all disclosure information using PASSPort. **Paper submissions, including certifications of no changes to existing VENDEX packages will not be accepted in lieu of complete online filings**.

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

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

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

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

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 to learn more about the loan or contact constructionloan@sbs.nyc.gov / (212) 513-6444 to obtain details and to determine preliminary eligibility.

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

A prime contractor may not discriminate against a subcontractor or potential subcontractor by reason of the subcontractor's participation, or nonparticipation, in the NYC Construction loan program.

(NO TEXT THIS PAGE)

CITY OF NEW YORK

DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE

BID BOOKLET

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED FOR:

PROJECT ID: SEK20068

FOR THE CONSTRUCTION OF STORM AND COMBINED SEWERS AND APPURTENANCES IN:

 9^{TH} STREET BETWEEN SMITH STREET AND 2^{ND} AVENUE 2^{ND} AVENUE BETWEEN 9^{TH} STREET AND 7^{TH} STREET

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Together With All Work Incidental Thereto BOROUGH OF BROOKLYN CITY OF NEW YORK

PROJECT ID: SEK20068

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

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).
- (3) <u>PASSPort COMPLIANCE</u>: The Bidder is advised that Vendex Questionnaires and procedures have been replaced by the PASSPort system. Compliance with PASSPort is mandatory for contract Award. PASSPort details are set forth on NTB-2 at the beginning of this Bid Booklet.
- (4) <u>SPECIAL EXPERIENCE REQUIREMENTS</u>: 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) <u>SPECIAL EXPERIENCE REQUIREMENTS FOR THE BIDDER:</u> 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 (11).

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.

- 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
- 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:** The entity that will perform the subsurface permeation grouting must have, within the last five (5) consecutive years prior to the bid opening, successfully completed in a timely fashion at least three (3) projects similar in scope and type to the required work. The entity must submit a list of projects where it has performed subsurface permeation grouting under similar conditions.

CPESC, Inc.

(B) <u>SPECIAL EXPERIENCE REQUIREMENTS FOR SPECIFIC AREAS OF WORK (to be provided after an award of contract)</u>:

The requirements in this Section (B) apply to this contract where indicated by a blackened box (11).

The Special Experience Requirements set forth below apply to the contractor, subcontractor or subsubcontractor that will perform the specific area of work. Compliance with such Special Experience Requirements will be determined solely by the City after an award of contract. After an award of contract, when requested by the City, the contractor will be required to submit the qualifications of the contractor, subcontractor or sub-subcontractor that will perform the specific area of work. If the bidder intends to perform such work itself, it must demonstrate compliance with the Special Experience Requirements. If the bidder intends to subcontract this work, the proposed subcontractor or 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 subsubcontractor.

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

- (C) <u>SPECIFICATIONS</u>: 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) <u>SUBMISSION REQUIREMENTS</u>: 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) <u>CONDITIONS</u>: 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) <u>JOINT VENTURES</u>: In the event the bidder is a joint venture, at least one firm in the joint venture must meet the above described experience requirements.

Name of Contractor:JI	RCRUZ Corp.
Name of Project:S	ER002311
Location of Project: B	ertram Avenue, Staten Island
Owner or Owner's represen	ntative (Architect or Engineer) who is familiar with the work performed:
Name: Hitendra Pate, Title: Deputy Directo	PE Phone Number: 718/391-3149
Construction of Sanita	oject completed or the Project in progress:ary & Storm Sewers including Water Main Work
Was the Project performed	as a prime, a subcontractor or a sub-subcontractor: Prime
Amount of Contract, Subc	ontract or Sub-subcontract: \$18,321,123
Start Date and Completion	Date: February 2014 - June 2016
•	********
Name of Contractor:	
•	
	ntative (Architect or Engineer) who is familiar with the work performed:
Name:	
Title:	Phone Number:
Brief description of the Pr	oject completed or the Project in progress:
Was the Project performed	as a prime, a subcontractor or a sub-subcontractor:
Amount of Contract, Subc	ontract or Sub-subcontract:
Start Date and Completion	Date:

Name of Project: New Stapleton Waterfront Phase II Location of Project: Staten Island Owner or Owner's representative (Architect or Engineer) who is familiar with the work performed: Name: Julia Melzer Title: NYC EDC Asst. VP - Capital Program Phone Number: 212/312-4268 Brief description of the Project completed or the Project in progress: Waterfront development, BMP Was the Project performed as a prime, a subcontractor or a sub-subcontractor: Prime Amount of Contract, Subcontract or Sub-subcontract: \$12,179,902.00 Start Date and Completion Date: Ongoing ****** Name of Contractor: JRCRUZ Corp. Name of Project: Kiswick Street, Staten Island Owner or Owner's representative (Architect or Engineer) who is familiar with the work performed: Name: David Peterson, P.E. Title: NYC DDC EIC Phone Number: 718/391-2022 Brief description of the Project completed or the Project in progress: Storm sewers, appurtenances, BMP Was the Project performed as a prime, a subcontractor or a sub-subcontractor: Prime Amount of Contract, Subcontract or Sub-subcontract: \$22,251,507.00 Start Date and Completion Date: Ongoing	Name of Contractor:J	RCRUZ Corp.
Owner or Owner's representative (Architect or Engineer) who is familiar with the work performed: Name:Julia_Melzer Title: NYC EDC Asst. VP - Capital Program Phone Number:212/312-4268 Brief description of the Project completed or the Project in progress:	Name of Project:	lew Stapleton Waterfront Phase II
Name:	Location of Project: S	taten Island
Title: NYC EDC Asst. VP - Capital Program Phone Number:212/312-4268 Brief description of the Project completed or the Project in progress:	Owner or Owner's repres	sentative (Architect or Engineer) who is familiar with the work performed:
Title: NYC EDC Asst. VP - Capital Program Phone Number:212/312-4268 Brief description of the Project completed or the Project in progress:	Name: Julia Melzer	
Was the Project performed as a prime, a subcontractor or a sub-subcontractor: Prime Amount of Contract, Subcontract or Sub-subcontract: \$12,179,902.00 Start Date and Completion Date: Ongoing ***********************************	Title: NYC EDC Asst	. VP - Capital Program Phone Number: 212/312-4268
Amount of Contract, Subcontract or Sub-subcontract: \$12,179,902.00 Start Date and Completion Date: Ongoing ***********************************	Brief description of the I Waterfront developr	nant DMD
Name of Contractor: JRCRUZ Corp. Name of Project: MIBBNC001 Location of Project: Kiswick Street, Staten Island Owner or Owner's representative (Architect or Engineer) who is familiar with the work performed: Name: David Peterson, P.E. Title: NYC DDC EIC Phone Number: 718/391-2022 Brief description of the Project completed or the Project in progress: Storm sewers, appurtenances, BMP Was the Project performed as a prime, a subcontractor or a sub-subcontractor: Prime Amount of Contract, Subcontract or Sub-subcontract: \$22,251,507.00	Was the Project perform	ed as a prime, a subcontractor or a sub-subcontractor: Prime
Name of Contractor: JRCRUZ Corp. Name of Project: MIBBNC001 Location of Project: Kiswick Street, Staten Island Owner or Owner's representative (Architect or Engineer) who is familiar with the work performed: Name: David Peterson, P.E. Title: NYC DDC EIC Phone Number: 718/391-2022 Brief description of the Project completed or the Project in progress: Storm sewers, appurtenances, BMP Was the Project performed as a prime, a subcontractor or a sub-subcontractor: Prime Amount of Contract, Subcontract or Sub-subcontract: \$22,251,507.00	Amount of Contract, Sul	ocontract or Sub-subcontract: \$12,179,902.00
Name of Contractor:	Start Date and Completic	on Date: Ongoing
Name of Project: MIBBNC001 Location of Project: Kiswick Street, Staten Island Owner or Owner's representative (Architect or Engineer) who is familiar with the work performed: Name: David Peterson, P.E. Title: NYC DDC EIC Phone Number: 718/391-2022 Brief description of the Project completed or the Project in progress: Storm sewers, appurtenances, BMP Was the Project performed as a prime, a subcontractor or a sub-subcontractor: Prime Amount of Contract, Subcontract or Sub-subcontract: \$22,251,507.00		********
Location of Project: Kiswick Street, Staten Island Owner or Owner's representative (Architect or Engineer) who is familiar with the work performed: Name: David Peterson, P.E. Title: NYC DDC EIC Phone Number: 718/391-2022 Brief description of the Project completed or the Project in progress: Storm sewers, appurtenances, BMP Was the Project performed as a prime, a subcontractor or a sub-subcontractor: Prime Amount of Contract, Subcontract or Sub-subcontract: \$22,251,507.00	Name of Contractor:J	RCRUZ Corp.
Owner or Owner's representative (Architect or Engineer) who is familiar with the work performed: Name: David Peterson, P.E. Title: NYC DDC EIC Phone Number: 718/391-2022 Brief description of the Project completed or the Project in progress: Storm sewers, appurtenances, BMP Was the Project performed as a prime, a subcontractor or a sub-subcontractor: Prime Amount of Contract, Subcontract or Sub-subcontract: \$22,251,507.00	Name of Project:	IIBBNC001
Name: David Peterson, P.E. Title: NYC DDC EIC Phone Number: 718/391-2022 Brief description of the Project completed or the Project in progress: Storm sewers, appurtenances, BMP Was the Project performed as a prime, a subcontractor or a sub-subcontractor: Prime Amount of Contract, Subcontract or Sub-subcontract: \$22,251,507.00	Location of Project:k	Ciswick Street, Staten Island
Title: NYC DDC EIC Phone Number:718/391-2022 Brief description of the Project completed or the Project in progress:	Owner or Owner's repres	sentative (Architect or Engineer) who is familiar with the work performed:
Title: NYC DDC EIC Phone Number:718/391-2022 Brief description of the Project completed or the Project in progress:	Name: David Peterso	on. P.E.
Storm sewers, appurtenances, BMP Was the Project performed as a prime, a subcontractor or a sub-subcontractor: Prime Amount of Contract, Subcontract or Sub-subcontract: \$22,251,507.00		
Amount of Contract, Subcontract or Sub-subcontract: \$22,251,507.00		
	Was the Project perform	ed as a prime, a subcontractor or a sub-subcontractor: Prime
Start Date and Completion Date: Ongoing	Amount of Contract, Sul	ocontract or Sub-subcontract: \$22,251,507.00
	Start Date and Completic	on Date: Ongoing

Name of Contractor:JRCRUZ Corp.
Name of Project: SEQ200508
Location of Project: Bay 32nd Street, Queens
Owner or Owner's representative (Architect or Engineer) who is familiar with the work performed:
Name: Norbu Tsering
Title: NYC DDC EIC Phone Number: 718/391-2555
Brief description of the Project completed or the Project in progress: Sanitary and storm sewers, appurtenances, BMP
Was the Project performed as a prime, a subcontractor or a sub-subcontractor: Prime
Amount of Contract, Subcontract or Sub-subcontract: \$11,411,411.00
Start Date and Completion Date: Completed May 2016

Name of Contractor: JRCRUZ Corp.
Name of Project: SE-734
Location of Project: Richard Avenue, Staten Island
Owner or Owner's representative (Architect or Engineer) who is familiar with the work performed:
Name: Hitendra Patel, P.E.
Title: NYC DDC Deputy Director Phone Number: 718/391-3149
Brief description of the Project completed or the Project in progress: Sanitary and storm sewers, appurtenances, water main, BMP
Was the Project performed as a prime, a subcontractor or a sub-subcontractor: Prime
Amount of Contract, Subcontract or Sub-subcontract: \$12,799,997.00
Start Date and Completion Date: Completed May 2017

· 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: JRCRUZ Corp. Name of Project: - SER20088 Edgegrove Ave., Staten Island, NY Location of Project: Owner or Owner's representative (Architect or Engineer) who is familiar with the work performed: NYC DDC Thomas Foley Title: Engineer in Charge Phone Number: Brief description of the Project completed or the Project in progress: Construction of Combined Sewars, BMP, curbs, sidewalks and road restoration. Was the Project performed as a prime, a subcontractor or a sub-subcontractor: Amount of Contract, Subcontract or Sub-subcontract: \$5,828,901 Start Date and Completion Date: Name of Contractor: JRCRUZ Corp. Name of Project: SE-777-R Location of Project: North Railroad St., Staten Island, NY Owner or Owner's representative (Architect or Engineer) who is familiar with the work performed: NYC DDC, Shakeel Ahmed, P.E. Name: Title: Engineer in Charge Phone Number: 718-391-1907 Brief description of the Project completed or the Project in progress: Construction of combined sewers, BMP, curbs, sidewalks, water mains, road restoration. Was the Project performed as a prime, a subcontractor or a sub-subcontractor: Prime Amount of Contract, Subcontract or Sub-subcontract: \$34,720,000 Start Date and Completion Date: August 2010

Name of Contractor: Applemon Corp.
Name of Project: Richard Avenue (SE-734)
Location of Project: Staten Island, NY
Owner or Owner's representative (Architect or Engineer) who is familiar with the work performed:
Name: NYC DDC - Sam Riad
Title: EIC Phone Number: 718/317-2359
Brief description of the Project completed or the Project in progress: Construction of sanitary and storm sewers and appurtenances in Richard Avenue including water main and Best Management Practice (BMP)
Was the Project performed as a prime, a subcontractor or a sub-subcontractor: Subcontractor
Amount of Contract, Subcontract or Sub-subcontract; \$60,000
Start Date and Completion Date: 07/07/2014 - 02/25/2017

Name of Contractor: Applemon Corp.
Name of Project: Bertram Avenue (SER002311)
Location of Project: Staten Island
Owner or Owner's representative (Architect or Engineer) who is familiar with the work performed:
Name: NYC DDC - Hitendra Patel
Title: EIC Phone Number: 718/227-1235
Brief description of the Project completed or the Project in progress: Construction of sanitary an storm sewers in Bertram Avenue including water main work
Was the Project performed as a prime, a subcontractor or a sub-subcontractor: Subcontractor
Amount of Contract, Subcontract or Sub-subcontract: \$42,000
Start Date and Completion Date: 02/17/2014 - 10/20/2017

Name of Contractor: Applemon Corp.
Name of Project: Kiswick Street (MIBBNC001)
Location of Project: Staten Island
Owner or Owner's representative (Architect or Engineer) who is familiar with the work performed:
Name: NYC DDC - Dave Peterson
Title: EIC Phone Number: 718/351-4072
Brief description of the Project completed or the Project in progress: Construction of storm and sanitary sewers and appurtenances in Kiswick Street including water main work
Was the Project performed as a prime, a subcontractor or a sub-subcontractor. Subcontractor
Amount of Contract, Subcontract or Sub-subcontract: \$15,000
Start Date and Completion Date: 09/14/2015 - 06/04/2017

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:
And the second s

Project ID: SEK20068

ATTACHMENT 1 - BID INFORMATION

PROJECT ID: SEK20068 PIN: 8502013SE0024C

Description and Location of Work:

FOR THE CONSTRUCTION OF STORM AND COMBINED SEWERS AND APPURTENANCES IN:
9TH STREET BETWEEN SMITH STREET AND 2ND AVENUE
2ND AVENUE BETWEEN 9TH STREET AND 7TH STREET

CAPITAL PROJECT WM-1 FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN: 2ND AVENUE BETWEEN 9TH STREET AND 7TH STREET

Together With All Work Incidental Thereto

BOROUGH OF BROOKLYN CITY OF NEW YORK

	CITY OF NEW YOR	RK
Documents Available A	30-30 Thomson Avenue First Floor Bid Procurement Long Island City, New York 8:30 A.M. to 4:00 P.M Mo	11101
Submission of Bids To:	30-30 Thomson Avenue First Floor Bid Procurement Long Island City, New York Before 11:00 A.M. on	11101
Bid Opening:	30-30 Thomson Avenue First Floor Bid Procurement Long Island City, New York	
	Time and Date: 11:00 A.M.	on MAY 16, 2018
Pre-Bid Conference:	YesNo	X
	If Yes, Mandatory: Time and Date: Location:	Optional:
Bid Security:		at set forth below; provided, however, bid L BID PRICE set forth on the Bid Form is
	,	han 10% of the TOTAL BID PRICE set
	forth on the Bid Form, OR Certified Check in an amoun PRICE set forth on the Bid F	t not less than 2% of the TOTAL BID form.
		n the amount of \$1,000,000 or more. an amount equal to 100% of the Contract
Agency Contact Person	Lorraine Holley Phone: 718-391-2601 Email: CSB_projectinquiries@	FAX: 718-391-2627 @ddc.nyc.gov

	LIST OF DRAWINGS
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	9TH STREET FROM SMITH STREET TO 2ND AVENUE PLAN AND PROFILE
3	9TH STREET FROM SMITH STREET TO 2ND AVENUE PLAN AND PROFILE
4	2ND AVENUE FROM 9TH STREET TO 7TH STREET PLAN AND PROFILE, MODIFIED PRECAST MANHOLE DETAIL
5	9TH STREET FROM SMITH STREET TO 2ND AVENUE SANITARY SEWER PROFILES
6	ADDITIONAL PROFILES ALONG 2ND AVENUE. SECTIONS A-A, C-C.
7	CFA PILE DETAILS FOR PIPE SEWERS
8	CHAMBER NO. 1
9	CHAMBER NO. 2
10	CHAMBER NO. 3
11	OUTFALL NO. 1 9TH STREET AND GOWANUS CANAL
12-13	OUTFALL NO. 2 9TH STREET AND GOWANUS CANAL
14-16	MAINTENANCE AND PROTECTION OF TRAFFIC
17	FIRE DEPARTMENT BASE MAP
18-19	EROSION & SEDIMENT CONTROL PLAN AND DETAILS.
TF1	TRAFFIC SIGNAL DESIGN DRAWINGS (FOR REFERENCE ONLY)
1 - 2	NEW YORK CITY TRANSIT DUCT ASSIGNMENT DRAWINGS (FOR REFERENCE ONLY)
3 - 5	NINTH STREET BRIDGE OVER GOWANDS CANAL (FOR REFERENCE ONLY)
6 - 17	CON EDISON AND VERIZON UTILITY DRAWINGS (FOR REFERENCE ONLY)
B1 - B5	BORING RECORDS

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	NYC Department of Transportation ("DOT") Standard Highway Specifications, as amended in the R-Pages, located in Volume 3 of 3 herein;
7.XXX 8.XXX (Except 8.01 XXX; see below) 9.XXX	AND NYC DOT Standard Details of Construction; OR, if the item is not contained within the Standard Specifications, 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 (Except 79.11XXX; see below) 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; AND NYC DOT Specifications for Trunk Main Work; AND NYC DOT Sewer Design Standards; AND NYC DOT Water Main Standard Drawings; OR, if the item is not contained within the Standard Specifications, 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 AND NYC DEP Standards for Green Infrastructure.
UTL-XXX	Gas Cost Sharing Standard Specifications in the EP7-Pages, located in Volume 3 of 3 herein.

B-1

BID SCHEDULE

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

(NO FURTHER TEXT ON THIS PAGE)



NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION CONTRACT PIN:8502013SE0024C DIVISION OF INFRASTRUCTURE - BUREAU OF

PROJECT ID:SEK20068

5/18/2018 9:04 AM

BID SCHEDULE

- proportionate share of the Bidder's anticipated profit, overhead costs, and other Indirect costs, anticipated 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 for the performance of the Items in question.
- The following bld prices on Unit Price Contracts are to be paid for the actual quantities of the Item numbers appliances of every description necessary to complete the entire work, as specified, and the removal of all In the completed work or structure, and they cover the cost of all work, labor, material, tools, plant and debris, temporary work and appliances. 3
- (3) PLEASE BE SURE A LEGIBLE BID IS ENTERED, IN INK, FOR EACH ITEM. Afterations must be initlaled 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.
- Commissioner, in writing, if any pages are missing, and must request that such missing pages be furnished (5) Prospective bidders must examine the Bid Schedule carefully and, before bidding, must advise the them. The pages of this Bid Schedule are numbered consecutively, as follows: B-3 [REVISION #1] Through B-39 [REVISION #1]

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.

Department of Design and Construction

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SEK20068 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502013SE0024C

5/18/2018 9:04 AM

BID SCHEDULE FORM

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	ASPHALTIC CONCRETE WEARING COURSE, 2" THICK			30 0	3	145,000	Q .
005	4.02 CA	1,700.00	TONS				
	BINDER MIXTURE			130	00	od dal, as	8
6003	4.04 H	1,000.00	C.Y.				Ş
	CONCRETE BASE FOR PAVEMENT, VARIABLE THICKNESS FOR TRENCH RESTORATION, (HIGH-EARLY STRENGTH)			920	8	00/098 00	8
90	4.05 AX	160.00	C.Y.			(
·	HIGH-EARLY STRENGTH REINFORCED CONCRETE PAVEMENT (BUS STOPS)			(20	3	1 90,600	8
905	4.08 AA	400.00	LF.	4		(
	CONCRETE CURB (18" DEEP)			O 9	3	9d'000	g
98	4.09 AD	1,000.00	L.F.	(78.5	
	STRAIGHT STEEL FACED CONCRETE CURB (18" DEEP)			40	B	000 /0/ 000	8

B-4 [REVISION # 1]



NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SEK20068

CONTRACT PIN: 8502013SE0024C DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN **BID SCHEDULE FORM** 5/18/2018 9:04 AM

	THE THE PERSON OF THE PARTY OF	COL3 ENGINEERS ESTIMATE: OF QUANTITY		CON CONTRACTOR OF THE PROPERTY	SIO	A Leading Light	20
007	4.09 AF Straight Steel Faced Concrete Curb (27" Deep)	200.00	LF.	961	S	000 /HC 000	8
800	4.09 BD DEPRESSED STEEL FACED CONCRETE CURB (18" DEEP)	200.00	7 F.	120	3	Sylves	8
600	4.09 CD CORNER STEEL FACED CONCRETE CURB (18" DEEP)	200.00	ন	150	8	00 75, av	B
010	4.13 AAS 4" CONCRETE SIDEWALK (UNPIGMENTED)	7,000.00	A.	6	8	20/1/200	8
011	4.13 BAS 7" CONCRETE SIDEWALK (UNPIGMENTED)	3,000.00	A.	5	S	000 /5/200	8
012	4.13 DE EMBEDDED PREFORMED DETECTABLE WARNING UNITS	320.00	ю. г.	900	9	00 P 100	8

Department of Design and Construction

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SEK20068 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502013SE0024C

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BID SCHEDULE FORM

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COL 4 EURITERI EUNIT DOLLARS	EACH 750	еасн 1,350	ЕАСН 1, 500	ЕАСН 150	БАСН	EACH
ENGINEER'S ESTIMATE OF QUANTITY	2.00	8.00	2.00	14.00	10.00	2.00
TEN NUMBER WITH DESCRIPTION	4.16 AA TREES REMOVED (4" TO UNDER 12" CALIPER)	4.16 BA TREES PLANTED, 2-1/2" TO 3" CALIPER, ALL TYPES	4.16 CA TREES PLANTED, 3" TO 3-1/2" CALIPER, ALL TYPES	4.18 A MAINTENANCE TREE PRUNING (UNDER 12" CAL.)	4.18 B MAINTENANCE TREE PRUNING (12" TO UNDER 18" CAL.)	4.18 D MAINTENANCE TREE PRUNING (24" CAL. AND OVER)
COL 1.3	013	410	015	016	017	918

B - 6 [REVISION # 1]



NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SEK20088

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CONTRACT PIN: 8502013SE0024C

BID SCHEDULE FORM

ON DES	COL 2 TEM WINBER and DESCRIPTION	ESTINATE ESTINATE OF CLANITIVE	COL 4	INTEREST		Physical Company of the Company of t	
019	4.21 TREE CONSULTANT	600.00	P/HR	29	8	36,000 co	8
020	50.21C3C024D 24" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	260.00	F.	80	8	260, cm co	8
021	50.21C3C030D 30" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	300.00	<u>"</u>	799	8	310,000	8
022	50.21C3C053W 53"W X 34"H R.C.P. CLASS HE-III COMBINED SEWER, ON CONCRETE CRADLE	260.00	LF.	3 0051	Q	340,000	8
023	50.21M3C042D 42" R.C.P. CLASS III STORM SEWER, ON CONCRETE CRADLE	120.00	H.	0 0 0 1	00	(30,000	0
024	50.21M3E045W 45"W X 29"H R.C.P. CLASS HE-III STORM SEWER, ENCASED IN CONCRETE	150.00	ñ.) (300)	20	00/051 00	B
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PROJECT ID: SEK20068 NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502013SE0024C

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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SEK20068 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502013SE0024C

BID SCHEDULE FORM

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031	50.31SE12 12" E.S.V.P. SANITARY SEWER, ENCASED IN CONCRETE	1,200.00	L.	700	8	840,000	Q9
032	50.41M6C18 18" D.I.P. CLASS 56 STORM SEWER, ON CONCRETE CRADLE	00.00	<u> </u>	Sas	2	00/8H 00	8
033	50.41S6E12 12" D.I.P. CLASS 56 SANITARY SEWER, ENCASED IN CONCRETE	800.00	<u>"</u>	700	8	00 420,000 co	8
034	50.91S6C06 6" D.I.P. CLASS 56 SANITARY FORCE MAIN, ON CONCRETE CRADLE	100.00	5	350	8	35,000	8
035	51.11C002 CHAMBER NO. 2	0.1	ЕАСН	850,000 B	8	\$50,000	8
036	51.11C003 CHAMBER NO. 3	1.00	ЕАСН	L(00,000 ac		400,000	g

[REVISION # 1]

Design and Construction

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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SEK20068 **DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN**

CONTRACT PIN: 8502013SE0024C

BID SCHEDULE FORM

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COLS FERGINEER'S ESTINATE OF OUTANTITY	12.00	3.00	3.00	1.00	3.00	4.00
OOU 2 THEN NUMBER AND DESCRIPTION	51.11P004 STANDARD 4'-0" DIAMETER PRECAST MANHOLE	51.11P006 STANDARD 6-0" DIAMETER PRECAST MANHOLE	51.11P007 STANDARD 7:0" DIAMETER PRECAST MANHOLE	51.11P008 STANDARD 8-0" DIAMETER PRECAST MANHOLE	51.21S0A1000V STANDARD MANHOLE TYPE A-1	51.21S0A3000V STANDARD SHALLOW MANHOLE TYPE A-3
©0∐1 SEG.NO	037	038	033	92	2	045

B - 10 [REVISION # 1]



NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SEK20068

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CONTRACT PIN: 8502013SE0024C DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

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Department of Design and Construction 5/18/2018 9:04 AM

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SEK20068 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502013SE0024C

BID SCHEDULE FORM

6° DUCTILE IRON PIPE SPUR FOR HOUSE CONNECTION ON 12° D.I.P. SANITARY SEWER 52.31D08S12 8° DUCTILE IRON PIPE SPUR FOR HOUSE CONNECTION ON 12° D.I.P. SANITARY SEWER 52.31V06S12 6° E.S.V.P. SPUR FOR HOUSE CONNECTION ON 12° E.S.V.P. SANITARY SEWER 52.31V08S12 8° E.S.V.P. SPUR FOR HOUSE CONNECTION ON 12° E.S.V.P.	2.31V08: "E.S.V.P. SI ANITARY SI
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SEK20068 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502013SE0024C

BID SCHEDULE FORM

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COL3 ESTIMATE OF OUNTITY	30.00	50.00	120.00	250.00	3,000.00	3.00
COL 2 TEM NAMER and DESCRIPTION TO	52.41D06N NEW 6" D.I.P. HOUSE CONNECTION DRAIN ON STONE BEDDING Unit price bid shell not be greater than: \$ 75.00	52.41D06R 6" D.I.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	52.41D08N NEW 8" D.I.P. HOUSE CONNECTION DRAIN ON STONE BEDDING Unit price bid shall not be greater than: \$80.00	52.41D08R 8" D.I.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	53.11DR TELEVISION INSPECTION AND DIGITAL AUDIO-VISUAL RECORDING OF SEWERS	54.12CS CLEANING OF DRAINAGE STRUCTURES
20 20 20 30 30	055	056	057	058	059	090

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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SEK20068 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502013SE0024C

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BID SCHEDULE FORM

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1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8	8	900	00	95	8
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COL 4	S.Y.	C.Y.	C.Y.	C.Y.	્ર ન	LF.
** ENGINEER'S: ESTIMATE: DE QUANTITY	490.00	2,000.00	100.00	800.00	1,250.00	7,000.00
COL 2 COL 3 COL 2 COL 3 CO	6.01 AC CLEARING AND GRUBBING	6.02 AAN UNCLASSIFIED EXCAVATION	6.02 XHEC INCREMENTAL COST FOR MODIFYING WORK METHODS NEAR (WITHIN 3 FEET OF) TRANSIT FACILITIES AND BUILDING VAULTS	6.02 XSCW INCREMENTAL COST FOR USING SPECIAL CARE WORK METHODS NEAR (FROM 3 FEET TO 50 FEET) TRANSIT FACILITIES	6.25 RS TEMPORARY SIGNS	5 6.26 TIMBER CURB
COL. 1 SEC. NO	190	062	063	8	065	990

B - 14 [REVISION # 1]



NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SEK20068
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN CONTRACT PIN: 8502013SE0024C DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

BID SCHEDULE FORM

COLT.	COL 2	ENGINEERS ESTIMATES OF COMMETTED	ANDOLA SE	Mile Receipt Mile Market Ma	EXTENDED A MOUNT	(
290	6.28 AA LIGHTED TIMBER BARRICADES	700.00	L.F.		7,000	000
890	6.40 D ENGINEER'S FIELD OFFICE (TYPE D)	24.00	MONTH	(5,000	360,000	0
690	6.44 THERMOPLASTIC REFLECTORIZED PAVEMENT MARKINGS (4" WIDE)	4,300.00	<u> </u>	<u> </u>	co 4,300	8
070	6.44 CST COLOR SURFACE TREATMENT FOR PAVEMENTS (CST)	1,470.00	A.	S.	09 7,350	3
071	6.49 TEMPORARY PAVEMENT MARKINGS (4" WIDE)	2,000.00	Ë,	7	70 1,400	8
072	6.52 CG CROSSING GUARD	2,500.00	P/HR	35 00	co (62,500	8



CONTRACT PIN: 8502013SE0024C

5/18/2018 9:04 AM

BID SCHEDULE FORM

COL 1	TEM NUMBER and DESCRIPTION	COL 3 ENGINEERS ESTIMATE OF QUANTITY	PONT.	COL 6 UNIT PRICE (IN FICURES) FOLIARS	COL B EXTERIOED AMOUNT (INTRACIOES) DOLARS	ξ
073	6.53 REMOVE EXISTING LANE MARKINGS (4" WIDE)	3,600.00	LF.	75	75 J.7cs	8
074	6.59 P TEMPORARY CONCRETE BARRIER	2,000.00	LF.	50 &	50 co (00,000	0
075	6.59 PF TEMPORARY CONCRETE BARRIER WITH FENCE	200.00	LF.	(00 00)	00 DC,000	8
076	6.85 A TRAFFIC ENFORCEMENT AGENTS PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 806,919.00	1.00	R. S.	806,919 : 00	\$806,919	8
077	6.87 PLASTIC BARRELS	1,800.00	ЕАСН	08)	3,600	3

DOC Department of Design and Construction 5/18/2018 9:04 AM

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SEK20068 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502013SE0024C

BID SCHEDULE FORM

COLOR SEO. NO	COL 2	OOL 35 ENGINEERS ESTMATE OF QUANTITY	* COL * FE	Construction (In Property)		Manager (Manager)	1857 5
078	6.91 REFLECTIVE CRACKING MEMBRANE (18" WIDE)	200.00	F	8	R	009	0
620	60.11R516 FURNISHING AND DELIVERING 16-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 55)	20.00	r.	0 001	8	S, 588	8
080	60.11R520 FURNISHING AND DELIVERING 20-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 55)	00.00	Ë.	175 (2	00 (05,000	3
081	60.11R606 FURNISHING AND DELIVERING 6-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	20.00	H.	3	9	X XX	8
082	60.11R612 FURNISHING AND DELIVERING 12-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	120.00	F.	25)	0	00/01/00	Q
083	60.12D06 LAYING 6-INCH DUCTILE IRON PIPE AND FITTINGS	40.00	ñ.	50)	0	2007 J 200	8
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CONTRACT PIN: 8502013SE0024C

5/18/2018 9:04 AM

BID SCHEDULE FORM

Design and Construction 5/18/2018 9:04 AM

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SEK20068 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502013SE0024C

BID SCHEDULE FORM

COL 1	COL 2	ENGINEERS ESTIMATE DE QUANTITY	200.4 200.4 Unit	TOOL & TO		TRANSPORT OF THE PROPERTY OF T	8 10 8 10
680	61.11DMM20 FURNISHING AND DELIVERING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	1.00	ЕАСН	2), 000	200	21,000	8
060	61.11TWC03 FURNISHING AND DELIVERING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	1.00	ЕАСН	88	b B	800	00
091	61.11TWC04 FURNISHING AND DELIVERING 4-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	7.00	ЕАСН	g Coop	900	20	000
092	61.12DMM06 SETTING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	2.00	ЕАСН	00001	80 80 80	_	8
063	61.12DMM20 SETTING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	1.00	ЕАСН	2,500 u	w 2,500		B
994	61.12TWC03 SETTING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	1.00	ЕАСН	Zes	8	300	720

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Design and Construction

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SEK20068 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

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	З	8	S	g	8	8
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COL A	ЕАСН	ЕАСН	БАСН	EACH	EACH	SNOT
COL 3 ENGINEERS ESTINATE OF QUANTITY	1.00	2.00	2.00	2.00	4.00	3.00
COL.2	61.12TWC04 SETTING 4.INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	62.11SD FURNISHING AND DELIVERING HYDRANTS	62.12SG SETTING HYDRANTS COMPLETE WITH WEDGE TYPE RETAINER GLANDS	62.13RH REMOVING HYDRANTS	62.14FS FURNISHING, DELIVERING AND INSTALLING HYDRANT FENDERS	63.11VC FURNISHING AND DELIVERING VARIOUS CASTINGS
SEQ.NO	982	960	097	860	660	6

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BID SCHEDULE FORM

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Design and Construction

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SEK20068 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502013SE0024C

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COLS UNIT PRICE (IN FIGURES DOLLARS	th.500	_		·	30	12,000
COC. 1	ЕАСН	LBS.	L.F.	S.F.	C.Y.	MONTH
ENGINEERS ESTIMATE OF QUANTITY	1.00	200.00	350.00	8,000.00	00.09	18.00
COL. 2 THEN NUMBER AND DESCRIPTION	64.13WC2 FURNISHING SLEEVE ON 2	65.11BR FURNISHING, DELIVERING AND INSTALLING BANDS, RODS, WASHERS, ETC., COMPLETE, FOR RESTRAINING JOINTS	65.21PS FURNISHING AND PLACING POLYETHYLENE SLEEVE Unit price bid shall not be less than: \$ 0.50	65.31FF FURNISHING, DELIVERING AND PLACING FILTER FABRIC Unit price bid shall not be less than: \$ 0.10	65.71SG FURNISHING, DELIVERING AND PLACING SCREENED GRAVEL OR SCREENED BROKEN STONE BEDDING	7.13 B MAINTENANCE OF SITE Unit price bid shell not be less then: \$8,000.00
COL.1	107	108	109	110	=	112

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BID SCHEDULE FORM

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CON B WITT PRICE (NI FIGURES) FOLLARS	& X	8	7,400 000	60 m 6,000	9	65 E
THAT	F	4	L.S.	ЕАСН	ЕАСН	BLOCK
COLS ENGINEERS ESTINATE OF QUANTITY	305.00	4,000.00	1.00	100.00	100.00	100.00
TIEW NUMBER and DESCRIPTION	7.19 LOAD TRANSFER JOINT	7.36 PEDESTRIAN STEEL BARRICADES	7.88 AA RODENT INFESTATION SURVEY AND MONITORING Unit price bid shall not be less than: \$7,400.00	7.88 AB RODENT BAIT STATIONS Unit price bid shall not be less than: \$ 60.00	7.88 AC BAITING OF RODENT BAIT STATIONS Unit price bid shall not be less than: \$9.50	7.88 AD WATERBUG BAIT APPLICATIONS Unit price bid shell not be less then: \$ 65.00
CO SEC. NO	113	1	115	116	117	2

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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SEK20068 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

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4 Joseph Market	V.F.	V.F.	EACH	S.Y.	4	C.Y.
ENGINEER'S FISHINGTE OF QUANTITY	8,000.00	33,000.00	2.00	2,200.00	8,000.00	100.00
COL2 ** ** ** ** ** ** ** ** ** ** ** ** **	70.11TT TIMBER PILES (TREATED) Unit price bid shall not be less than: \$ 15.00	70.13MN MINI-PILES (GROUTED)	70.13MT MINI-PILES, LOAD TEST	70.21DK DECKING	70.31FN FENCING Unit price bid shell not be less then: \$2.00	70.51EO EXCAVATION OF BOULDERS IN OPEN CUT Unit price bid shall not be less than: \$ 75.00
COL 4	119	120	121	122	123	124

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UNIT PRICE	62 B	180 co	5 B	4	7	A R
COL.4	C.Y.	C.Y.	C.Y.	C.Y.	LBS.	C.Y.
COLS ENGINEERS ESTINATE OF QUANTITY	160.00	1,000.00	1,600.00	1,000.00	120,000.00	700.00
COL 2 TEM NUMBER and DESCRIPTION	73.11AB ADDITIONAL BRICK MASONRY Unit price bid shall not be less than: \$ 62.50	73.21AC ADDITIONAL CONCRETE Unit price bid shall not be less than: \$ 62.50	73.31AE0 ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (ALL DEPTHS) Unit price bid shall not be less than: \$20.00	73.41AG ADDITIONAL SELECT GRANULAR BACKFILL Unit price bid shall not be less than: \$ 15.00	73.51AS ADDITIONAL STEEL REINFORCING BARS Unit price bid shell not be less than: \$ 1.00	73.61AT ADDITIONAL STONE BALLAST Unit price bid shall not be less than: \$ 15.00
FOOL 1	131	132	133	134	135	136

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BID SCHEDULE FORM

TO.61RE ROCK EXCAVATION TO.71SB STONE BALLAST Unit price bid shall not be CLEAN BACKFILL Unit price bid shall not be CLEAN BACKFILL Unit price bid shall not be TO.91SW12 FURNISHING AND PLACIN FOR WATER MAIN PIPE 12 TO.91SW20 FURNISHING AND PLACIN FOR WATER MAIN PIPE 20 TO.91SW20 FURNISHING FILL FOR ABA HYDRAULIC FILL FOR ABA	ENGINEER'S COL 4 DONE 5 ENGINEER'S ENGINEER'	AVATION 1,600.00 G.Y.	old shall not be less than: \$15.00 4,100.00 C.Y.	all not be less than: \$ 15.00	70.91SW12 FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 12-INCH IN DIAMETER AND LESS	70.91SW20 S.F. PURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 20-INCH IN DIAMETER $(1, \mathcal{H}_{CC})$	72.11HF HYDRAULIC FILL FOR ABANDONED SEWERS AND WATER MAINS 150.00 C.Y. 150.00 $30,500$ 00
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SEK20068

OF DESIGN CONTRACT PIN: 8502013SE0024C DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

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COOL A		L.S.	L.S.	TONS	SETS	TONS
COL 3 ELECTIVETES ESTIMATE OF COLAWITES	1,400.00	1.00	1.00	1,400.00	14.00	200.00
COL.2 TIEN WIMBERIANG DESCRIPTION	75.11RT REMOVAL OF ABANDONED TRACKS	76.11CR CONSTRUCTION REPORT	76.21MR MONITORING AND POST-CONSTRUCTION REPORT	8.01 C1 HANDLING, TRANSPORTING AND DISPOSAL OF NON-HAZARDOUS CONTAMINATED SOIL	8.01 C2 SAMPLING AND TESTING OF CONTAMINATED/POTENTIALLY HAZARDOUS SOIL FOR DISPOSAL PURPOSES	8.01 H HANDLING, TRANSPORTING AND DISPOSAL OF HAZARDOUS SOIL
COL 1	137	138	139	140	141	142



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COLS UNITARICE (NIMOUNES) DOLLARS	7 000/21	# 000 ¹)	7 005	<i>S</i>	10
601.4 	ĽS.	DAY	SETS	S.F.	<u>.</u>
COLS ENGINEERS ESTIMATE GEQUANTITY	1.00	6.00	6.00	1,000.00	200.00
COL 2 T. T. T. T. T. T. T. T. T. WABER and DESCRIPTION	8.01 S HEALTH AND SAFETY	8.01 W1 REMOVAL, TREATMENT, AND DISCHARGE/DISPOSAL OF CONTAMINATED WATER	8.01 W2 SAMPLING AND TESTING OF CONTAMINATED WATER	8.02 A SPECIAL CARE EXCAVATION AND RESTORATION FOR SIDEWALK WORK	8.02 B SPECIAL CARE EXCAVATION AND RESTORATION FOR CURB WORK
SEG. NO	143	144	145	146	147



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\$5,000:00 \$1,800,000; 00 8 3/200 6,400 85a 1,800,000:00 5,000:00 2,750 % ध 3/ 200 2 D¥ D₩ т. Si R S 'n. **BID SCHEDULE FORM** 9. 9: 39.00 2.00 320.00 INCENTIVE PAYMENTS AND DISINCENTIVE ASSESSMENTS FOR B PORTION WORK PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 1,800,000.00 PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 5,000.00 EROSION AND SEDIMENT CONTROL LICENSED/CERTIFIED PROFESSIONAL ALLOWANCE FOR ANTI-FREEZE ADDITIVE IN CONCRETE LICENSED SURVEYOR BMP-7.404-B BMP-7.504A **BMP-7.09** SILT FENCE 91698.93 9.04 HW 18 149 150 152 151



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COL.5 UNITRACE (WFRUSS) DULKS	a 0059	ब क (क्क/5	001	500,000 00	T 057'E
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ENGINEERS ESTINATE OF QUANTITY	2.00	1.00	90.00	1.00	3.00
COL. 2% The state of the state	BMP-7.509-A STABILIZED CONSTRUCTION ENTRANCE	BMP-7.510 PORTABLE SEDIMENT TANK	BMP-7.516 TURBIDITY CURTAIN	HW-900H ALLOWANCE FOR CITY WORK ACCELERATION PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 500,000.00	SL-20.02.02 FURNISH AND INSTALL STANDARD TYPE ANCHOR BOLT FOUNDATION, AS PER DRAWING E-3788
COL 1	153	154	155	156	157



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Sterrog	009'E	12,000	2,550	059	215
UNITRRICE (INFROVERS) DOLLARS	# 07/	4,000 00	₹ 058	# 059	215 #
COLA FUNIT	ЕАСН	ЕАСН	EACH	EACH	ЕАСН
COLO ENGINEER'S ESTIMATE OF QUANTITY	3.00	3.00	3.00	1.00	1.00
COL. 2	SL-20.08.01 REMOVE STANDARD TYPE ANCHOR BOLT CONCRETE FOUNDATION	SL-21.03.02 FURNISH AND INSTALL TYPE 2S, 4S, 6S, 8S OR 12S LAMPPOST WITH TRANSFORMER BASE	SL-21.09.05 REMOVE STANDARD FABRICATED STEEL, SPUIN ALUMINUM NO. 10, ETC. WITH ARM(S), LUMINAIRE(S), CONTROL(S) WITH ALL ATTACHMENTS, IF ANY.	SL-21.09.08 REMOVE ALL STREET LIGHTING EQUIPMENT FROM TYPE "M-2" TRAFFIC POST (ARM(S), PHOTOELECTRIC CONTROLLER, LUMINAIRE (S). SHAFT EXTENSION, WIRING, ETC.)	SL-22.03.01 INSTALL LUMINAIRE ON STREET TYPE(INCLUDING ALL DECORATIVE) LAMPPOST. MAKE ALL NECESSARY CONNECTIONS. LAMP FURNISHED BY CONTRACTOR.
ODE IT	158	159	160	161	162

Design and Construction

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SEK20068 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

BID SCHEDULE FORM

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FF COL 5 - UNIT PRES UN FEURES DOLLARS	095	079	1,250 14	(20	n 905/	4,170 @
cot.4 s	ЕАСН	ЕАСН	ЕАСН	ЕАСН	ЕАСН	ЕАСН
ESTINATE ESTINATE OF QUANTITY	3.00	1.00	1.00	4.00	1.00	1.00
TEM NUMBER and DESORIETION	SL-22.16.05 FURNISH AND INSTALL ROADWAY TYPE LED FIXTURE AS PER SPECIFICATION 466 WITH PEC RECEPTACLE AND PEC	SL-24.02.04 INSTALL ARM ON LAMPPOST OR "M-2" TRAFFIC POST SHAFT EXTENSION	SL-24.02.06 INTALL SHAFT EXTENSION (FS, FLATBUSH AVE., ETC) ON "M-2" TRAFFIC POST.	SL-26.01.04 FURNISH AND INSTALL LONG LIFE PHOTO ELECTRIC CONTROL WITH SURGE PROTECTION FOR LED LIGHT	T-1.20 REMOVE TYPE "M" SERIES FOUNDATION	T-1.3 INSTALL TYPE "M2-5S" FOUNDATION
COL 1	163	164	165	166	167	168

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18 18 10 18 10 18	430 %	475 W	91	<u>s)</u>	B	<i>9</i>]
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COURT	ЕАСН	ЕАСН	ЕАСН	ЕАСН	ЕАСН	ЕАСН
DOL 3 ENGINEERS FS ESTIMATE FOE QUANTITY	2.00	4.00	1.00	1.00	1.00	2.00
TEM NUMBER and DESCRIPTION	T-3.6 INSTALL PEDESTRIAN SIGNAL ON ANY TYPE POST	T-30013L FURNISH ADJUSTABLE 3 SECTION 1-WAY, DIE CAST ALUMINUM TRAFFIC SIGNALS 8" - W/LED LENS	T-31210 h) "HUB" ASSEMBLY "ASSEMBLY IS EQUAL TO ONE PAIR	T-31235	T-31351 g) "VB-2P" ASSEMBLY "ASSEMBLY IS EQUAL TO ONE PAIR	T-33000L FURNISH POLYCARBONATE INCANDESCENT PED SIGNAL W/LED LENS
COL 1 SEC. NO	175	176	177	178	179	180

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BID SCHEDULE FORM

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7700 (A)	ц. —	F.	F. F.	я. Я.	<u>.</u>	F.
COL 3 ENGINEERS ESTIMATE OF QUANTITY	50.00	50.00	300.00	200.00	500.00	500.00
OF THE NAMER WADES CRIPTION	T-5.32 RESTORING PERMANENT ROADWAY (INCLUDING SAWCUT)	T-5.50 FURNISH AND INSTALL 2" HDPE UNDERGROUND CONDUIT IN PAVED ROADWAY	T-6.1 INSTALL CABLE (INCLUDES OVERHEAD)	T-6.10 REMOVE CABLE (INCLUDES OVERHEAD)	T-6.2 INSTALL MULTIPLE CABLE (INCLUDES OVERHEAD)	T-60000B FURNISH 2 c # 10B (BREAKDOWN = 2#10 WITH 3RD WIRE FOR GROUNDING).
COL. 1	181	182	183	18 2	185	186

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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SEK20068
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN
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187 T-60040 c) 7 CONDUCTOR, 14 A.W.G. 188 T-60190 190 T-8.10 T-8.10 T-8.3 T-8.10 T-8.3 T-8.10 T-8.3 T-8.10 T-8.3 T-8.10 T-8.3 T-8.10 T-8.8 T-8.10 T-8.9 T-8.10 T	∞ol. 1 .k.: .k.: SEQ. No	ITEM NUMBER and DESCRIPTION	COL 3 ENGINEERS ESTIMATE OPDUMITITY	.©OL.4 List	(in Fouriers)	OCOLO SERVICIO SE SERVICIO SE	142
T-60190 L.F. S00.00 L.F. S E e) 13 CONDUCTOR, 14 A W.G. 1 1.00 EACH S E T-8.10 T-8.10 EACH 2,500 *4 T-8.8 1,00 EACH 2,500 *4 INSTALL CONGRETE PYLON 1.00 EACH 2,000 *9 T-8.1000 T-81000 1.00 EACH 1,000 *9 T-81000 T-81000 1.00 EACH 9 *9	187	T-60040 c) 7 CONDUCTOR, 14 A.W.G.	300.00	LF.	7	<i>b</i> 009	
T-8.10 RELOCATE CONCRETE PYLON WITH POST T-8.8 INSTALL CONCRETE PYLON INSTALL CONCRETE PYLON T-8.9 REMOVE CONCRETE PYLON T-8.1000 FURNISH CONCRETE PYLON FURNISH CONCRETE PYLON T-8.1000 FURNISH CONCRETE PYLON FURNISH CONCRETE PYL	188	T-60190 e) 13 CONDUCTOR, 14 A.W.G.	500.00	LF.	×	1,500	
T-8.8 1.00 EACH Z,M) \(\overline{a}\) T-8.9 T-8.9 T-8.9 T-8.9 \(\overline{a}\) \(\over	189	T-8.10 RELOCATE CONCRETE PYLON WITH POST	1.00	ЕАСН	2,500 %	2,500	21
T-8.9 1.00 EACH FACH PACH PACH <t< th=""><th>190</th><th>T-8.8 INSTALL CONCRETE PYLON</th><th>1.00</th><th>ЕАСН</th><th>2,000 2</th><th>2,000 œ</th><th><i>61</i></th></t<>	190	T-8.8 INSTALL CONCRETE PYLON	1.00	ЕАСН	2,000 2	2,000 œ	<i>61</i>
T-81000 EACH	191	T-8.9 REMOVE CONCRETE PYLON	1.00	БАСН	1,000 se), coo	~1
	192	T-81000 FURNISH CONCRETE PYLON	1.00	ЕАСН	950	a 056	9 1

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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION PROJECT ID: SEK20068

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CONTRACT PIN: 8502013SE0024C

BID SCHEDULE FORM

COLS.	1,040 & 7,280 %	2 OLL 2 OLL	æ 09b1 ₹ 09b1	2,340 % 7020 %	465 # 19,995 #	485 4 2,425 4
COLS ENGINEERS ESTIMATE OF QUANTITY	7.00 EACH	1.00 EACH	1.00 EACH	3.00 EACH	43.00 EACH	5.00 EACH
COL. 14. SEO. NO. TEM WINNER and DESCRIPTION	193 UTL-6.01.1 GAS MAIN CROSSING SEWER UP TO 24" IN DIAMETER (S6.01) Unit price bid shall not be less than: \$1,040.00	194 UTL-6.01.2 GAS MAIN CROSSING SEWER 30" IN DIAMETER (S6.01) Unit price bid shall not be less than: \$ 1,770.00	195 UTL-6.01.4C GAS MAIN CROSSING 45"W X 29"H HORIZONTAL ELLIPTICAL REINFORCED CONCRETE STORM SEWER (\$6.01) Unit price bid shell not be less than: \$1,960.00	GAS MAIN CROSSING 53"W X 34"H HORIZONTAL ELLIPTICAL REINFORCED CONCRETE STORM SEWER (\$6.01) Unit price bid shall not be less than: \$2,340.00	197 UTL-6.01.8 GAS SERVICES CROSSING TRENCHES AND/OR EXCAVATIONS (S6.01) Unit price bid shell not be less then: \$ 465.00	198 UTL-6.01.9 GAS MAIN CROSSING WATER MAIN UP TO 20" IN DIAMETER (S6.01) Unit price bid shall not be less than: \$485.00

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BID SCHEDULE FORM

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ENGINEERS ESTIMATE: OF QUANTITY	3.00	1,500.00	1,400.00	10.00	10.00	600.00
TEM NUMBER and DESCRIPTION	LTL-6.02 EXTRA EXCAVATION FOR THE INSTALLATION OF CATCH BASIN SEWER DRAIN PIPES WITH GAS INTERFERENCES (\$6.02) Unit price bid shall not be less than: \$715.00	UTL-6.03 REMOVAL OF ABANDONED GAS FACILITIES. ALL SIZES. (S6.03) Unit price bid shell not be less then: \$ 15.00	UTL-6.03.1 REMOVAL OF ABANDONED GAS FACILITIES WITH POSSIBLE COAL TAR WRAP. ALL SIZES. (FOR NATIONAL GRID WORK ONLY) (S6.03) Unit price bid shell not be less then: \$25.00	UTL-6.04 ADJUST HARDWARE TO GRADE USING SPACER RINGS/ADAPTORS. (STREET REPAVING.) (S6.04) Unit price bid shall not be less than: \$35.00	UTL-6.05 ADJUST HARDWARE TO GRADE BY RESETTING. (ROAD RECONSTRUCTION.) (\$6.05) Unit price bid shall not be less than: \$65.00	UTL-6.06 SPECIAL CARE EXCAVATION AND BACKFILLING (S6.06) Unit price bid shall not be less than: \$ 180.00
or page	199	200	201	202	203	204

B-38 [REVISION #1]



PROJECT ID: SEK20068 NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

CONTRACT PIN: 8502013SE0024C

5/18/2018 9:04 AM

BID SCHEDULE FORM

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COL. 2 ***********************************	UTL-6.07 TEST PITS FOR GAS FACILITIES (S6.07) Unit price bid shell not be less than: \$ 100.00	UTL-GCS-2WS GAS INTERFERENCES AND ACCOMMODATIONS PRICE BID SHALL BE FOR THE FIXED SUM
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SUB-TOTAL: \$ $21,925,876^{20}$

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	MOBILIZATION			07777 OS	30: 100 LL0
	BID PRICE OF MOBILIZATION SHALL NOT EXCEED 4% OF THE ABOVE SUB-TOTAL PRICE.				550/110

TOTAL BID PRICE: \$ 22,802,911 25

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: SEK20068

FOR THE CONSTRUCTION OF STORM AND COMBINED SEWERS AND APPURTENANCES IN:
9TH STREET BETWEEN SMITH STREET AND 2ND AVENUE
2ND AVENUE BETWEEN 9TH STREET AND 7TH STREET

CAPITAL PROJECT WM-1 FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN: 2ND AVENUE BETWEEN 9TH STREET AND 7TH STREET

Together With All Work Incidental Thereto BOROUGH OF BROOKLYN CITY OF NEW YORK

Name of Bidder: JRCRUZ Corp.	
Date of Bid Opening: May 16, 2018	
Bidder is: (Check one, whichever applies) Individual	() Partnership () Corporation (X)
Place of Business of Bidder: 675 Line Road, Aberd	deen, NJ 07747
Bidder's Telephone Number: 732/290-0700	Fax Number: 732/290-8960
Bidder's E-Mail Address: engineering@jrcruz.co	om
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: Evaristo Cruz 74 Hickory La	, Jr., PE ne, Lincroft, NJ 07738
Name and Home Address of Secretary: Matthew J. C.	
Name and Home Address of Treasurer: Evaristo Cruz, 74 Hickory La	Jr., PE. ne, Lincroft, NJ 07738

BID FORM

The above-named Bidder affirms and declares:

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

The bidder hereby affirms that it has paid all applicable City income, excise and other taxes for all years it has conducted business activities in New York City.

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).

AFFIRMATION

PROJECT ID. SEK20068					
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:					
(If none, the bidder shall insert the word "None" in the space provided above.)	 				
Full Name of Bidder: JRCRUZ Corp. Address: 675 Line Road					
City Aberdeen State NJ Zip Code	07747				
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 X / EMRLOYER IDENTIFICATION NUMBER 24-3373796	•				
By: Signature Evensto Cruz, Jr., PE					
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 FORM

PROJECT ID.: SEK20068

TOTAL BID SCHEDULE PRICE:

"A" Portion

In the space provided to the right, the Bidder shall indicate its Total Bid Schedule Price in figures. Such Total Bid Schedule Price is to be transferred from the final page of the Bid Schedule.

\$ 22,802,911²⁵

CONSECUTIVE CALENDAR DAYS:

In the space provided below, the Bidder shall indicate the number of consecutive calendar days (CCD) it proposes to establish for the time required to complete all work.

"B" Portion

The "B" Portion of the bid is calculated in the space provided to the right as "N" (Total number of CCD's) multiplied by the Daily Cost of \$10,000.

"N" = 455
(Not to exceed 640 CCD)

"N" x \$10,000 =

\$ 4,550,000°

TOTAL BID PROPOSAL:

"A" + "B"

("A" Portion + "B" Portion)

s 27,352,91125

BIDDER'S SIGNATURE AND AFFIDAVIT

5/31/18

Bidder:

JECRUZ Corp

Evaristo Cruz, J

PE, President ignature of Partner or corporate officer)

Attest: Matthew J. Cruz

Secretary of Corporate Bidder

(Corporate Seal)

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

BID FORM (TO BE NOTARIZED)

AFFIDAVIT WHERE BIDDER IS AN INDIVIDUAL

STATE OF NEW YORK, COUN	TTY OF		ss:	being duly sworn says:
I am the person described in and respects true.	who executed the fore	going bid, and the	several matte	ers therein stated are in all
	· -	(0)	0.1	
Subscribed and sworn to before n		(Signature	of the person	n who signed the Bid)
Notary Public				
<u>A</u>	FFIDAVIT WHERE I	BIDDER IS A PAR	TNERSHIP	
STATE OF NEW YORK, COUN	TY OF		ss:	being duly sworn says:
I am a member of bid. I subscribed the name of the respects true.	firm thereto on behal	the firm dese	cribed in and ne several ma	which executed the foregoing
Subscribed and sworn to before n		(Signature	of Partner w	ho signed the Bid)
Notary Public				
AF	FIDAVIT WHERE E	SIDDER IS A COR	PORATION	I
Jersey				•
STATE OF NEW XXXX COUN Evaristo Cruz, Jr., P	E		Ss:	being duly sworn says:
I am the President executed the foregoing bid. I res	of the abov	e named corporation	n hose nan	ne is subscribed to and which
I have knowledge of the several r	natters therein stated,	and they are in all	respecta True	
		Signature of Corpo	rate Officer	who signed the Bid)
Subscribed and sworn to before r 31st day of May , 2	ne this 018			
Cign				
Notary Public	Cynthia My Notary Put State of New Commission # : Commission expire	olic Jersey 2303118		
			· · · · · · · · · · · · · · · · · · ·	

AFFIRMATION

CEIZAGGEO

State Zip Code

DDA IECT ID

PROJECT ID. SEKZUU08
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:
(If none, the bidder shall insert the word "None" in the space provided above.)
Full Name of Bidder:

CHECK ONE BOX AND INCLUDE APPROPRIATE NUMBER:

_/	A -	Individual or Sole Proprietorship*
		SOCIAL SECURITY NUMBER

Address:

City

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

C- Corporation
EMPLOYER IDENTIFICATION NUMBER

Signature

Title:

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.

If a corporation, place seal here

By:

BID BOND 1 FORM OF BID BOND

CITY OF NEW YORK DEPARTMENT OF DESIGN AND CONSTRUCTION	C-7	BID BOOKLET MARCH 2017
(c) In all respects perform the a provided in the Information for Bidders, bout the aforesaid Proposal, then this obligation seffect.	greement created by the acceptane and herewith and made a part here shall be null and void; otherwise to	of, or if the City shall reject
for the faithful performance and proper fulfi all respects to the City and shall be executed	by good and sufficient sureties, a	ands shall be satisfactory in and
(a) Within ten (10) days after note to the City all the executed counterparts of the in accordance with the proposal as accepted.	otification by the City, execute in he Contract in the form set forth in , and	quadruplicate and deliver in the Contract Documents,
NOW, THEREFORE, the condition withdraw said Proposal without the consent opening of bids and in the event of acceptan shall:	of the City for a period of forty-fi	ve (45) days after the
Capital Project WM-1 Replacement of Water Mains	& appurtenances in 2nd AVe. between t	9th St. and 7th St.
Project ID: SEK20068 PIN: 8502013SE0024C, Con Street Between Smith St. & 2nd Ave., 2nd Ave. Between Smith St. & 2nd Ave., 2nd Ave.	struction of Storm and Combined Sewel ween 9th St and 7th St.	
Whereas, the Principal is about to su proposal, hereby made a part hereof, to enter		
(\$), Dollars lawful money money well and truly to be made, we, and ex successors and assigns, jointly and severally	of the United States, for the paym ach of us, bind ourselves, our heir firmly by these presents.	ent of which said sum of s, executors, administrators,
hereinafter referred to as the "Surety" are he hereinafter referred to as the "CITY", or to i ten percent of bid amount	eld and firmly bound to THE CITY ts successors and assigns in the po	OF NEW YORK,
hereinafter referred to as the "Principal", and Liberty Mutual Insurance Company	d	

KNOW ALL MEN BY THESE PRESENTS JRCruz Corp.	S. That we,	

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.

(Seal)

JRCruz Corp. (L.S.)

By:

By: \

Evaristo Cruz, Jr. PE, President

(Seal)

Liberty Mutual Insurance Company

N Surety

Lisa Nosal, Atty-in-fact

ACKNOWLEDGEMENT OF SURETY

State of New Jersey] |-ss County of Passaic |

On May 31, 2018, before me personally came Lisa Nosal to me known, who, being by me duly sworn, did depose and say that she is an attorney-in-fact of Liberty Mutual Insurance Company the corporation described in and which executed the within instrument; that she knows the corporate seal of said corporation, and that the seal affixed to the within instrument is such corporate seal, and that she signed the said instrument and affixed the said seal as Attorney-in-Fact by authority of the Board of Directors of said corporation and by authority of this office under the Standing Resolutions thereof.

My Commission expires:

Notary Pub

STEPHANIE F. FOY

NOTARY PUBLIC

STATE OF NEW JERSEY

MY COMMISSION EXPIRES OCTOBER 27, 2018

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

Certificate No. 8057824

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Liberty Mutual Insurance Company The Ohio Casualty Insurance Company

West American Insurance Company

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THE	SE PRESENTS: That T	he Ohio Casualty In	surance Comp	any is a c	orporation duly	organized	under the	laws of the	State of Nev	v Hampshire	that
Liberty Mutual Insurance Compar											
organized under the laws of the St	late of Indiana (herein i	collectively called the	"Companies"),	pursuant	to and by auth						
Lisa Nosal; Pamela J. Boyle	; Robert E. Culnen;	Joseph W. Malic	ry; Louis A.	Vlahakes	s						

all of the city of Totowa state of NJ each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 6th _day of _April 2018

1919

STATE OF PENNSYLVANIA **COUNTY OF MONTGOMERY**

SS

On this 6th _day of April . 2018, before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.

COMMONWEALTH OF PENNSYLVANIA

Notarial Seal Teresa Pastella, Notary Public Upper Merion Two. Montgomery County My Commission Expires March 28, 2021

Teresa Pastella, Notary Public

The Ohio Casualty Insurance Company

Liberty Mutual Insurance Company

West American Insurance Company

David M. Carev. Assistant Secretary

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS - Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts - SECTION 5. Surety Bonds and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the president and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-infact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

t, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this

2018



Assistant Secretary



LIBERTY MUTUAL INSURANCE COMPANY

FINANCIAL STATEMENT — DECEMBER 31, 2017

Assets	Liabilities
Cash and Bank Deposits \$370,003,299	Unearned Premiums \$7,503,154,587
*Bonds — U.S Government	Reserve for Claims and Claims Expense 19,658,731,454
*Other Bonds	Funds Held Under Reinsurance Treaties 224,693,828
	Reserve for Dividends to Policyholders 967,520
*Stocks	Additional Statutory Reserve 52,491,027
Real Estate	Reserve for Commissions, Taxes and
Agents' Balances or Uncollected Premiums 5,258,657,823	Other Liabilities
Accrued Interest and Rents	Total\$31,489,431,268
Other Admitted Assets	Special Surplus Funds \$176,230,822
<u>11,172,287,530</u>	Capital Stock 10,000,000
	Paid in Surplus 9,484,316,385
	Unassigned Surplus 4,860,776,066
Total Admitted Assets <u>\$46,020,754,541</u>	Surplus to Policyholders 14,531,323,273
	Total Liabilities and Surplus <u>\$46,020,754,541</u>



* Bonds are stated at amortized or investment value; Stocks at Association Market Values.

The foregoing financial information is taken from Liberty Mutual Insurance Company's financial statement filed with the state of Massachusetts Department of Insurance.

I, TIM MIKOLAJEWSKI, Assistant Secretary of Liberty Mutual Insurance Company, do hereby certify that the foregoing is a true, and correct statement of the Assets and Liabilities of said Corporation, as of December 31, 2017, to the best of my knowledge and belief.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation at Seattle, Washington, this 16th day of March, 2018.

Assistant Secretary

TAMiholojewski.

BID BOND 3

ACKNOWLEDGMENT OF PRINCIPAL, IF A CORPORATION

Evaristo Cruz, that he resides at that he is the Presthe corporation; that one corporation; that one	Jr., PE to a 74 Hickory I sident ribed in and which executive.	me known, who, beir ane, Lincroft, NJ of JRCRUZ uted the foregoing instaid instrument is such signed his name ther I Myers Public Wyers # 2303118	, before me personally came ag by me duly sworn, did depose and say 07738 Z Corp. strument; that he knows the seal of said h seal; that it was so affixed by order of
·	ACKNOWLEDGMENT	OF PRINCIPAL, IF	A PARTNERSHIP
State ofOn this	County of day of to 1	, me known and known	ss: , before me personally appeared n to me to be one of the members of the
firm ofinstrument, and he as firm.	cknowledged to me that	describence de	ed in and who executed the foregoing e as and for the act and deed of said
		-	Notary Public
	ACKNOWLEDGMENT	OF PRINCIPAL, IF	AN INDIVIDUAL
State of	County of		66'
On this	day ofto	me known and know	_ ss: , before me personally appeared n to me to be the person described in at he executed the same.
and who executed th	e foregoing instrument a	nd acknowledged tha	at he executed the same.
		·	Notary Public
A)	FFIX ACKNOWLEDGME	INTS AND JUSTIFICA	ATION OF SURETIES

M/WBE PROGRAM

M/WBE UTILIZATION PLAN

<u>M/WBE Program Requirements</u>: 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.

<u>Waiver</u>: 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.

<u>Impact on LBE Requirements</u>: 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.

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- 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.

- 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, by emailing DSBS at buyer@sbs.nyc.gov, by calling (212) 513-6356, or by visiting or writing DSBS at 110 William St., New York, New York, 10038, 7th floor. Eligible firms that have not yet been certified may contact DSBS in order to seek certification by visiting www.nyc.gov/getcertified, emailing MWBE@sbs.nyc.gov, or calling the DSBS certification helpline at (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 rhangji@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, 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;

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- (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.

	APT E- 85018	BUTTI
Tax ID #:	PIN #:	

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

Part I to be completed by contracting agency

Contract Overview								
APT E- Pin #	85018B0111		FMS Pr	oject IDa	#: _SE	K2006	58	·
Project Title/ Agency PIN #	FOR THE CONSTRUCTION OF STORM AND COMBINED SEWERS AND APPURTENANCES IN 9 TH STREET, ETC./8502013SE0024C							
Bid/Proposal Response Date	MAY 16, 2018							
Contracting Agency	Department of Design a	nd Cons	truction					
Agency Address	30-30 Thomson Ave.	_ City	Long Island	d City	State	NY	Zip Code	11101
Contact Person	Tempestt Bellamy		Title	MWBE	Comp	liance	Analyst	
Telephone #	(718)391-2604		Email	Bellamy	yte@dd	lc.nyc.	gov	

Project Description (attach additional pages if necessary)

PROJECT ID: SEK20068

FOR THE CONSTRUCTION OF STORM AND COMBINED SEWERS AND APPURTENANCES IN:
9TH STREET BETWEEN SMITH STREET AND 2ND AVENUE
2ND AVENUE BETWEEN 9TH STREET AND 7TH STREET

CAPITAL PROJECT WM-1
FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN:
2ND AVENUE BETWEEN 9TH STREET AND 7TH STREET

BOROUGH OF BROOKLYN CITY OF NEW YORK

M/WBE 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>	7 %	
or		
Black American	UNSPECIFIED*	
Hispanic American	UNSPECIFIED*	
Asian American	UNSPECIFIED*	
Women	UNSPECIFIED*	
otal Participation Goals	7%	Line 1

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

Гах ID #:	22-3373796		APT E- PIN #:	85018B0111 285018B009 7X	
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SCHEDULE B - Part II: M/WBE Participation Plan

Part II to be completed by the bidder/proposer.

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

Section I: Prime	Contractor Contact Infor	mation		erin i de la composition della		
Tax ID#	22-3373796	· ·		FMS Vendor ID#	0017	733898
Business Name	JRCRUZ Corp.			Contact Person	Evar	isto Cruz, Jr.
Address	675 Line Road, Ab	erdeen, NJ 0774	 7			
Telephone #	732/290-0700	Email	er	aineerina@ircruz.c	om_	٠.
Section II: M/WB	IE Utilization Goal Calcul	ation: Check the app	lica	ble box and complete si	ubsec	tion.
PRIME CONTR	ACTOR ADOPTING AG	ENCY M/WBE PAR	TIC	IPATION GOALS		
		Total Bid/Proposal Value		Agency Total Participation Goals (Line 1, Page 13)		Calculated M/WBE Participation Amount
Calculate the total bid that you agree M/WBE subcontracted to an M/Qualified Joint Ve	al dollar value of your total e will be awarded to actors for services and/or WBE prime contractor or enture.	27,352,91125		7%		1,914,70329
Contractors for m	Notice to Prospective ore information on how to MWBE participation.	\$	x		=	\$ Line 2
PRIME CONTR PARTICIPATIO	ACTOR OBTAINED PA N GOALS	RTIAL WAIVER APP	PRO	OVAL: ADOPTING MC	DIFI	ED M/WBE
	ontractors (including /entures and M/WBE	Bid/Proposal Value		Participation Goal (From Partial Waiver)		Participation Amount
firms) adopting I Participation Go						
bid that you agree M/WBE subcontra	I dollar value of your total will be awarded to actors for services and/or NBE prime contractor or inture.					
Contractors for m	Notice to Prospective ore information on how to MWBE participation.	\$	x		=	\$ Line 3

Tax ID #: 22-33/3/96		PIN #: 85018B0111
	Note that the second of the se	
eview the Notice to Prospect	Plan: How Proposer/Bidder Will Fulfill ive Contractors for more information o le box. The Proposer or Bidder will ful	n how to obtain credit for M/WBE
contract the value of which is at	least the amount located on Lines 2 or 3 a BE firms will not be credited towards fulfill	ract to other M/WBE firms a portion of the above, as applicable. The value of any Iment of M/WBE Participation Goals.
As a Qualified Joint Venture and/or the value of any work sub	with an M/WBE partner, in which the value occurrected to other M/WBE firms is at least of any work subcontracted to non M/WBI on Goals.	ast the amount located on Lines 2 or 3
	ntractor that will enter into subcontracts wi	th M/WBE firms the value of which is at
What is the expected percent services, regardless of M/WB	age of the total contract dollar value that you e	expect to award in subcontracts for
	subcontracting if awarded this contract. For each	ralue of subcontracts for all/any services you plan on the item, indicate whether the work is designated for e frame in which such work is scheduled to begin, and from the plant of the pl
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Scopes of Subcontract Work	8. 9. 10. 11. 12.	
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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:
- 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	1/1/40	Date May 16, 2018	
Print Name	Evaristo Cruz, Jr., PE	Title President	
	- /		

APPRENTICESHIP PROGRAM QUESTIONNAIRE ("APQ")

Bidder 1	Name:	JRCRUZ Corp.
Project 1	ID Num	ber: SEK20068
1.	Does the scope of	JST complete, sign, and submit this Apprenticeship Program Questionnaire with its bid. he bidder have any Apprenticeship Program agreement(s) appropriate for the type and of work to be performed? (Note: Participation may be by either direct sponsorship or collective bargaining agreement(s).)
		X_YESNO
2.	Has/hav	we the bidder's Apprenticeship Program agreement(s) been registered with, and approved New York State Commissioner of Labor ("NYSDOL Commissioner")?
		X_YES NO
3.	Has/hav followii	we the bidder's Apprenticeship Program successfully passed the two-year Probation perioding its initial registration with the New York State Department of Labor ("NYSDOL")?
		_X_YES NO
herewith as infor	n where mation followin	to Questions 1, 2, and 3 are "Yes". The bidder shall, in the space below (and/or attached applicable), provide the contact information for such Apprenticeship Program(s) as well demonstrating that such Apprenticeship Program(s) have passed the two-year Probation ag its initial registration with the NYSDOL. (The bidder may attach additional pages if
•	Where provide	the bidder directly sponsors any such apprenticeship Program(s), the bidder shall the following:
÷	0	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).
:	membe where	the bidder participates in any such Apprenticeship Program(s) through its ership in an employer organization(s) that directly sponsors such program(s) or the employer association(s) participates in such program(s) through collective ning, the bidder shall provide the following:
	•0	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")

SEK20068

Project ID Number: SEK20068	
• Where the bidder participates in any subargaining agreements, the bidder shall pro-	ach Apprenticeship Programs through collective ovide the following:
 The contact information for such co trade(s) covered pursuant to the bidd A letter(s) from such collective bar executed by an officer, delegate or 	llective bargaining entity(ies) and the apprenticeable ler's affiliation therewith; gaining entity(ies), on letterhead of such entity(ies), official thereof, which verifies/verify the bidder's ood standing to such collective bargaining entity(ies)
We are members of the General Contractor	rs Association of New York (GCA).
Please refer to the attached letter.	
Bidder: JRCRUZ Corp.	
By: (Signature of Partner or Corporate Officer) Evaristo Cruz, Jr., PE Date: May 16, 2018	Title: President
CITY OF NEW YORK 2 DEPARTMENT OF DESIGN AND CONSTRUCTION	1 BID BOOKLET MARCH 2017



Executive Director

THE GENERAL CONTRACTORS ASSOCIATION OF NEW YORK, INC.

January 3, 2018

JR CRUZ Corp. Attn: Mr. Evarett Cruz, Jr. 675 Line Road Aberdeen, NJ 07747

Dear Mr. Cruz:

JR CRUZ 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, upholds and is subject to all provisions of those agreements, including the union(s) 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.

William G. Tyson

Sincerely,

Director, Labor Relations

SAFETY QUESTIONNAIRE

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

1. Bidder Informatio	n:		
Company Name:	JRCRUZ Corp.		
DDC Project Number:	SEK20068		
Company Size:	Ten (10) e	employees or less	
	X Greater th	an ten (10) employees	
Company has previous	sly worked for DDC	X YES	NO
2. Type(s) of Constru	action Work		
TYPE OF WO General Building Cons Residential Building C	struction	LAST 3 YEARS	THIS PROJECT
Nonresidential Building		X	X
Heavy Construction, ex	xcept building	X	X
Highway and Street Co			
Heavy Construction, ex Plumbing, Heating, HV			
Painting and Paper Har			
Electrical Work	**************************************		
Masonry, Stonework a	nd Plastering		
Carpentry and Floor W	/ork		***************************************
Roofing, Siding, and S	heet Metal		
Concrete Work			X
Specialty Trade Contra	acting	X	
Asbestos Abatement	•		
Other (specify) BMP		X	X
3. Experience Modifi	ication Rate:		
Insurance (NCCI). The insurance. The contract	is rating is used to deter ctor may obtain its EMR	rating generated by the Nati mine the contractor's premiu by contacting its insurance nit a written explanation as to	onal Council of Compensation for worker's compensation broker or the NCCI. If the owny.
CYTY OF NEW YORK			

Project ID. SEK20068

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

YEAR	<u>INTRA</u> STATE RATE	<u>INTERSTATE RATE</u>
2015	.83	.83
2016	.83	.83
2017	.79	.79

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

Incident Rate =	Total Number of Incident Total Number of Hours Worked b	
YEAR	TOTAL NUMBERS OF HOURS WORKED BY EMPLOYEES	INCIDENT RATE
2015	116,573	0.00
2016	217,294	1.84
2017	202,124	0.10
		The state of the s

OSHA's Form 300

Log of Work-Related Injuries and Illnesses

that protects the confidentiality of employees to the extent possible while the information is being used Attention: This form contains information relating to employee health and must be used in a manner for occupational safety and health purposes.

Year 2017

U.S. Department of Labor Occupational Safety and Health Administration

You mus aid. You that meet	if record information about every with must also record significant work. I any of the specific recording cities SHA Form 301) or equivalent form	ork-related injury or related injuries and i sria fisted in 29 CFR	ilfness that involutesses that a 1904.8 through	You must record information about every work-related riging or ithress that involves foss of consciousness, restricted work activities. You must also record significant work-related injuries and linessess that are disprosed by a physician or increase that the disprosed by a physician or increase that the case any other specific recording orities listed in 29 CFR 190.48 through 1904.12. Feel free to use two lines for a single report (CSAH From 301) or equivalent from 16 each injury or itees recorded on this form. If you've not sure whether a case is	You must record altornation about every work-related nighty or litness that involves toss of consciousness, restricted work activity or job transfer, days away from work, or medical treatment beyond first aid. You must also record significant work-related injures and illnesses that are degrosed by a physician or icensed health care professional. You must state record work-related injures and illnesses that meet any of the specific recording orithinal isted in 20 CTR 1904 be through 1904.12. Feel free to use two lines or single case if you need it. You must complete an injury and illness incident among CGP4 from 301) or equivalent form for each injury or fleess recorded on this form. If you've not such expectately, call your local OSH4 office for help.	beyond first nd illnesses incident		Establishment name		JRCRUZ Corp.	Зогр.	Form a	pproved (JMB no.	Form approved OMB no. 1218-0176
								City	Aberdeen			State New Jersey	Vew Jer	Şe	
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Se Se	Employee's Name	Job Title (e.g., Welder)		Where the event occurred (e.g. Loading dock north end)	obje Opje		serious result for each case;	h case:		was:		one type of illness.	ilhess:		
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				***************************************				Job transfer or restriction	Other record- able cases	(qays)	······································	(un[u		Donal Poiso	ijo ilA iaenlii
				*******	-	<u>©</u>	£	€	5	£	3	5			
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Public reporting burden for this collection of information is estimated to average 14 minutes per response, including time to review the instruction, search and gather the data needed, and complete and review the collection of information. Persons are not required to respond to the collection of information unless it displays a currently vaild OMB control. number. If you have any comments about these estimates or any sepects of this data collection, contact. US Department of Labor, GSHA Office of Statistics, Room N-3844, 200 Constitution Ave, NW, Washington, DC 20210, Do

not send the completed forms to this office,

OSHA's Form 300A

Summary of Work-Related Injuries and Illnesses

Occupational Safety and Health Administration U.S. Department of Labor

Year 2017

All establishments covered by Part 1904 must complete this Summary page, even if no injunies or llinesses occurred during the year. Ramember to review the Log to verify that the entries are complete

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the log. If you had no cases write "0,"

Employees former employees, and their representatives have the right to review the OSHA Form 300 in its entirety. They also have limited access to the OSHA Form 301 or its equivalent. See 29 CFR 1904.35, in OSHA's Recordkeeping rule, for further detaits on the access provisions for these forms.

#	Total number of other recordable	cases 0	(7)
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(1) Injury (2) Skin Disorde (3) Respiratory Condition

Total number of...

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) Poisoning	All other illnesses	
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Post this Summary page from February 1 to April 30 of the year following the year covered by the form

Public reporting burden for this collection of information is estimated to average 50 minutes per response, including time to review the instruction, search and gather the data needed, and complete and review the collection of information. Persons are not required to respond to the collection of information unless it despiays a cumently valid OMB control number. If you have any comments about these estimates or any aspects of this data collection, contact. US
Denominated of Jahor. OSHA Office of Shericks Recen. N.:34.44. 700 Constitution Ave. NW. Westimmon Of Jahor. OSHA Office of Shericks Recen. N.:34.44. 700 Constitution Ave. NW. Westimmon Of Jahor.

		N.J Zip 07747		e)					t of my knowledge the	Office Marrager	1/15/2016 Date
Establishment Information Your establishment name JRCRUZ Corp.	Street 675 Line Road	City Aberdeen State	Industry description (e.g., Manufacture of motor fruck trailers) Heavy Construction	Standard Industrial Classification (SNC), if known (e.g., SIC 3715)	Employment information	fulnition of employees	Total hours worked by at emphysees test year 202,124	Sign heap (Anowingly falsifying this document may result in a fine.	I certify that I have examined this document and that to the best of my knowledge the entries are true, accurate, and complete,	Rosie Catao Company executive	732-290-0700 Phone

OSHA's Form 300 (Rev. 01/2004)

Log of Work-Related Injuries and Illnesses

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Attention: This form contains information relating to protects the confidentiality of employees to the extent possible while the information is being used for employee health and must be used in a manner that occupational safety and health purposes

U.S. Department of Labor Occupational Safety and Health Administration Year 20 1 6

Form approved OMB no 1218-0176

New Jersey JRCRUZ Corp. Aberdeen Safethyment perm

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CHECK ONLY ONE box for each case
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Page 1 of 1

OSHA's Form 300A (Few 01/2004)

Summary of Work-Related Injuries and Illnesses

Form approved COMB no 1218-0176 U.S. Department of Labor Comparison States and Health Administration Year 20 1 6

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Total number of days away from work		Total number of days of job transfer or restriction		
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Total number of (M)		(4) Poisonings	0	
(2) Skin disorders	0	(5) Hearing loss (6) All other illnesses	00	

Post this Summary page from Februsary 1 to April 30 of the year todowing the year covered by the form.

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(3) Respiratory conditions (2) Skin disorders

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OSHA's Form 300 (Rev. 01/2004)

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Attention: This form contains information relating

Year 2015
U.S. Department of Labor
Occapations Select and Health Administration

Form approved OMB no. 1218-0176

JRCRUZ Corp. to emptoyee health and must be used in a manner that provises the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes. Establishment name Log of Work-Related Injuries and Illnesses

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OSHA's Form 300A (Rev. 01/2004)

Summary of Work-Related Injuries and Illnesses

Year 2015 W. U.S. Department of Labor Occapational Befor and Health Administration From supposed CARS IN TREATING

All establishments covered by Part 1904 must complete this Summery page, even if no bywies or illnesses occurred during the year. Remember to review the Log to venity that the enthies are complete.

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the Log. If you had no cases write "D".

Employees former employees, and their representatives have the right to review the OSHA Form 300 in its entirety. They also have firmled access to the OSHA Form 301 or its equivalent. See 29 CFR 1904.35, in OSHA's Recordieraping rule, for further details on the access provisions for these forms.

Total rumber of deaths	Total number of cases with days away from work	Total number of cases with job transfer or restriction 0	Total number of other recordable cases
(9)	Ξ	(1)	(5)
August 1			
Total number of days away from		Total number of days of job transfer or restriction	
08		03	
Patrice Sea Printer		#	
Total number of (M) (M) (1) Injury (2) Skin Disorder	0	(4) Poisoning (5) Hearing Loss	0
(3) Respiratory Condition	0	(6) All Other Illnesses	0

Post this Summary page from February 1 to April 30 of the year following the year covered by the form Public reporting burgen for the colection of information is estimated to assess Silminhas nor resource, including the to series the freshrightnessed and

Public reporting barden for this collection of information is estimated to awarge 58 insulates per exporte, including line to review the instruction, search and guide the second to the conduction of information whereas a recting when the benched to include the modes of departs of committy valid OMB control number 1 (you have any commerce about these estimates or any aspects of this data collection, conduct. US Department of Later CRHA CRITIC of Statistics. However, 10 the hash and You which were controlled to the controlled from the this difference of the controlled forms to the con

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Establishment information	Your establishment name JRCRUZ Corp. Street 675 Line Road		industry description (e.g., Manufacture of motor truck (raiters) Heary Construction.	Standard Incustrial Classification (SIC), if known (e.g., SIC 3715)	OR North American Industrial Classification (NAICS), if known (e.g., 390212)	Employment information	Annual average/fumbr of employees Total fours doubt by all employees lest	$\leq Z$	Knowingly fall living this document may result	I certify that I have examined this document and the complete	Rosia Catao Compeny executive	732-290-0700 Phone

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)

X YESNO	Contractor previously audited by the DDC Office of Site Safety.
	DDC Project Number(s): SE774 , SER200187,
X YESNO	Accident on previous DDC Project(s).
	DDC Project Number(s): <u>SE801</u> , <u>SER777R</u> , <u>HD153C2</u>
YES X 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].
Date: May 16, 201	DDC Project Number(s),,
	(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.

PROJECT REFERENCES – CONTRACTS COMPLETED BY THE BIDDER Ą.

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

CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION

PROJECT REFERENCES - CONTRACTS CURRENTLY UNDER CONSTRUCTION BY THE BIDDER

B.

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

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

CITY OF NEW YORK DEPARTMENT OF DESIGN AND CONSTRUCTION

BID BOOKLET MARCH 2017

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PROJECT REFERENCES – PENDING CONTRACTS NOT YET STARTED BY THE BIDDER ن

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

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

CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION

BID BOOKLET MARCH 2017

OFFICE OF THE MAYOR BUREAU OF LABOR SERVICES CONTRACT CERTIFICATE

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

ontractor:	
ddress:	
elephone Number:	
ame and Title of Signatory:	
ontracting Agency or Owner:	
roject Number:	
roposed Contract Amount:	
escription and Address of Proposed Contract:	
ames of Subcontractors in the amount of 750,000 or more on this contract (if not known at this time, so dicating that trades will be subcontracted):	state
I, (fill in name of person signing), ereby affirm that I am authorized by the above-named contractor to certify that said contractor's proposed ontract with the above-named owner or city agency is less than \$1,000,000. This affirmation is made in	d
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.

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VENDEX COMPLIANCE

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

Bid Information: The Bidder shall complete the bid information set forth below.

Name of Ridder

	Traine of Bidder.
	Bidder's Address:
	Bidder's Telephone Number:
	Bidder's Fax Number:
	Date of Bid Opening:
	PROJECT ID:
	ex Compliance: To demonstrate compliance with Vendex requirements, the Bidder shall complete Section (1) or Section (2) below, whichever applies.
(1)	Submission of Vendex Questionnaires to MOCS: By signing in the space provided below, the
)	Bidder certifies that as of the date specified below, the Bidder has submitted Vendex
	Questionnaires to the Mayor's Office of Contract Services, Attn: VENDEX, 253 Broadway, 9th
	Floor, New York, New York 10007.
	Date of Submission:
	$\mathbf{R}_{\mathbf{V}}$
	By: (Signature of Partner or corporate officer)
	(Signature of Farmer of corporate officer)
	Print Name:
(2)	Submission of Certification of No Change to DDC: By signing in the space provided below,
. /	the Bidder certifies that it has read the instructions in a "Vendor's Guide to Vendex" and that
	such instructions do not require the Bidder to submit Vendex Questionnaires. The Bidder has
	completed TWO ORIGINALS of the Certification of No Change set forth on the next page of
	this Bid Booklet.
	By:
	By: (Signature of Partner or corporate officer)
	(Signature of Farmer of corporate officer)
	Print Name:
	Print Name:

Certificate of No Change Form



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

I,, being duly sworn, state that I have read
Enter Your Name
and understand all the items contained in the vendor questionnaire and any submission of change as identified on page one of this form and certify that as of this date, these items have not changed. I further certify that, to the best of my knowledge, information and belief, those answers are full, complete, and accurate; and that, to the best of my knowledge, information, and belief, those answers continue to be full, complete, and accurate.
In addition, I further certify on behalf of the submitting vendor that the information contained in the principal questionnaire(s) and any submission of change identified on page two of this form have not changed and have been verified and continue, to the best of my knowledge, to be full, complete and accurate.
I understand that the City of New York will rely on the information supplied in this certification as additional inducement to enter into a contract with the submitting entity.
Vendor Questionnaire This section is required. This refers to the vendor questionnaire(s) submitted for the vendor doing business with the City.
Name of Submitting Entity:
Vendor's Address:
Vendor's EIN or TIN: Requesting Agency:
Are you submitting this Certification as a parent? (Please circle one) Yes No
Signature date on the last full vendor questionnaire signed for the submitting vendor:
Signature date on change submission for the submitting vendor:

Principal Questionnaire



This section refers to the most recent principal questionnaire submissions.

Principal Name	Date of signature on last full Principal Questionnaire	Date(s) of signature on submission of change
ertification This section is form must be signed and no ertified By: Name (Print)	is required. tarized. Please complete this twice. C	opies will not be accepted.
Title		
Name of Submitting Entity		
Name of Submitting Entity Signature		Date
		Date
Signature	County License Issued	Date License Number

Certificate of No Change Form



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

I,, Enter Your Name	being duly sworn, state that I have read
Enter Your Name	
and understand all the items contained in the vendor quest as identified on page one of this form and certify that as of changed. I further certify that, to the best of my knowledge are full, complete, and accurate; and that, to the best of my those answers continue to be full, complete, and accurate.	this date, these items have not , information and belief, those answers
In addition, I further certify on behalf of the submitting vend principal questionnaire(s) and any submission of change idnot changed and have been verified and continue, to the beand accurate.	entified on page two of this form have
I understand that the City of New York will rely on the informadditional inducement to enter into a contract with the subn	
Vendor Questionnaire This section is required. This refers to the vendor questionnaire(s) submitted for the	vendor doing business with the City.
Name of Submitting Entity:	· · · · · · · · · · · · · · · · · · ·
Vendor's Address:	
Vendor's EIN or TIN: Requesting	g Agency:
Are you submitting this Certification as a parent? (Please of	circle one) Yes No
Signature date on the last full vendor questionnaire signed	for the submitting vendor:
Signature date on change submission for the submitting ve	ndor:

Principal Questionnaire



This section refers to the most recent principal questionnaire submissions.

Principal Name	Date of signature on last full Principal Questionnaire	Date(s) of signature on submission of change
<u> </u>		
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		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
)	***************************************	
ertification This section is renis form must be signed and notarizertified By: Name (Print)		
Title		
Name of Submitting Entity		·
Signature		Date
Notarized By:		
Notary Public	County License Issued	License Number
Sworn to before me on:		

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]

X	behalf of any bidder certifies as to its o knowledge and beli	bid or proposal, each bidder/proposer and each person signing or proposer certifies, and in the case of a joint bid each party thereto in organization, under penalty of perjury, that to the best of its f, that each bidder/proposer is not on the list created pursuant to vision 3 of Section 165-a of the State Finance Law.
	on the list created pu	that my name and the name of the bidder/proposer does not appear suant to paragraph (b) of subdivision 3 of Section 165-a of the State attached a signed statement setting forth in detail why I cannot so
		SIGNATURE
		Evaristo Cruz, Jr., PE
		PRINTED NAME
		President
C		TITLE
	to before me this day of May, 2018	
, , , ,		
Notary	Public	
Dated	: May 16, 2018	Cynthia Myers Notary Public State of New Jersey Commission # 2303118 Commission expires 07-21-18

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

rnone: (212) 513 – 632. 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	
	Prime contractor	\$1,000,000 or greater	Construction Employment Report
City and state funded		\$750,000 or greater	
	Subcontractor	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:

- 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. Copes of the medical information questionnaire and instructions must be submitted with the Employment Report.
- Question 24: Indicate the existence and location of all statements of your firm's Equal Employment Opportunity policy and attach a copy of each statement.
- Question 25: 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	2. Nature of the	3. Position(s) of the	4. Was an investigation	5. Current status of the
complaint(s)	complaint(s)	complainant(s)	conducted?	disposition
			Y/N	

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	2. Administrative agency	3. Nature of the	4. Current status	5. If not pending, the
complainant(s)	or court in which action was filed	complaint(s)		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

	Your contractual relationship in this contract is:	Prime contractor x Subcontractor	
	Are MWBE goals attached to this project? Yes X	_ No	
	Please check one of the following if your firm would City of New York as a:	like information on how to certify with the	
	Minority Owned Business Enterprise Women Owned Business Enterprise Disadvantaged Business Enterprise	Locally Based Business Enterprise Emerging Business Enterprise	}
	If you are certified as an MBE, WBE, LBE, EBE or certified with?	DBE, what city/state agency are you Are you DBE certified? Yes No _X	
	Please indicate if you would like assistance from SB contracting opportunities: YesNo \underline{X}		
	Is this project subject to a project labor agreement?	Yes No _X_	
	Are you a Union contractor? Yes X No II with Operating Engineers Local 14 & 15, Labor		∍d
		ieis Lucai /5 i, iu iu, Duckbullueis /	
	Umperman Local 1556	4	_
	Are you a Veteran owned company? YesNo	X	-
	Umperman Local 1556	X ION	
•1	Are you a Veteran owned company? Yes No : CONTRACTOR/SUBCONTRACTOR INFORMAT 22-3373796	X ION engineering@jrcruz.co	<u>m</u>
•	Are you a Veteran owned company? Yes No l: CONTRACTOR/SUBCONTRACTOR INFORMAT 22-3373796 Employer Identification Number or Federal Tax I.D.	X ION	<u>m</u>
	Are you a Veteran owned company? Yes No : CONTRACTOR/SUBCONTRACTOR INFORMAT 22-3373796	X ION engineering@jrcruz.co	<u>m</u>
	Are you a Veteran owned company? Yes No I: CONTRACTOR/SUBCONTRACTOR INFORMAT 22-3373796 Employer Identification Number or Federal Tax I.D. JRCRUZ Corp. Company Name	X ION engineering@jrcruz.co	<u>m</u>
•	Are you a Veteran owned company? Yes No li: CONTRACTOR/SUBCONTRACTOR INFORMAT 22-3373796 Employer Identification Number or Federal Tax I.D. JRCRUZ Corp.	X ION engineering@jrcruz.co	<u>m</u>
	Are you a Veteran owned company? Yes No I: CONTRACTOR/SUBCONTRACTOR INFORMAT 22-3373796 Employer Identification Number or Federal Tax I.D. JRCRUZ Corp. Company Name 675 Line Road, Aberdeen, NJ 07747 Company Address and Zip Code	X lON engineering@jrcruz.co Email Addre	<u>m</u>
	Are you a Veteran owned company? Yes No I: CONTRACTOR/SUBCONTRACTOR INFORMAT 22-3373796 Employer Identification Number or Federal Tax I.D. JRCRUZ Corp. Company Name 675 Line Road, Aberdeen, NJ 07747	X engineering@jrcruz.co Email Addre	<u>m</u>
`[Are you a Veteran owned company? Yes No I: CONTRACTOR/SUBCONTRACTOR INFORMAT 22-3373796 Employer Identification Number or Federal Tax I.D. JRCRUZ Corp. Company Name 675 Line Road, Aberdeen, NJ 07747 Company Address and Zip Code Evaristo Cruz, Jr. Chief Operating Officer Same	X lON engineering@jrcruz.co Email Addre	<u>m</u>
	Are you a Veteran owned company? Yes No I: CONTRACTOR/SUBCONTRACTOR INFORMAT 22-3373796 Employer Identification Number or Federal Tax I.D. JRCRUZ Corp. Company Name 675 Line Road, Aberdeen, NJ 07747 Company Address and Zip Code Evaristo Cruz, Jr. Chief Operating Officer	X engineering@jrcruz.co Email Addre	<u>m</u>

13.	Number of employees in your company: 100 +/-
14.	Contract information:
	(a) NYC DDC (b) Contracting Agency (City Agency) Contract Amount
	(c) (d) Contract Registration Number (CT#)
•	(e) (f) Projected Commencement Date Projected Completion Date
	(g) Description and location of proposed contract:
	SEK20068 Construction of Storm and Combined Sewers and Appurtenances in 9th Street, Brooklyn
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_ X _
	If yes, attach a copy of certificate.
l W	OTE: DLS WILL NOT ISSUE A CONTINUED CERTIFICATE OF APPROVAL IN CONNECTION ITH THIS CONTRACT UNLESS THE REQUIRED CORRECTIVE ACTIONS IN PRIOR ONDITIONAL 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_X
	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_ X
	If yes,
	2 ed 8/13 OFFICIAL USE ONLY: File No

	(a) Nan	ne and address of OFCCP office.
	(b) Was	s a Certificate of Equal Employment Compliance issued within the past 36 months? X No
	if ye	s, attach a copy of such certificate.
	(c) Wer	e any corrective actions required or agreed to? Yes No_X
	If ye	s, attach a copy of such requirements or agreements.
	(d) Wer	e any deficiencies found? Yes No_X
	If ye	s, attach a copy of such findings.
19.	is respo	company or its affiliates a member or members of an employers' trade association which nsible for negotiating collective bargaining agreements (CBA) which affect construction $\frac{X}{X}$ No
	If yes, a	ttach a list of such associations and all applicable CBA's.
PARI	FII: DOC	UMENTS REQUIRED
20.	procnur	following policies or practices, attach the relevant documents (e.g., printed booklets, es, manuals, memoranda, etc.). If the policy(ies) are unwritten, attach a full explanation ractices. See instructions.
	<u>Y</u> (a)	Health benefit coverage/description(s) for all management, nonunion and union employees (whether company or union administered)
	<u>Y</u> (b)	Disability, life, other insurance coverage/description
	<u>N</u> (c)	Employee Policy/Handbook
	<u>N</u> (d)	Personnel Policy/Manual
	<u>N</u> (e)	Supervisor's Policy/Manual
	<u>Y</u> (f)	Pension plan or 401k coverage/description for all management, nonunion and union employees, whether company or union administered
	<u>Y</u> (g)	Collective bargaining agreement(s).
	<u>Y</u> (h)	Employment Application(s)
	<u>N</u> (i)	Employee evaluation policy/form(s).
	<u>N</u> (j)	Does your firm have medical and/or non-medical (i.e. education, military, personal, pregnancy, child care) leave policy?

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21.	The second of whom does your	
	To comply with the Immigration Reform and Control Act of 1986 when <u>and of whom</u> does your firm require the completion of an I-9 Form?	
	(a) Prior to job offer Yes No_X_	
	(b) After a conditional job offer Yes No X	
	(c) After a job offer Yes X No	
	(d) Within the first three days on the job Yes X No	
	(e) To some applicants Yes No_X	•
	(f) To all applicants Yes X No	
	(g) To some employees Yes No_X	
	(h) To all employees Yes_X No	
22.	Explain where and how completed I-9 Forms, with their supportive documentation, are maintained and made accessible. Completed at the field office, witnessed and signed by the President of the Corporation. Filed in the main office.	
23.	Does your firm or any of its collective bargaining agreements require job applicants to take a	
	medical examination? Yes No_X	
	If yes, is the medical examination given:	
	The state of the s	
	(a) Prior to a job offer Yes No	
	(b) After a conditional job offer Yes No	
	(c) After a job offer Yes No	
	(d) To all applicants Yes No	
	(e) Only to some applicants Yes No	
	If yes, list for which applicants below and attach copies of all medical examination or questionnaire forms and instructions utilized for these examinations.	
24.	Do you have a written equal employment opportunity (EEO) policy? Yes_X_No	
24.		
24.	If yes, list the document(s) and page number(s) where these written policies are located.	
24.	If yes, list the document(s) and page number(s) where these written policies are located. Equal Employment and Affirmative Action. Page One (1) and Statements Policies.	
24.	If yes, list the document(s) and page number(s) where these written policies are located.	
24. 25.	If yes, list the document(s) and page number(s) where these written policies are located. Equal Employment and Affirmative Action. Page One (1) and Statements Policies. Section B Equal Employment Does the company have a current affirmative action plan(s) (AAP)	
	If yes, list the document(s) and page number(s) where these written policies are located. Equal Employment and Affirmative Action. Page One (1) and Statements Policies. Section B Equal Employment Does the company have a current affirmative action plan(s) (AAP) X Minorities and Women	
	If yes, list the document(s) and page number(s) where these written policies are located. Equal Employment and Affirmative Action. Page One (1) and Statements Policies. Section B Equal Employment Does the company have a current affirmative action plan(s) (AAP) X Minorities and Women X Individuals with handicaps	
	If yes, list the document(s) and page number(s) where these written policies are located. Equal Employment and Affirmative Action. Page One (1) and Statements Policies. Section B Equal Employment Does the company have a current affirmative action plan(s) (AAP) X Minorities and Women	_
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2 5.	If yes, list the document(s) and page number(s) where these written policies are located. Equal Employment and Affirmative Action. Page One (1) and Statements Policies. Section B Equal Employment Does the company have a current affirmative action plan(s) (AAP) X Minorities and Women X Individuals with handicaps Other. Please specify Does your firm or collective bargaining agreement(s) have an internal grievance procedure with	-
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2 5.	If yes, list the document(s) and page number(s) where these written policies are located. Equal Employment and Affirmative Action. Page One (1) and Statements Policies. Section B Equal Employment Does the company have a current affirmative action plan(s) (AAP) X Minorities and Women X Individuals with handicaps Other. Please specify Does your firm or collective bargaining agreement(s) have an internal grievance procedure with respect to EEO complaints? Yes X No If yes, please attach a copy of this policy.	_
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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_X
	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_ \overline{X}
	If yes, attach a log. See instructions.
29.	Are there any jobs for which there are physical qualifications? Yes No_X
	If yes, list the job(s), submit a job description and state the reason(s) for the qualification(s).
30.	Are there any jobs for which there are age, race, color, national origin, sex, creed, disability, marital status, sexual orientation, or citizenship qualifications? Yes No_ \overline{X}
	If yes, list the job(s), submit a job description and state the reason(s) for the qualification(s).

SIGNATURE PAGE

			المعطالة والمطالق والمسالة وال
I, (print name of authorized official sign	ning) <u>Evaristo Cruz</u>	Jr.	hereby certify that
the information submitted herewith is t	rue and complete to the	best of my know	viege and belief and
submitted with the understanding that	compliance with New Y	ork City's equal t	Mo 50 (1980) as
requirements, as contained in Chapter	56 of the City Charter,	Executive Order	ation I also agree on
amended, and the implementing Rules behalf of the company to submit a cert	s and Regulations, is a c	code to the Divisi	on of Labor Services on
a monthly basis.	lined copy of payroll rec	Olos to the Divisi	011 01 22301 20111000 011
a monthly basis.			
JRCRUZ Corp.			·
Contractor's Name			
Contractor a Mario			
Cynthia Strodel	Ac		ssistant - Engineering
Name of person who prepared this En	ployment Report	Title	1
Evaristo Cruz, Jr., PE		resident	
Name of official authorized to sign on	behalf of the contractor	Title	
700,000 0700			
732/296-0709/ //			•
Telephone Number			
		Max	v 16, 2018
Oireach as a faculties in a facility		Date	
Signature of authorized official		Date	•
If contractors are found to be underuti	lizing minorities and fem	ales in anv niver	trade based on Chapter
56 Section 3H, the Division of Labor S	enione receives the rig	ht to request the	contractor's workforce
data and to implement an employmen	relaices leselaes nic lià	IK to todayayaya	
add and to imploment an employmen	r program.		*
Contractors who fail to comply with the	e above mentioned requ	irements or are f	found to be in
noncompliance may be subject to the	withholding of final payr	nent.	
• •	-		
Willful or fraudulent falsifications of an	y data or information su	bmitted herewith	may result in the
termination of the contract between the	e Citv and the bidder or	contractor and ir	a disapprovar or ruture
contracts for a period of up to five year	rs. Further, such falsific	ation may result	in civit and/and or
criminal prosecution.			
T. 15	1 1 1 14 15	discharge of DI (S' reconsibilities under
To the extent permitted by law and co	nsistent with the proper	GISCHARGE OF DES	the implementing Rules
Charter Chapter 56 of the City Charter	and Executive Order N	O. 50 (1900) and	dential
and Regulations, all information provide	led by a contractor to Di	LO Stratt De COTTIN	donida.
Only	original signatures ac	ccepted.	
	Original digitals.		
			• .
Sworn to before me this 16th	day of May 20 _	18	
		Max	. 16 2010
			y 16, 2018
	Authorized Signature	Date	₹
Cynthia Myers Notary Public			
State of New Jersey			
Commission # 2303118			
Commission expires 07-21-18			
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FOR OFFICIAL USE ONLY: File No.			

CONTRACT BID INFORMATION: USE OF SUBCONTRACTORS/TRADES FORM A.

- Do you plan to subcontractor work on this contract? Yes X No_
- If yes, complete the chart below. ત્યં

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
Not known at this time.				

*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

(A) Apprentice (TRN) Trainee

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.

rade:			2	MALES				Ш	FEMALES		
Laborers		(1) White	(2) Black	(3)	(4)	(2)	(6) White		(8)	(6)	(10)
Jnion Affillation, if applicable 731	i.	Non Hisp.	Non Hisp.	Hisp.	Asian	Native Amer.	Non Hisp.	T	Non Hisp. Hisp.	Asian	Native Amer.
otal (Col. #1-10):	-	9		2							
8 otal Minority, Male & Female	I										
Col. #2,3,4,5,7,8,9, & 10):	⋖										
otal Female Col. #6 – 10); 0	TRN										
	TOT	9		2						<u> </u>	
	•										

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

Unions and Community Outreach

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FORM B: PROJECTED WORKFORCE

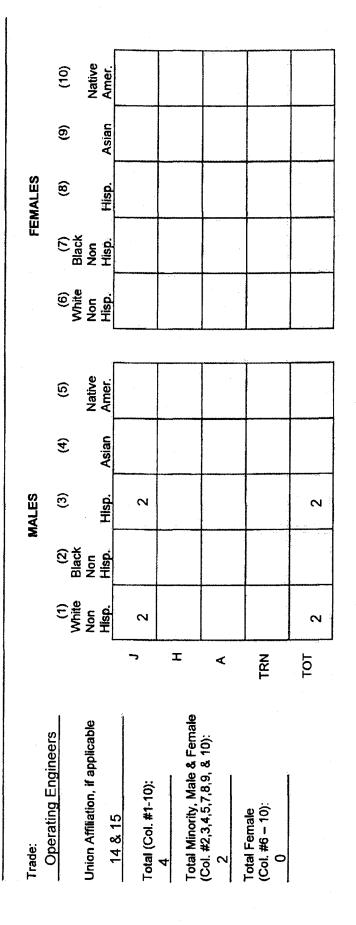
TRADE CLASSIFICATION CODES

(J) Journeylevel Workers (H) Helper

(TOT) Total by Column

(A) Apprentice (TRN) Trainee

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.



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

Unions and Community Outreach

Page 9

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FORM B: PROJECTED WORKFORCE

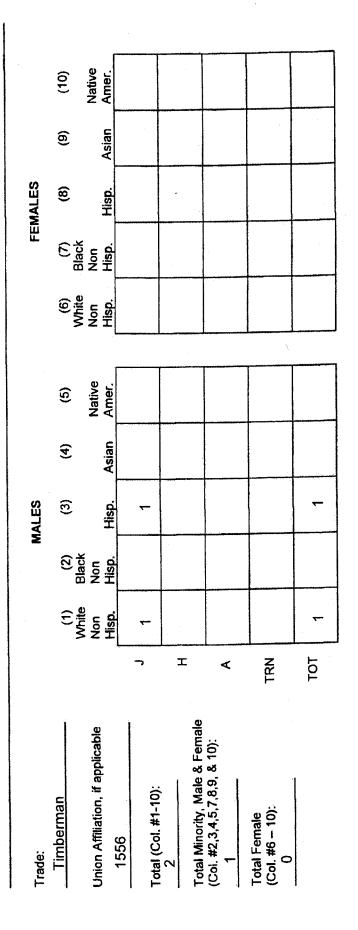
TRADE CLASSIFICATION CODES

(J) Journeylevel Workers (H) Helper

(TOT) Total by Column

(A) Apprentice (TRN) Trainee

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.



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

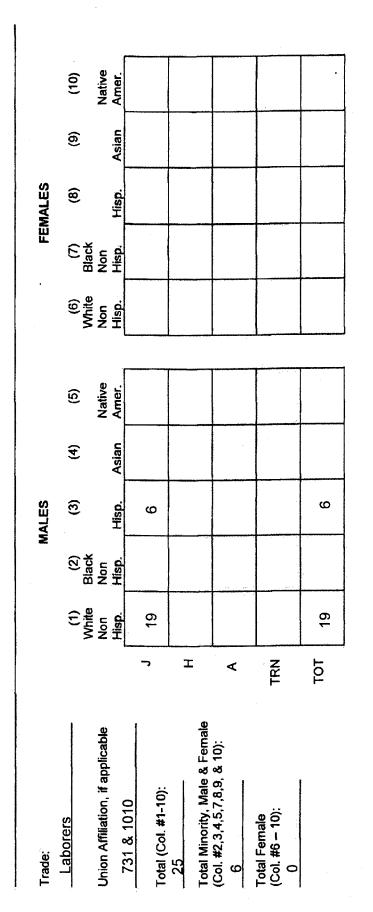
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FOR OFFICIAL USE ONLY: File No.

TRADE CLASSIFICATION CODES

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

(A) Apprentice (TRN) Trainee

all work performed in New York City, enter the current workforce For each trade currently engaged by your company for for Males and Females by trade classification on the charts below.



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

Unions and Community Outreach

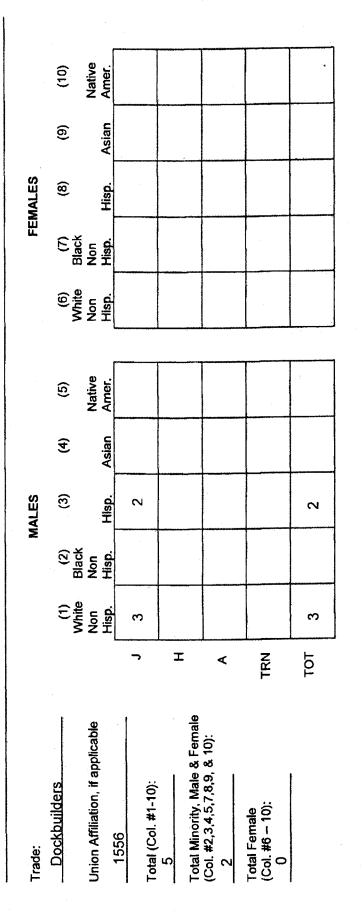
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TRADE CLASSIFICATION CODES

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

(A) Apprentice (TRN) Trainee

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.



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

Unions and Community Outreach

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TRADE CLASSIFICATION CODES

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

(A) Apprentice (TRN) Trainee

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:			Σ	MALES				出	FEMALES		
Imberman		(1) White	(2) Black	(3)	<u>4</u>	(2)	(6) White	Black	(8)	(6)	(10)
Union Affiliation, if applicable		Non	Non			Native	Non	Non			Native
1556		Hisp.	Hisp.	Hisp.	Asian	Amer.	Hisp.	Hisp.	Hisp.	Asian	Amer.
Total (Col. #1-10):	7	-	-	9							
8	I										
Total Minority, Male & Female											
(Col. #2,3,4,5,7,8,9, & 10):	4								-		
Total Female (Col. #6 – 10): 0	TRN										
	TOT	1	-	9							,

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

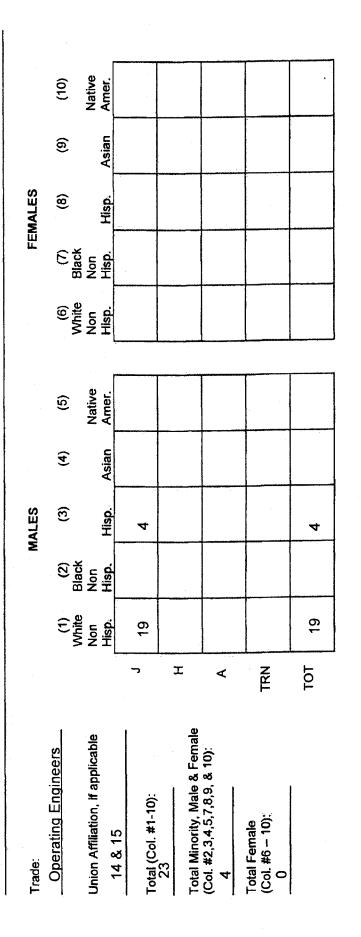
Page 11 Revised 8/13 FOR OFFICIAL USE ONLY: File No_

TRADE CLASSIFICATION CODES

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

(A) Apprentice (TRN) Trainee

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.



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

Unions and Community Outreach

Page 11 Revised 8/13

FOR OFFICIAL USE ONLY: File No.

TRADE CLASSIFICATION CODES

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

(A) Apprentice (TRN) Trainee

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:			2	MALES				H	FEMALES		
Crossing Guards		(1) White	(2) Black	(3)	4	(2)	(6) White	(7) Black	(8)	(6)	(10)
Union Affiliation, if applicable	•	Non Hisp.	Non Hisp.	Hisp.	Asian	Native Amer.	Non Hisp.	Non Hisp.	Hisp.	Asian	Native Amer.
Total (Col. #1-10):	7		Ŋ	_				_	-		
8 Total Minority, Male & Female	Ι										
(Col. #2,3,4,5,7,8,9, & 10):	< <										
Total Female (Col. #6 – 10); 2	TRN									·	
	TOT		2	-					-		4

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

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

ATTACH TO CONTRACT DOCUMENTS

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

PROJECT ID: SEK20068

FOR THE CONSTRUCTION OF STORM AND COMBINED SEWERS AND APPURTENANCES IN:
9TH STREET BETWEEN SMITH STREET AND 2ND AVENUE
2ND AVENUE BETWEEN 9TH STREET AND 7TH STREET

CAPITAL PROJECT WM-1
FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN:
2ND AVENUE BETWEEN 9TH STREET AND 7TH STREET

Together With All Work Incidental Thereto

BOROUGH OF BROOKLYN
CITY OF NEW YORK

ADDENDUM NO. 1

DATED: MAY 15, 2018

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;
 - <u>Change</u> the dates shown for <u>Submission of Bids</u> and for <u>Bid Opening</u> from "May 16, 2018" to read "May 24, 2018."
- Refer to the Bid and Contract Documents, VOLUME 1 OF 3, SCHEDULE B M/WBE Utilization Plan on Page 13;

<u>Change</u> the date shown for Bid/Proposal Response Date from "May 16, 2018" to read "May 24, 2018."

END OF ADDENDUM NO. 1

By signing in the space provided below, the bidder acknowledges receipt of this Addendum consisting of ONE (1) page.

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

GURDIP SAINI, P.E.

Associate Commissioner/Design I

JRCRUZ Corp.

Name of Bidder

Ву:_____

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

ADDENDA CONTROL SHEET

BID OPENING DATE: MAY 24, 2018

PROJECT NO.:

SEK20068

DESCRIPTION:

FOR THE CONSTRUCTION OF STORM AND COMBINED

SEWERS AND APPURTENANCES IN 9TH STREET, ETC.

A	Addendum		· · · · · · · · · · · · · · · · · · ·	Addendum Cont	ains:	
No.	Date	Revised Bid Date/Time	Revised Bid Schedule	Questions & Responses	Additional Ammendments	Drawings (number)
1	05/15/2018	⊠				□ (O)
						(0)
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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: SEK20068

FOR THE CONSTRUCTION OF STORM AND COMBINED SEWERS AND APPURTENANCES IN:
9TH STREET BETWEEN SMITH STREET AND 2ND AVENUE
2ND AVENUE BETWEEN 9TH STREET AND 7TH STREET

CAPITAL PROJECT WM-1
FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN:
2ND AVENUE BETWEEN 9TH STREET AND 7TH STREET

Together With All Work Incidental Thereto

BOROUGH OF BROOKLYN CITY OF NEW YORK

ADDENDUM NO. 1

DATED: MAY 15, 2018

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

- <u>Refer</u> to the Bid and Contract Documents, VOLUME 1 OF 3, Attachment 1 Bid Information on Page A-1;
 - <u>Change</u> the dates shown for <u>Submission of Bids</u> and for <u>Bid Opening</u> from "May 16, 2018" to read "May 24, 2018."
- 2. Refer to the Bid and Contract Documents, VOLUME 1 OF 3, SCHEDULE B M/WBE Utilization Plan on Page 13;

<u>Change</u> the date shown for Bid/Proposal Response Date from "May 16, 2018" to read "May 24, 2018."

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Associate Commissioner/Design I

Ву:_____

ATTACH TO CONTRACT DOCUMENTS

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

PROJECT ID: SEK20068

FOR THE CONSTRUCTION OF STORM AND COMBINED SEWERS AND APPURTENANCES IN:
9TH STREET BETWEEN SMITH STREET AND 2ND AVENUE
2ND AVENUE BETWEEN 9TH STREET AND 7TH STREET

CAPITAL PROJECT WM-1
FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN:
2ND AVENUE BETWEEN 9TH STREET AND 7TH STREET

Together With All Work Incidental Thereto

BOROUGH OF BROOKLYN CITY OF NEW YORK

ADDENDUM NO. 2

DATED: MAY 22, 2018

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

- Refer to the Bid and Contract Documents, Volume 1 of 3; Insert the attached Notice to Bidders.
- Refer to the Bid and Contract Documents, VOLUME 1 OF 3, Attachment 1 Bid Information on Page A-1;

<u>Change</u> the dates shown for <u>Submission of Bids</u> and for <u>Bid Opening</u> from "May 24, 2018" to read "May 31, 2018."

 Refer to the Bid and Contract Documents, VOLUME 1 OF 3, SCHEDULE B – M/WBE Utilization Plan on Page 13;

<u>Change</u> the date shown for Bid/Proposal Response Date from "May 24, 2018" to read "May 31, 2018."

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

Delete Bid Schedule pages in their entirety;

Substitute the attached revised Bid Schedule pages 8-3 [REVISION # 1] through B-39 [REVISION # 1]. NOTE:

- Quantity for item 50.21C3C053W changed.
- Item 50.31CC15 was added
- Item 51.11C001 was removed
- Quantity for item 6.40 D changed
- Quantity for item 6.52 CG changed
- Price for item 6.85 A changed
- Quantity for item 7.13 B
- Item 91698.93 was added

- Quantity for item 70.11TT changed
- Quantity for item 70.13MN changed
- Quantity for item 7.88 AD changed
- Item 4.09 AF was added
- "Not greater than" condition was added to item 52.41D08N
- Item 52.41D06N was added
- Item 50.31CC12 was removed
- Item 51.11P005 was removed
- Item 51.2150E1053H was removed
- Quantity for item 51.11P007 changed
- Item 52.31D06S12 was added
- Item 52.31V06S12 was added
- item 52.41D06R was added
- Item 6.59 P was added
- Item 6.59 PF was added
- Item 6.44 POG was removed
- Item 6.44 CST was added
- Refer to the Bid and Contract Documents, Volume 1 of 3;
 Delete Page C-4 in its entirety;
 Substitute the attached revised Page C-4R.
- Refer to the Bid and Contract Documents, Volume 1 of 3, Page 13;
 Insert the attached Page 14 after Page 13.
- Refer to the Bid and Contract Documents, Volume 3 of 3, Table of Contents;
 Delete the Table of Contents in its entirety;
 Substitute the attached revised Table of Contents.
- Refer to the Bid and Contract Documents, Volume 3 of 3, Schedule A;
 Delete Schedule A in its entirety;
 Substitute the attached revised Schedule A.

NOTE:

- Pages SA-1 and SA-4 were revised.
- Refer to the Bid and Contract Documents, Volume 3 of 3, SW-Pages;
 Delete the SW-Pages in its entirety;
 Substitute the attached revised SW-Pages.
 NOTE:
 - New NTB #1 and #29.
 - Section 91698.93 was added
 - Wetlands Specialist and/or Environmental Scientist replaced with dewatering/water treatment Specialist
 - Specification 51.61R.3(E) Boulder Protection Placement replaced with "NO TEXT"
 - New Amendment (3) of the OCMC traffic Stipulations
- 10. Refer to the Contract Drawings;
 <u>Delete</u> Sheet 5 of 19 and Sheet 10 of 19 in their entirety;
 <u>Substitute</u> the attached Sheet 5R of 19 and Sheet 10R of 19.
 NOTE: Changes made are shown in the bubble.

- Refer to the Contract Drawings;
 Delete Sheet 4 of 19 its entirety;
 Substitute the attached clear Sheet 4 of 19.
- 12. For additional information, see the attached ten (10) pages of "Questions Submitted by Bidders and DDC's Responses".

END OF ADDENDUM NO. 2

By signing in the space provided below, the bidder acknowledges receipt of this Addendum consisting of three (3) pages, attachment consisting of one hundred and ten (110) pages, and

three (3) sheets of drawing.

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

GURDIP SAINI, P.E.

Associate Commissioner/Design I

JRCRUZ Corp.

Name of Bidder

Ву: — У

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

ADDENDA CONTROL SHEET

BID OPENING DATE: MAY 31, 2018

PROJECT NO.:

SEK20068

DESCRIPTION:

FOR THE CONSTRUCTION OF STORM AND COMBINED SEWERS AND APPURTENANCES IN 9TH STREET, ETC.

	Addendum			Addendum Cont	tains:	
No.	Date	Revised Bid Date/Time	Revised Bid Schedule	Questions & Responses	Additional Ammendments	Drawings (number)
1	05/15/2018	×				□ (0)
2	05/22/2018		× ·	×	×	⊠ (3)
						□ (o)
						□ (o)
						□ (o)
						□ (O)
						□ (0)
						(o)
						□ (0)
						□ (O)
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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: SEK20068

FOR THE CONSTRUCTION OF STORM AND COMBINED SEWERS AND APPURTENANCES IN:
9TH STREET BETWEEN SMITH STREET AND 2ND AVENUE
2ND AVENUE BETWEEN 9TH STREET AND 7TH STREET

CAPITAL PROJECT WM-1
FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN:
2ND AVENUE BETWEEN 9TH STREET AND 7TH STREET

Together With All Work Incidental Thereto

BOROUGH OF BROOKLYN
CITY OF NEW YORK

ADDENDUM NO. 2

DATED: MAY 22, 2018

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

- Refer to the Bid and Contract Documents, Volume 1 of 3; Insert the attached Notice to Bidders.
- Refer to the Bid and Contract Documents, VOLUME 1 OF 3, Attachment 1 Bid Information on Page A-1;

<u>Change</u> the dates shown for <u>Submission of Bids</u> and for <u>Bid Opening</u> from "May 24, 2018" to read "May 31, 2018."

3. Refer to the Bid and Contract Documents, VOLUME 1 OF 3, SCHEDULE B — M/WBE Utilization Plan on Page 13;

<u>Change</u> the date shown for Bid/Proposal Response Date from "May 24, 2018" to read "May 31, 2018."

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

Delete Bid Schedule pages in their entirety;

Substitute the attached revised Bid Schedule pages B-3 [REVISION # 1] through B-39 [REVISION # 1]. **NOTE:**

- Quantity for item 50.21C3C053W changed.
- Item 50.31CC15 was added
- Item 51.11C001 was removed
- Quantity for item 6.40 D changed
- Quantity for item 6.52 CG changed
- Price for item 6.85 A changed
- Quantity for item 7.13 B
- Item 91698.93 was added

- Quantity for item 70.11TT changed
- Quantity for item 70.13MN changed
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- Item 52.41D06R was added
- Item 6.59 P was added
- Item 6.59 PF was added
- Item 6.44 POG was removed.
- Item 6.44 CST was added
- Refer to the Bid and Contract Documents, Volume 1 of 3;
 Delete Page C-4 in its entirety;
 Substitute the attached revised Page C-4R.
- 6. Refer to the Bid and Contract Documents, Volume 1 of 3, Page 13; Insert the attached Page 14 after Page 13.
- Refer to the Bid and Contract Documents, Volume 3 of 3, Table of Contents;
 Delete the Table of Contents in its entirety;
 Substitute the attached revised Table of Contents.
- Refer to the Bid and Contract Documents, Volume 3 of 3, Schedule A;
 Delete Schedule A in its entirety;
 Substitute the attached revised Schedule A.

NOTE:

- Pages SA-1 and SA-4 were revised.
- Refer to the Bid and Contract Documents, Volume 3 of 3, SW-Pages;
 Delete the SW-Pages in its entirety;
 Substitute the attached revised SW-Pages.
 - NOTE:
 - New NTB #1 and #29.
 - Section 91698.93 was added
 - Wetlands Specialist and/or Environmental Scientist replaced with dewatering/water treatment Specialist
 - Specification 51.61R.3(E) Boulder Protection Placement replaced with "NO TEXT"
 - New Amendment (3) of the OCMC traffic Stipulations
- 10. Refer to the Contract Drawings;

<u>Delete</u> Sheet 5 of 19 and Sheet 10 of 19 in their entirety; <u>Substitute</u> the attached Sheet 5R of 19 and Sheet 10R of 19.

NOTE: Changes made are shown in the bubble.

- 11. <u>Refer</u> to the Contract Drawings; <u>Delete</u> Sheet 4 of 19 its entirety; <u>Substitute</u> the attached clear Sheet 4 of 19.
- 12. For additional information, see the attached ten (10) pages of "Questions Submitted by Bidders and DDC's Responses".

END OF ADDENDUM NO. 2

By signing in the space provided below, the bidder acknowledges receipt of this Addendum consisting of three (3) pages, attachment consisting of one hundred and ten (110) pages, and

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

GURDIP SAINI, P.E.
Associate Commissioner/Design I

Name of Bidder

Questions Submitted by Bidders and DDC's Responses

QUESTION #1:

Please refer to Contract Dwgs Sheet 5 & 6, plan view indicates 24" RCP, While the profile below indicates 30 " RCP. Please clarify.

DDC'S RESPONSE:

There are two (2) Combined Sewers located on 2nd Avenue:

- 1) 24" R.C.P. at the west side of the road.
- 2) 30" R.C.P. which connects to a 53"W x 34" R.C.P. located at the center of the road.

The profile for the 24" R.C.P. can be found in drawing sheet #7 as indicated in the plan.

QUESTION #2:

The plans and specs reference the use of Steel or Composite Sheeting as cofferdams for the construction of the sewer penetrations through the outfall wall. What Type of sheeting connections onto the existing outfalls are allowed to be used in order to create a tight seal for our cofferdams and work in the dry?

DDC'S RESPONSE:

As per the Contract Documents for Item 553.01 (Type 1 Cofferdams), the Contractor shall submit the design, including computations, material and method of installation, to the Engineer for review prior to any construction of the cofferdam. In addition, any sealing material used to create a watertight seal between the cofferdam ends against the existing outfall wall must not result in permanent damage or alter its appearance of the existing wall upon removal of said cofferdam.

QUESTION #3:

Is Amendment (1) of the OCMC NYCDOT Traffic Stipulations NOT valid for this contract anymore or can it be applied as an either or with Amendment (2)? **DDC'S RESPONSE**:

Amendment (2) is to be read in conjunction with Amendment (1).

QUESTION #4:

Will all of the outfall permits listed on page SW-15, that NYCDDC filled for, be available at the time of the contract award?

DDC'S RESPONSE:

Permits will be provided to the Contractor at the time of NOTICE TO PROCEED.

QUESTION #5:

As per spec, a Wetlands Specialist or Environmental Scientist will be required for this project. To which bid item shall this cost be applied too?

DDC'S RESPONSE:

Per Article 9 of this Addendum, a Wetland Specialist or Environmental Scientist is not required for this project.

QUESTION #6:

Can you provide the drawing U2 (Sheet 4 of 19) again? It was downloaded a bit distorted.

DDC'S RESPONSE:

Please see Article 11 of this Addendum.

QUESTION #7:

Will all of the reinforcement identified for the sewer cradles/encasements on sheet 8 of 19 be paid under "Additional Steel Reinforcing Bars"?

DDC'S RESPONSE:

Please follow the NYCDEP Sewer Design Standards for reinforcement paid under "Additional Steel Reinforcing Bar."

QUESTION #8:

In Volume 1 of the bid specifications, page 14 is missing from Schedule B – M/WBE Utilization Plan. Could you please provide the missing page in a future addendum? **DDC'S RESPONSE**:

Please see Article 6 of this Addendum.

QUESTION #9:

Please confirm that "Fixed Sum" items (Traffic Enforcement Agents, Allowance for Anti-Freeze Additive in Concrete, Allowance for City Work Acceleration, Gas Interferences and Accommodations) are not subject to the MWBE goal requirements.

DDC'S RESPONSE:

The M/WBE goal is applicable to the entire contract value. DDC has accounted for items that will not contribute to M/WBE participation, such as fixed sum items, as part of the goal setting process.

QUESTION #10:

Given the numerous questions to be answered and to provide the answers to our subs, could you please extend the bid date to May 30th?

DDC'S RESPONSE:

Please see Addendum 1.

QUESTION #11:

Could you please clarify whether the Environmental Scientist specified in Subsection 40.14.2 (Page SW-12) of Volume 3 is a full-time position?

DDC'S RESPONSE:

Please see the revised specifications that indicates that Environmental Scientist is not required for this project.

QUESTION #12:

Could you please clarify whether the Wetland Scientist specified in Subsection 40.15.2 (Page SW-16) of Volume 3 is a full-time position?

DDC'S RESPONSE:

Assuming that Wetland Specialist is being referred to here, please see the revised specifications that indicates that Wetland Specialist is not required for this project.

QUESTION #13:

What is pile spacing for timber piles? Contract drawings indicate 9ft on center for all ESVP, however standard DEP drawing #SE2 indicates a maximum spacing of 6ft on center. Please clarify.

DDC'S RESPONSE:

The timber pile spacing will be as directed in the DEP standard drawing. The nine (9'-0") spacing is only applicable to mini piles.

QUESTION #14:

Bid quantity for Item #70.11TT – Timber Piles is 20,000 VF. Based on the contract drawings this quantity is significantly greater than what is anticipated (At least 50% greater). Please clarify.

DDC'S RESPONSE:

Please refer to Article 4 of this Addendum.

QUESTION #15:

Bid quantity for Item #70.13MN – Mini Piles is 40,000 LF. Based on the pile length and the spacing shown in the contract drawings the quantity is significantly greater (At least 50% greater). Please clarify where the additional pile length is to be used.

DDC'S RESPONSE:

Please refer to Article 4 of this Addendum. Please refer to the contract drawing for the mini piles details.

QUESTION #16:

The lengths of the timber piles were not indicated in the drawings. Could you please indicate their lengths?

DDC'S RESPONSE:

Please refer to the boring records and the NYCDEP Standard Sewer and Water Main Specifications section 70.11. Bidders are advised to bid accordingly.

QUESTION #17:

Specification Section 40.14 Dewatering Permits requires the Contractor to obtain Dewatering/Discharge Permits, LI Well Permit and SPDES permit prior to any temporary dewatering that is to occur. Dewatering permits can take several months, even up to a year to receive. Could you please confirm if the time required to receive the permits is considered within the Base Contract Duration of 730 days? DDC'S RESPONSE:

The contractor should submit permit application to NYCDDC Office of Environmental & Geotechnical Services (OEGS) in a timely manner to facilitate acquisition of the necessary permits prior to commencement of work. Pease note that the duration of NYS Department of Environmental Conservation (DEC) review of the permit application may vary from project to project.

QUESTION #18:

Could you please confirm if the independent Environmental Consultant is required for the full duration of the project?

DDC'S RESPONSE:

The duration for which the independent Environmental Consultant is maintained should be determined by the contractor based on project requirements in consultation with the Engineer.

QUESTION #19:

The bid plans show several bus stops that needs new concrete pavement, but there is no additional item for the 27" Steel Faced Concrete Curb that is also required for the bus stops. What's the pay item for the 27" curb and what's included as part of the pay item?

DDC'S RESPONSE:

Item #4.09 AF has been added to the Bid Schedule to accommodate the 27" Steel Faced Concrete Curb for bus pad.

QUESTION #20:

Is data available that shows the approximate amount of marine traffic in the Gowanus Canal?

DDC'S RESPONSE:

Marine traffic data is not available.

QUESTION #21:

Will work be restricted while marine traffic is present?

DDC'S RESPONSE:

Any marine traffic encountered will be coordinated with DDC Construction and NYCDOT Bridge maintenance at the appropriate time.

QUESTION #22:

In Drawing U1, Sheet 3 of 19, of the bid plans, the plan and profile show a 42" RCP Storm Sewer Encased in Concrete, but there is no item for this in the bid item list. What's the pay item for the 42" RCP and what's included as part of the pay item? DDC'S RESPONSE:

The pay item is 51.61R. Please refer to Sheet 14 of 19 and relevant SW-Pages for limit of payments and other relevant information for this item.

QUESTION #23:

In sheet 5 of 19 of the bid plans, the plan and profile show a 15" E.S.V.P. Combined Sewer on Concrete Cradle, but there is no item for this in the bid item list. What's the pay item for the 15" E.S.V.P. and what's included as part of the pay item?

DDC'S RESPONSE:

The pay item is 50.31CC15: 15" E.S.V.P. COMBINED SEWER ON CONCRETE CRADLE, please refer to Article 4 of this Addendum. Please refer to NYCDEP Standard Sewer and Water Main Specifications for this pay item.

QUESTION #24:

In the bid item list, there were two items that we could not find in the plans. These items are:

- a. No. 25 50.31CC12 12" E.S.V.P. Combined Sewer, on Concrete Cradle
- b. No. 38 51.11P005 Standard 5'-0" Diameter Precast Manhole.

Could you please indicate where are these two items are depicted?

DDC'S RESPONSE:

Items 50.31CC12 and 51.11P005 were removed from latest bid schedule. Please refer to Article 4 of this Addendum.

QUESTION #25:

Could you please confirm that there are no tide gates in the outfalls, as there are none clearly shown?

DDC'S RESPONSE:

There are no tide gates in the outfalls.

QUESTION #26:

The following notes appears in various existing pipes in Drawings U1, U2 & U3 (Sheets 3, 4 & 5 of 19 respectively): "EXIST. STORM SEWER TO BE REMOVED/ABANDONED AS DIRECTED BY THE ENGINEER". Since there is a great difference in pricing for pipe to be removed and pipe to be abandoned, could you please indicate which one is it for bidding purposes?

DDC'S RESPONSE:

The decision will be made in the field, as directed by the Engineer. Bidders are advised to bid accordingly.

QUESTION #27:

The following notes appears in various existing pipes in Drawings U1, U2 & U3 (Sheets 3, 4 & 5 of 19 respectively): "EXIST. 12" STORM SEWER, CATCH BASINS AND MANHOLES TO BE REMOVED/ABANDONED AS DIRECTED BY THE ENGINEER". Since there is a great difference in pricing for pipes/manholes to be removed and pipe/manholes to be abandoned, could you please indicate which one the contractor ought to use for bidding purposes?

DDC'S RESPONSE:

The decision will be made in the field, as directed by the Engineer. Bidders are advised to bid accordingly.

QUESTION #28:

Specification Volume 3 Page SW-16 states that the DDC has filed for a joint application and "it shall be the Contractor's responsibility to comply with the requirements of said permits." Will the owner be able to provide a list of permit requirements pre-bid?

DDC'S RESPONSE:

Contractor is required to coordinate with the Engineer after Notice to Proceed.

QUESTION #29:

Specification Volume 3 Page SW-22 Section K.3.06. Time of Completion states that the grout installation shall be completed within 45 calendar days of commencement of grouting permeation. Is there any waiting (curing) period between Phases 1, 2 & 3? If there is, how long should the contractor figure it needs?

DDC'S RESPONSE:

Grout must reach the design strength specified on page SW-23R between phases. The Contractor must design the grout mix accordingly.

QUESTION #30:

Amendment #2 of the OCMC permit states that work on 9th Street, between Smith Street & 2nd Avenue shall be from 10 pm to 5 am Monday – Sunday for 3 months. Please clarify the following:

- a) Will all the work within this area (Drainage pipes & Manholes, Grouting Work Demo of existing abutment, Construction of Vault#3, Construction of Outfalls #1 & #2) needs to be complete within this 3-month period?
- b) Could you please indicate when these three months that this stipulation refers to will take place?

DDC'S RESPONSE:

- a) Amendment #2 of the OCMC Traffic Stipulations will work in conjunction with the original Traffic Stipulations and Amendment #1. Outside of the 3 months of night work, day work is permitted on 9th Street between 2nd Ave. and Smith St. Bidders shall plan accordingly.
- b) The three months of night work added by Amendment #2 of the Traffic Stipulations is for the purpose of allowing the contractor to work on the outfalls at the 9th St. Bridge. The Contractor should plan its work accordingly.

QUESTION #31:

Could you please provide a contract schedule that will be used as the basis for bid or basis for the traffic stipulation as the three months completion for all the work on 9th Street between Smith Street and 2nd Ave. seems unrealistic?

DDC'S RESPONSE:

Please refer to the response to question 30. Contractor to prepare a schedule and bid accordingly.

QUESTION #32:

Will micropiles be required under the new Sanitary/Storm Sewer Manholes and/or catch basins? If so, could you please indicate how many per structure?

DDC'S RESPONSE:

Please refer to NYCDEP Sewer Design Standards for pile plans for number of minipiles required per structure.

QUESTION #33:

Will a site tour be scheduled to inspect the project site? If so, would it be possible if a lift opening be conducted during the tour?

DDC'S RESPONSE:

No site tour is anticipated at this time.

QUESTION #34:

Please confirm that Specification 51.61R.3(E) Boulder Protection Placement (Volume 3 of 3 Page SW-23) is applicable to this project. If so, could you please provide limits, details and provide item for this work to be paid under?

DDC'S RESPONSE:

Please refer to Article 9 of this Addendum.

QUESTION #35:

Could you please provide lifting schedule for 9th Street Bridge. Is there any bridge operation performed during the night?

DDC'S RESPONSE:

The Coast Guard Regulations state that "The draws of the Ninth Street Bridge, mile 1.4, the Third Street Bridge, mile 1.8, the Carroll Street Bridge, mile 2.0, and the Union Street Bridge, mile 2.1, at Brooklyn, shall open on signal, if at least a two-hour advance notice is given to the New York City Department of Transportation (NYCDOT), Radio Hotline, or the NYCDOT Bridge Operations Office." Bridge operation is as required in accordance with Coast Guard Regulations, see 65 FR 46868; 33 CFR 117.

QUESTION #36:

Will the 9th Street Bridge be in operation during the 3-month nightly shutdown? **DDC'S RESPONSE**:

The 9th Street Bridge will be closed to all traffic, from 10pm to 5am, during the 3-month nightly shutdown.

QUESTION #37:

Which item is to include the measurement and payment of the concrete barrier (MPT) on 9th St.?

DDC'S RESPONSE:

Per latest bid schedule, the pay items for concrete barriers are 6.59 P and 6.59 PF.

QUESTION #38:

Is there a fee to raise/lower the bridge?

DDC'S RESPONSE:

No fee is charged for openings required for vessel passage.

QUESTION #39:

Is the bridge open 24 hours a day?

DDC'S RESPONSE:

The OCMC Traffic Stipulations permit 3 months of night work with full closure and day work, for the remainder of the project duration, with lane closures. Please refer to the OCMC Traffic Stipulations for additional details.

QUESTION #40:

Is a bridge operator required to be present during the night work shifts?

DDC'S RESPONSE:

NYCDOT operation personnel are present at the bridge 24 hours per day.

QUESTION #41:

There are multiple references to "DOT" items on the plan sheet. Can you please advise as to whether a new bid sheet is to be provided that list these items or is the contractor to include these "DOT" items in a specific bid item already provided.

DDC'S RESPONSE:

Outfall #2 includes numerous references to DOT items and those items will be paid under 51. 61RF002: OUTFALL NO 2 STRUCTURE WITH ABUTMENT AND BRIDGE RESTORATION; please bid accordingly.

QUESTION #42:

50.31CC12 - No 12" EVSP combined sewer on concrete cradle was found, please advise where it is located

DDC'S RESPONSE:

Item deleted, please refer to Article 4 of this Addendum.

QUESTION #43:

40 LF of 15" ESVP combined sewer on concrete cradle on timber piles was found on sheet 5, there is no pay item for this type of pipe, please advise

DDC'S RESPONSE:

The pay item is 50.31CC15: 15" E.S.V.P. COMBINED SEWER ON CONCRETE CRADLE, please refer to Article 4 of this Addendum. Please refer to NYCDEP Standard Sewer and Water Main Specifications for this pay item.

QUESTION #44:

50.31MC18 - No 18" ESVP Combined sewer on concrete cradle was found, please advise where it is located

DDC'S RESPONSE:

Please see sheets 5 and 7

QUESTION #45:

51.11 P005 – No 5' Diameter Manholes were found, please advise where they are located **DDC'S RESPONSE**:

Item deleted, please refer to Article 4 of this Addendum.

QUESTION #46:

51.11 P007 – Only 2ea of 5ea were found, one at approx. station 11+25 on 2nd ave and the other at 13+25, please advise on the location of the others

DDC'S RESPONSE:

There are three 7' Precast Manholes, all located on 2nd Ave. Please refer to Article 4 of this Addendum.

QUESTION #47:

51.21 S0E1053H – A 53"x34" sewer line is located on sheet 3 from approx. station 17+25 to 19+00 and again on sheet 5 from approx. station 13+85 to 16+40, no E-1 manholes are shown in the contract drawings at these locations, please advise where it is located.

DDC'S RESPONSE:

There are no Type E-1 manholes. Please refer to Article 4 of this Addendum.

QUESTION #48:

37 LF of 42" RCP Encased in concrete on minipiles is found on sheet 3 beginning at approx. station 15+75 to 16+10, there is no pay item for this type of pipe, please advise.

DDC'S RESPONSE:

The pay item is 51.61RF002. Please refer to Sheet 14 of 19 and relevant SW-Pages for limit of payments and other relevant information for this item.

QUESTION #49:

DOT OCMC traffic Stipulations, Amendment #2, states "9th Street, Between Smith Street and 2nd Ave work hours shall be: 10pm-5am Monday thru Sunday for 3 Months" and "After working hours, the contractor shall maintain a minimum of 2, 11' lanes for traffic..."

- a. Does this mean that all work (ie. water main, mini piles, sewers, and roadway restoration) on 9th street shall be done in 3 months at night?
- b. It appears no day work will be permitted, please confirm. If day work is permitted, what are the stipulations as Amendment #2 supersedes Amendment #1?

 DDC'S RESPONSE:

Amendment #2 of the OCMC Traffic Stipulations will work in conjunction with the original Traffic Stipulations and Amendment # 1. Outside of the 3 months of night work, day work is permitted on 9th Street between 2nd Ave. and Smith St. Bidders shall plan the work accordingly.

QUESTION #50:

Specifications state that the contractor shall start work from downstream and work upstream. With that said, PCC estimates that 3 months is not enough time to finish all work at the outfall structures in addition to the work on 9th Street. Please look into this matter and consider a revision.

DDC'S RESPONSE:

Please refer to the response to question 49.

QUESTION #51:

At any time the NYCDOT may encounter issues with the hydraulic draw-bridge outside of the contractor's control, such as a break down in the lifting mechanism or lift gates, and may fail to open or close at night.

- a. Please explain how the contractor will be compensated for any downtime related to issues regarding the opening and closing of the bridge and/or lift gates.
- b. Please explain how the contractor will be compensated for any downtime related to issues regarding any repairs that will need to be made that may interfere with ongoing contract work.

DDC'S RESPONSE:

No issues are anticipated with the operations of the bridge.

QUESTION #52:

There are no contract drawings indicating the limits/locations of item 6.44 POG – Green bicycle Lane Pavement Overlay and any required markings/symbols. Please clarify.

DDC'S RESPONSE:

Item 6.44 POG has been deleted and replaced with item 6.44 CST. The item will be used on 9th Street but the exact locations are unknown at this time. The use of this item will be determined during construction, as directed by the Engineer.

QUESTION #53:
There are no contract drawings indicating the locations of item 6.44 – Thermoplastic Reflectorized Pavement Markings, please clarify.

DDC'S RESPONSE:

The item will be used on 9th Street and 2nd avenue but the exact locations are unknown at this time. The use of this item will be determined during construction, as directed by the Engineer.

CONTRACT SEK20068 NOTICE TO BIDDERS

The bidder's attention is directed to Volume 3, Sewer and Water Main Revisions to Specifications (SW-Pages) Notice to Bidders, Article 1, Sub-article 1.6, which states:

As part of the pre-award process for this contract, the low bidder will be required to submit a preliminary schedule and work plan in order to explain how it arrived at its "N" time proposal.

Award will only be made if the low bidder's preliminary schedule and work plan have sufficient detail to successfully explain and justify its "N" time proposal.

The sufficient detail required should include, but is not limited to:

- Resources, including:
 - Numbers of crews, with crew composition
 - o Manpower
 - o Major pieces of equipment
- Numbers of shifts being worked
- Anticipated weather delays
- Holiday embargo
- Traffic phasing

ATTACH TO CONTRACT DOCUMENTS

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

PROJECT ID: SEK20068

FOR THE CONSTRUCTION OF STORM AND COMBINED SEWERS AND APPURTENANCES IN:
9TH STREET BETWEEN SMITH STREET AND 2ND AVENUE
2ND AVENUE BETWEEN 9TH STREET AND 7TH STREET

CAPITAL PROJECT WM-1
FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN:
2ND AVENUE BETWEEN 9TH STREET AND 7TH STREET

Together With All Work Incidental Thereto

BOROUGH OF BROOKLYN
CITY OF NEW YORK

ADDENDUM NO. 3

DATED: MAY 25, 2018

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. 3

By signing in the space provided below, the bidder acknowledges receipt of this Addendum consisting of one (1) page, and attachment consisting of one (1) page.

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

GURDIP SAINI, P.E.

Associate Commissioner/Design I

Name of Bidder

JRCRUZ Corp.

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

ADDENDA CONTROL SHEET

BID OPENING DATE: MAY 31, 2018

PROJECT NO.:

SEK20068

DESCRIPTION:

FOR THE CONSTRUCTION OF STORM AND COMBINED

SEWERS AND APPURTENANCES IN 9TH STREET, ETC.

<i>F</i>	Addendum	Addendum Contains:						
No.	Date	Revised Bid Date/Time	Revised Bid Schedule	Questions & Responses	Additional Ammendments	Drawings (number)		
1	05/15/2018	☒				□ (o)		
2	05/22/2018	×	×	·	⊠	☑ (3)		
3	05/25/2018			×	4 0 •	□ (0)		
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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: SEK20068

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-10

	GURDIP SAINI, P.E. Associate Commissioner/Design I
Name of Bidder	
зу:	

Questions Submitted by Bidders and DDC's Responses

QUESTION #1:

In speaking to a prospective sub-contractor, he believes he is able to work during the day and has quoted me as such. I told him all work on 9th street is at night. He did not agree. Is all the work on 9th St designated to be done between 10pm and 5am? To avoid confusion, can the 3 part stipulations be combined into one comprehensive document?

DDC'S RESPONSE:

In accordance with the most updated OCMC Traffic Stipulations, Amendment 3 permits work to be done on 9th St. from 9pm to 6am for 3 months with full roadway closures. Outside of this, day work is also permitted along 9th St.. Please refer to the most updated OCMC Traffic Stipulations for additional specifics.

QUESTION #2:

Does Amendment (2) 1.A.1 of the stipulations mean that all work in 9th St is to be completed in three months? This is extremely aggressive given the tedious nature of the work. **DDC'S RESPONSE**:

Please see the response to question 4.

QUESTION #3:

Mini-piles offer the best method for the work underneath the elevated railroad, however, can CFA piles be used on other parts of the project where mini-piles are proposed.

DDC'S RESPONSE:

The design calls for the use of mini-piles, therefore CFA piles cannot be used.

QUESTION #4:

Regarding the newly added item, 6.44 CST- Color Surface Treatment for Pavements (CST), no specifications were found either in the bid documents or in the standard specifications. We request the specifications for this item to be sent in a future addendum.

DDC'S RESPONSE:

Please refer to SB 18-002 - COLOR SURFACE TREATMENT FOR PAVEMENTS in the R-Pages in Volume 3.

QUESTION #5:

Please refer to the following Q&A from Addenda #2. No pay item 51.61R is establish on the bid schedule, please clarify.

DDC'S RESPONSE:

The pay item is 51.61RF002.



INFRASTRUCTURE DIVISION BUREAU OF DESIGN

VOLUME 1 OF 3

PROJECT ID: SEK20068

FOR THE CONSTRUCTION OF STORM AND COMBINED SEWERS AND APPURTENANCES IN:

9TH STREET BETWEEN SMITH STREET AND 2ND AVENUE 2ND AVENUE BETWEEN 9TH STREET AND 7TH STREET

CAPITAL PROJECT WM-1

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN: 2ND AVENUE BETWEEN 9TH STREET AND 7TH STREET

Together With All Work Incidental Thereto BOROUGH OF BROOKLYN CITY OF NEW YORK

		Contractor
Dated		



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 www1.nyc.gov/site/ddc/index.page

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: SEK20068

FOR THE CONSTRUCTION OF STORM AND COMBINED SEWERS AND APPURTENANCES IN:

9TH STREET BETWEEN SMITH STREET AND 2ND AVENUE 2ND AVENUE BETWEEN 9TH STREET AND 7TH STREET

CAPITAL PROJECT WM-1 FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN:

 2^{ND} AVENUE BETWEEN 9^{TH} STREET AND 7^{TH} STREET

Together With All Work Incidental Thereto BOROUGH OF BROOKLYN CITY OF NEW YORK

FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION PREPARED BY IN-HOUSE DESIGN



M8-107



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 www1.nyc.gov/site/ddc/index.page

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 ENVIRONMENTAL PROTECTION PREPARED BY IN-HOUSE DESIGN

March 15, 2017

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. <u>Description and Location of Work</u>

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-l 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. <u>Definitions</u>

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

4. <u>Invitation For Bids and Contract Documents</u>

- (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) <u>Deposit for Copy of Invitation For Bids Documents</u>: 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) <u>Additional Copies</u>: 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.

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

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

15. Pre-Opening Modification or Withdrawal of Bids

Bids may be modified or withdrawn by written notice received in the office designated in 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.

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

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

(B) <u>Mistakes Discovered Before Award</u>

- (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) <u>Rejection of All Bids</u>: The Agency, upon written approval by the Agency Chief Contracting Officer, may reject all bids and may elect to resolicit bids if in its sole opinion it shall deem it in the best interest of the City so to do.
- (C) <u>Rejection of All Bids and Negotiation With All Responsible Bidders</u>: The Agency Head may determine that it is appropriate to cancel the Invitation For Bids after bid opening and before award and to complete the acquisition by negotiation. This determination shall be based on one of the following reasons:

- (1) All otherwise acceptable bids received are at unreasonable prices, or only one bid is received and the Agency Chief Contracting Officer cannot determine the reasonableness of the bid price, or no responsive bid has been received from a responsible bidder; or
- (2) In the judgment of the Agency Chief Contracting Officer, the bids were not independently arrived at in open competition, were collusive, or were submitted in bad faith.
- (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

- 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) <u>Submission</u>: Vendex Questionnaires must be submitted directly to the Mayor's Office of Contract Services, ATTN: Vendex, 253 Broadway, 9th Floor, New York, New York 10007. In addition, the bidder must submit a Confirmation of Vendex Compliance to the agency. A form for this confirmation is set forth in the Bid Booklet.
- (C) Obtaining Forms: Vendex Questionnaires, as well as detailed instructions, may be obtained at www.nyc.gov/vendex. The bidder may also obtain Vendex forms and instructions by contacting the

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.
 - Where all bids are rejected, the Comptroller will be notified to return the deposit of the three (3) lowest bidders at the time of rejection.
- (B) <u>Performance and Payment Security</u>: Performance and Payment Security must be provided in an amount and type specified in Attachment 1 (page A-l of the Bid Booklet). The performance and payment security shall be delivered by the contractor prior to or at the time of execution of the Contract. If a contractor fails to deliver the required performance and payment security, its bid security shall be enforced, and an award of Contract may be made to the next lowest responsible and responsive bidder, or the contract may be rebid.
- (C) <u>Acceptable Types of Security</u>: Acceptable types of security for bids, performance, and payment shall be limited to the following:
 - (1) a one-time bond in a form satisfactory to the City;
 - (2) a bank certified check or money order;
 - (3) obligations of the City of New York; or
 (4) other financial instruments as determined by the Office of Construction in consultation with the Comptroller.

Whenever the successful bidder deposits obligations of the City of New York as performance and payment security, the Comptroller may sell and use the proceeds thereof for any purpose for which the principal or surety on such bond would be liable under the terms of the Contract. If the money is deposited with the Comptroller, the successful bidder shall not be entitled to receive interest on such money from the City.

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

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

The Department of the Treasury of the United States advises that information concerning approved surety companies may be obtained as follows: (1) from the Government Printing Office at 202-512-1800; (2) through the Internet at http://www.fms.treas.gov/c570/index.html, and (3) through a computerized public bulletin board, which can be accessed by using your computer modem and dialing 202-874-6887.

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

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. <u>Bidder Responsibilities and Qualifications</u>

- (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 filling 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. <u>Lump Sum Contracts</u>

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

33. Unit Price Contracts

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

34. Excise Tax

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

35. <u>Licenses and Permits</u>

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

36. Multiple Prime Contractors

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

37. Locally Based Enterprise Requirements (LBE)

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

- (A) If any portion of the Contract is subcontracted, not less than ten percent of the total dollar amount of the contract shall be awarded to locally based enterprises ("LBEs"); except, where less than ten percent of the total dollar amount of the Contract is subcontracted, such lesser percentage shall be so awarded.
 - (B) No contractor shall require performance and payment bonds from LBE subcontractors.
 - (C) No Contract shall be awarded unless the contractor first identifies in its bid:
 - (1) the percentage, dollar amount and type of work to be subcontracted; and
 - (2) the percentage, dollar amount and type of work to be subcontracted to LBEs.
- (D) Within ten calendar days after notification of low bid, the apparent low bidder shall submit an "LBE Participation Schedule" to the contracting agency. If such schedule does not identify sufficient LBE subcontractors to meet the requirements of Administrative Code Section 6-108.1, the apparent low bidder shall submit documentation of its good faith efforts to meet such requirements.
 - (1) The "LBE Participation Schedule" shall include:
 - (a) the name and address of each LBE that will be given a subcontract,
 - (b) the percentage, dollar amount and type of work to be subcontracted to the LBE,
 - (c) the dates when the LBE subcontract work will commence and end.
 - (2) The following documents shall be attached to the "LBE Participation Schedule":
 - (a) verification letters from each subcontractor listed in the "LBE Participation Schedule" stating that the LBE will enter into a formal agreement for work,
 - (b) certification documents of any proposed LBE subcontractor which is not on the LBE certified list, and
 - (c) copies of the certification letter of any proposed subcontractor which is an LBE.
 - (3) Documentation of good faith efforts to achieve the required LBE percentage shall include as appropriate but not limited to the following:
 - (a) attendance at prebid meetings, when scheduled by the agency, to advise bidders of contract requirements;

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

The following forms, all of which are contained in the Bid Booklet, are to be completed and submitted with the bid:

- (1) Bid Schedule and Bid Form, including Affirmation
- (2) Bid Security (if required, see Attachment 1 on Page A-1)
- (3) M/WBE Subcontactor Utilization Plan (if participation goals have been established)

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

- (4) Safety Questionnaire
- (5) Construction Employment Report (if bid is \$1,000,000 or more)
- (6) Contract Certificate (if bid is less than \$1,000,000)
- (7) Confirmation of Vendex Compliance
- (8) Special Experience Requirements (if applicable to this contract)
- (9) Apprenticeship Program Questionnaire (if applicable)

FAILURE TO SUBMIT ITEMS (4) THROUGH (9) MAY RESULT IN THE 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

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

PURPOSE II.

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.

DEFINITIONS Ш.

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

Competent Person: As defined by OSHA, an individual who is capable of identifying existing and predictable hazards in the surroundings or working conditions that are unsanitary, hazardous, or dangerous to employees or the general public, and who has authorization to take prompt corrective measures to eliminate them.

Construction Safety Auditor: A representative of the QA&CS Construction Safety Unit who provides inspection and assessment services to enhance health and safety on all DDC construction projects. The activities of the Construction Safety Auditor include performing site surveys, reviewing health and safety plans, reviewing construction permits, and rendering technical advice and assistance to DDC Resident Engineers and Project Managers.

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

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

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

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

Daily Safety Job Briefing: Daily jobsite safety meetings, giving to all jobsite personnel by contractor, with the purpose of discussing project specific safety procedures for the scheduled construction work.

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

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

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

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

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

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

A Project Safety Manager shall possess the additional training, years of experience, and skills necessary to thoroughly understand the health and safety hazards and controls for large construction projects, including the full scope of the specific Work.

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

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

Resident Engineer (RE) / Construction Project Manager (CPM): Representative of the Commissioner duly designated by the Commissioner to be his/her representative at the site of the work. (The RE/CPM may be a third-party consultant, including a Construction Management firm, retained by DDC)

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

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

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

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

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

Weekly Safety Meetings: Weekly documented jobsite safety meetings, given to all jobsite personnel by contractor, with the purpose of discussing general safety topics and job specific requirements encountered at the DDC work site.

Work: The construction required by the Contract Documents whether completed or partially completed, performed by the Contractor/ subcontractors. Work refers to the furnishing of labor, furnishing and incorporating materials and equipment into the construction and providing any service required by the Contract Documents to fulfill the Contractor's obligation to complete the Project.

IV. RESPONSIBILITIES

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

A. DDC or CM Resident Engineer / Construction Project Manager

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

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- 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.

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 noncompliances, 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 I 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.

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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 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:
 - 11.7.3.1Profit, or loss of anticipated or unanticipated profit, except as provided in Article 11.7.1.9;
 - 11.7.3.2Consequential damages, including, but not limited to, construction or bridge loans or interest paid on such loans, loss of bonding capacity, bidding opportunities, or interest in investment, or any resulting insolvency;
 - 11.7.3.3 Indirect costs or expenses of any nature except those included in Article 11.7.1:
 - 11.7.3.4 Direct or indirect costs attributable to performance of **Work** where the **Contractor**, because of situations or conditions within its control, 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 reinspection, the Engineer/Resident Engineer determines that the Work is substantially complete or finally accepted, the date of such re-inspection shall be the date of Substantial Completion or Final Acceptance. Re-inspection by the Engineer/Resident Engineer shall be made within ten (10) Days after receipt of the Contractor's written request therefor.

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

ARTICLE 15. LIQUIDATED DAMAGES

- 15.1 In the event the Contractor fails to substantially complete the Work within the time fixed for such Substantial Completion in Schedule A of the General Conditions, plus authorized time extensions, or if the Contractor, in the sole determination of the Commissioner, has abandoned the Work, the Contractor shall pay to the City the sum fixed in Schedule A of the General Conditions, for each and every Day that the time consumed in substantially completing the Work exceeds the time allowed therefor; which said sum, in view of the difficulty of accurately ascertaining the loss which the City will suffer by reason of delay in the Substantial Completion of the Work hereunder, is hereby fixed and agreed as the liquidated damages that the City will suffer by reason of such delay, and not as a penalty. This Article 15 shall also apply to the Contractor whether or not the Contractor is defaulted pursuant to Chapter X of this Contract. Neither the failure to assess liquidated damages nor the granting of any time extension shall operate as a waiver or release of any claim the City may have against the Contractor for either actual or liquidated damages.
- 15.2 Liquidated damages received hereunder are not intended to be nor shall they be treated as either a partial or full waiver or discharge of the City's right to indemnification, or the Contractor's obligation to indemnify the City, or to any other remedy provided for in this Contract or by Law.
- 15.3 The **Commissioner** may deduct and retain out of the monies which may become due hereunder, the amount of any such liquidated damages; and in case the amount which may become due hereunder shall be less than the amount of liquidated damages suffered by the **City**, the **Contractor** shall be liable to pay the difference.

ARTICLE 16. OCCUPATION OR USE PRIOR TO COMPLETION

- 16.1 Unless otherwise provided for in the Specifications, the Commissioner may take over, use, occupy or operate any part of the Work at any time prior to Final Acceptance, upon written notification to the Contractor. The Engineer or Resident Engineer, as applicable, shall inspect the part of the Work to be taken over, used, occupied, or operated, and will furnish the Contractor with a written statement of the Work, if any, which remains to be performed on such part. The Contractor shall not object to, nor interfere with, the Commissioner's decision to exercise the rights granted by Article 16. In the event the Commissioner takes over, uses, occupies, or operates any part of the Work:
 - 16.1.1 the Engineer/Resident Engineer shall issue a written determination of Substantial Completion with respect to such part of the Work;
 - 16.1.2 the **Contractor** shall be relieved of its absolute obligation to protect such part of the unfinished **Work** in accordance with Article 7;
 - 16.1.3 the Contractor's guarantee on such part of the Work shall begin on the date of such use by the City; and;
 - 16.1.4 the Contractor shall be entitled to a return of so much of the amount retained in accordance with Article 21 as it relates to such part of the Work, except so much thereof as may be retained under Articles 24 and 44.

CHAPTER IV: SUBCONTRACTS AND ASSIGNMENTS

ARTICLE 17. SUBCONTRACTS

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

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

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.
 - 20.4.2In the event that the amount otherwise due and owing to the **Contractor** by the **City** is insufficient to satisfy such demand, the **City** may, at its option, require payment from the **Contractor** of an amount sufficient to cover such demand and exercise any other right to require or recover payment which the **City** may have under **Law** or **Contract**.
 - 20.4.3 In the event the City determines that the demand is invalid, any amount withheld pending the City's review of such demand shall be paid to the Contractor; provided, however, no lien has been filed. In the event a claim or an action has been filed, the terms and conditions set forth in Article 23 shall apply. In the event a lien has been filed, the parties will be governed by the provisions of the Lien Law of the State of New York.
- 20.5 The provisions of this Article 20 shall not prevent the City and the Contractor from resolving disputes in accordance with the PPB Rules, where applicable.
- 20.6 In the event the City determines that the beneficiary is entitled to payment pursuant to this Article 20, such determination and any defenses and counterclaims raised by the Contractor shall be taken into account in evaluating the Contractor's performance.
- 20.7 Nothing in this Article 20 shall relieve the Contractor of the obligation to pay the claims of all persons with valid and lawful claims against the Contractor relating to the Work.
- 20.8 The Contractor shall not require any performance, payment or other bonds of any Subcontractor if this Contract does not require such bonds of the Contractor.
- 20.9 The payment guarantee made pursuant to this Article 20 shall be construed in a manner consistent with Section 137 of the State Finance Law and shall afford to persons furnishing labor or 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.
 - 22.1.1Commercial General Liability Insurance: The Contractor shall provide Commercial General Liability Insurance covering claims for property damage and/or bodily injury, including death, which may arise from any of the operations under this Contract. Coverage under this insurance shall be at least as broad as that provided by the latest edition of Insurance Services Office ("ISO") Form CG 0001. Such insurance shall be "occurrence" based rather than "claims-made" and include, without limitation, the following types of coverage: premises operations; products and completed operations; contractual liability (including the tort liability of another assumed in a contract); broad form property damage; independent contractors; explosion, collapse and underground (XCU); construction means and methods; and incidental malpractice. Such insurance shall contain a "per project" aggregate limit, as specified in Schedule A, that applies separately to operations under this Contract.
 - 22.1.1(a) Such Commercial General Liability Insurance shall name the City as an Additional Insured. Coverage for the City shall specifically include the City's officials and employees, be at least as broad as the latest edition of ISO Form CG 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) nonowned 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.
 - 26.1.1For any unit price item, the Contractor will be paid at the unit price bid for any quantity up to one hundred twenty-five (125%) percent of the estimated quantity for that item set forth in the bid schedule. If during the progress of the Work, the actual quantity of any unit price item required to complete the Work approaches the estimated quantity for that item, and for any reason it appears that the actual quantity of any unit price item necessary to complete the Work will exceed the estimated quantity for that item by twenty-five (25%) percent, the Contractor shall immediately notify the Engineer of such anticipated overrun. The Contractor shall not be compensated for any quantity of a unit price item provided which is in excess of one hundred twenty-five (125%) percent of the estimated quantity for that item set forth in the bid schedule without written authorization from the Engineer.
 - 26.1.2 If the actual quantity of any unit price item necessary to complete the **Work** will exceed one hundred twenty five (125%) percent of the estimated quantity for that item set forth in the bid schedule, the **City** reserves the right and the **Contractor** agrees to negotiate a new unit price for such item. In no event shall such negotiated new unit price exceed the unit bid price. If the **City** and **Contractor** cannot agree on a new unit price, then the **City** shall order the **Contractor** and the **Contractor** agrees to provide additional quantities of

the item on the basis of time and material records for the actual and reasonable cost as determined under Article 26.2, but in no event at a unit price exceeding the unit price bid.

- 26.2 Extra Work: For Extra Work where payment is by agreement on a fixed price in accordance with Article 25.3.2, the price to be paid for such Extra Work shall be based on the fair and reasonable estimated cost of the items set forth below. For Extra Work where payment is based on time and material records in accordance with Article 25.3.3, the price to be paid for such Extra Work shall be the actual and reasonable cost of the items set forth below, calculated in accordance with the formula specified therein, if any.
 - 26.2.1 Necessary materials (including transportation to the **Site**); plus
 - 26.2.2 Necessary direct labor, including payroll taxes (subject to statutory wage caps) and supplemental benefits; plus
 - 26.2.3 Sales and personal property taxes, if any, required to be paid on materials not incorporated into such Extra Work; plus
 - 26.2.4 Reasonable rental value of Contractor-owned (or Subcontractor-owned, as applicable), necessary plant and equipment other than Small Tools, plus fuel/energy costs. Except for fuel costs for pick-up trucks which shall be reimbursed based on a consumption of five (5) gallons per shift, fuel costs shall be reimbursed based on actual costs or, in the absence of auditable documentation, the following fuel consumption formula per operating hour: (.035) x (HP rating) x (Fuel cost/gallon). Reasonable rental value is defined as the lower of either seventy-five percent of the monthly prorated rental rates established in "The AED Green Book, Rental Rates and Specifications for Construction Equipment" published by Equipment Watch (the "Green Book"), or seventy-five percent of the monthly prorated rental rates established in the "Rental Rate Blue Book for Construction Equipment" published by Equipment Watch (the "Blue Book") (the applicable Blue Book rate being for rental only without the addition of any operational costs listed in the Blue Book). The reasonable rental value is deemed to be inclusive of all operating costs except for fuel/energy consumption and equipment operator's wages/costs. For multiple shift utilization, reimbursement shall be calculated as follows: first shift shall be seventy-five (75%) percent of such rental rates; second shift shall be sixty (60%) percent of the first shift rate; and third shift shall be forty (40%) percent of the first shift rate. Equipment on standby shall be reimbursed at one-third (1/3) the prorated monthly rental rate. Contractor-owned (or Subcontractor-owned, as applicable) equipment includes equipment from rental companies affiliated with or controlled by the Contractor (or Subcontractor, as applicable), as determined by the Commissioner. In establishing cost reimbursement for 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) x (HP rating) x (Fuel cost/gallon). In lieu of renting, the City reserves the right to direct the purchase of non-operating equipment (scaffolding, sheeting systems, road plates, etc.), with payment on a purchase-salvage/life cycle basis, if less than the projected rental costs; plus
- 26.2.9 Workers' Compensation Insurance, and any insurance coverage expressly required by the City for the performance of the Extra Work which is different than the types of insurance required by Article 22 and Schedule A of the General Conditions. The cost of Workers' Compensation Insurance is subject to applicable payroll limitation caps and shall be based upon the carrier's Manual Rate for such insurance derived from the applicable class Loss Cost ("LC") and carrier's Lost Cost Multiplier ("LCM") approved by the New York State Department of Financial Services, and with the exception of experience rating, rate modifiers as promulgated by the New York Compensation Insurance Rating Board ("NYCIRB"); plus
- 26.2.10 Additional costs incurred as a result of the Extra Work for performance and payment bonds; plus
- 26.2.11 Twelve percent (12%) percent of the total of items in Articles 26.2.1 through 26.2.5 as compensation for overhead, except that no percentage for overhead will be allowed on **Payroll Taxes** or on the premium portion of overtime pay or on sales and personal property taxes. Overhead shall include without limitation, all costs and expenses in connection with administration, management superintendence, small tools, and insurance required by Schedule A of the General Conditions other than Workers' Compensation Insurance; plus
- 26.2.12 Ten (10%) percent of the total of items in Articles 26.2.1 through 26.2.5, plus the items in Article 26.2.11, as compensation for profit, except that no percentage for profit will be allowed on **Payroll Taxes** or on the premium portion of overtime pay or on sales and personal property taxes; plus
- 26.2.13 Five (5%) percent of the total of items in Articles 26.2.6 through 26.2.10 as compensation for overhead and profit.
- 26.3 Where the Extra Work is performed in whole or in part by other than the Contractor's own forces pursuant to Article 26.2, the Contractor shall be paid, subject to pre-audit by the Engineering Audit Officer, the cost of such Work computed in accordance with Article 26.2 above, plus an additional allowance of five (5%) percent to cover the Contractor's overhead and profit.
- 26.4 Where a change is ordered, involving both Extra Work and omitted or reduced Contract Work, the Contract price shall be adjusted, subject to pre-audit by the EAO, in an amount based on the difference between the cost of such Extra Work and of the omitted or reduced Work.
- 26.5 Where the Contractor and the Commissioner can agree upon a fixed price for Extra Work in accordance with Article 25.3.2 or another method of payment for Extra Work in accordance with

Article 25.3.4, or for Extra Work ordered in connection with omitted Work, such method, subject to pre-audit by the EAO, may, at the option of the Commissioner, be substituted for the cost plus a percentage method provided in Article 26.2; provided, however, that if the Extra Work is performed by a Subcontractor, the Contractor shall not be entitled to receive more than an additional allowance of five (5%) percent for overhead and profit over the cost of such Subcontractor's Work as computed in accordance with Article 26.2.

ARTICLE 27. RESOLUTION OF DISPUTES

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

Notice of Dispute and Agency Response. The Contractor shall present its dispute in writing ("Notice of Dispute") to the Commissioner within thirty (30) Days of receiving written notice of the determination or action that is the subject of the dispute. This notice requirement shall not be read to replace any other notice requirements contained in the Contract. The Notice of Dispute shall include all the facts, evidence, documents, or other basis upon which the Contractor relies in support of its position, as well as a detailed computation demonstrating how any amount of money claimed by the Contractor in the dispute was arrived at. Within thirty (30) Days after receipt of the detailed written submission comprising the complete Notice of Dispute, the Engineer, Resident Engineer, Engineering Audit Officer, or other designee of the Commissioner shall submit to the Commissioner all materials he or she deems pertinent to the dispute. Following initial submissions to the Commissioner, either party may demand of the other the production of any document or other material the demanding party believes may be relevant to the dispute. The requested party shall produce all relevant materials that are not otherwise

protected by a legal privilege recognized by the courts of New York State. Any question of relevancy shall be determined by the **Commissioner** whose decision shall be final. Willful failure of the **Contractor** to produce any requested material whose relevancy the **Contractor** has not disputed, or whose relevancy has been affirmatively determined, shall constitute a waiver by the **Contractor** of its claim.

- 27.4.1 Commissioner Inquiry. The Commissioner shall examine the material and may, in his or her discretion, convene an informal conference with the Contractor, the ACCO, and the Engineer, Resident Engineer, Engineering Audit Officer, or other designee of the Commissioner to resolve the issue by mutual consent prior to reaching a determination. The Commissioner may seek such technical or other expertise as he or she shall deem appropriate, including the use of neutral mediators, and require any such additional material from either or both parties as he or she deems fit. The Commissioner's ability to render, and the effect of, a decision hereunder shall not be impaired by any negotiations in connection with the dispute presented, whether or not the Commissioner participated therein. The Commissioner may or, at the request of any party to the dispute, shall compel the participation of any Other Contractor with a contract related to the Work of this Contract, and that Contractor shall be bound by the decision of the Commissioner. Any Other Contractor thus brought into the dispute resolution proceeding shall have the same rights and obligations under this Article 27 as the Contractor initiating the dispute.
- 27.4.2 Commissioner Determination. Within thirty (30) Days after the receipt of all materials and information, or such longer time as may be agreed to by the parties, the Commissioner shall make his or her determination and shall deliver or send a copy of such determination to the Contractor, the ACCO, and Engineer, Resident Engineer, Engineering Audit Officer, or other designee of the Commissioner, as applicable, together with a statement concerning how the decision may be appealed.
- 27.4.3 Finality of Commissioner's Decision. The Commissioner's decision shall be final and binding on all parties, unless presented to the Contract Dispute Resolution Board pursuant to this Article 27. The City may not take a petition to the Contract Dispute Resolution Board. However, should the Contractor take such a petition, the City may seek, and the Contract Dispute Resolution Board may render, a determination less favorable to the Contractor and more favorable to the City than the decision of the Commissioner.
- 27.5 Presentation of Dispute to the Comptroller. Before any dispute may be brought by the Contractor to the Contract Dispute Resolution Board, the Contractor must first present its claim to the Comptroller for his or her review, investigation, and possible adjustment.
 - 27.5.1 Time, Form, and Content of Notice. Within thirty (30) Days of its receipt of a decision by the Commissioner, the Contractor shall submit to the Comptroller and to the Commissioner a Notice of Claim regarding its dispute with the Agency. The Notice of Claim shall consist of (i) a brief written statement of the substance of the dispute, the amount of money, if any, claimed and the reason(s) the Contractor contends the dispute was wrongly decided by the Commissioner; (ii) a copy of the written decision of the Commissioner; and (iii) a copy of all materials submitted by the Contractor to the Agency, including the Notice of Dispute. The Contractor may not present to the Comptroller any material not presented to the Commissioner, except at the request of the Comptroller.

- 27.5.2 Response. Within thirty (30) Days of receipt of the Notice of Claim, the Agency shall make available to the Comptroller a copy of all material submitted by the Agency to the Commissioner in connection with the dispute. The Agency may not present to the Comptroller any material not presented to the Commissioner except at the request of the Comptroller.
- 27.5.3 Comptroller Investigation. The Comptroller may investigate the claim in dispute and, in the course of such investigation, may exercise all powers provided in Sections 7-201 and 7-203 of the Administrative Code. In addition, the Comptroller may demand of either party, and such party shall provide, whatever additional material the Comptroller deems pertinent to the claim, including original business records of the Contractor. Willful failure of the Contractor to produce within fifteen (15) Days any material requested by the Comptroller shall constitute a waiver by the Contractor of its claim. The Comptroller may also schedule an informal conference to be attended by the Contractor, Agency representatives, and any other personnel desired by the Comptroller.
- 27.5.4 Opportunity of Comptroller to Compromise or Adjust Claim. The Comptroller shall have forty-five (45) Days from his or her receipt of all materials referred to in Article 27.5.3 to investigate the disputed claim. The period for investigation and compromise may be further extended by agreement between the Contractor and the Comptroller, to a maximum of ninety (90) Days from the Comptroller's receipt of all materials. The Contractor may not present its petition to the Contract Dispute Resolution Board until the period for investigation and compromise delineated in this Article 27.5.4 has expired. In compromising or adjusting any claim hereunder, the Comptroller may not revise or disregard the terms of the Contract between the parties.
- 27.6 Contract Dispute Resolution Board. There shall be a Contract Dispute Resolution Board composed of:
 - 27.6.1 The chief administrative law judge of the Office of Administrative Trials and Hearings (OATH) or his/her designated OATH administrative law judge, who shall act as chairperson, and may adopt operational procedures and issue such orders consistent with this Article 27 as may be necessary in the execution of the Contract Dispute Resolution Board's functions, including, but not limited to, granting extensions of time to present or respond to submissions;
 - 27.6.2 The CCPO or his/her designee; any designee shall have the requisite background to consider and resolve the merits of the dispute and shall not have participated personally and substantially in the particular matter that is the subject of the dispute or report to anyone who so participated; and
 - 27.6.3 A person with appropriate expertise who is not an employee of the City. This person shall be selected by the presiding administrative law judge from a prequalified panel of individuals, established and administered by OATH with appropriate background to act as decision-makers in a dispute. Such individual may not have a contract or dispute with the City or be an officer or employee of any company or organization that does, or regularly represents persons, companies, or organizations having disputes with the City.
- 27.7 Petition to the Contract Dispute Resolution Board. In the event the claim has not been settled or adjusted by the Comptroller within the period provided in this Article 27, the Contractor,

within thirty (30) Days thereafter, may petition the Contract Dispute Resolution Board to review the Commissioner's determination.

- 27.7.1 Form and Content of Petition by Contractor. The Contractor shall present its dispute to the Contract Dispute Resolution Board in the form of a petition, which shall include (i) a brief written statement of the substance of the dispute, the amount of money, if any, claimed, and the reason(s) the Contractor contends the dispute was wrongly decided by the Commissioner; (ii) a copy of the written Decision of the Commissioner, (iii) copies of all materials submitted by the Contractor to the Agency; (iv) a copy of the written decision of the Comptroller, if any, and (v) copies of all correspondence with, or written material submitted by the Contractor, to the Comptroller. The Contractor shall concurrently submit four (4) complete sets of the Petition: one set to the City Corporation Counsel (Attn: Commercial and Real Estate Litigation Division) and three (3) sets to the Contract Dispute Resolution Board at OATH's offices with proof of service on the City Corporation Counsel. In addition, the Contractor shall submit a copy of the written statement of the substance of the dispute, cited in (i) above, to both the Commissioner and the Comptroller.
- 27.7.2 Agency Response. Within thirty (30) Days of its receipt of the Petition by the City Corporation Counsel, the Agency shall respond to the brief written statement of the Contractor and make available to the Contract Dispute Resolution Board all material it submitted to the Commissioner and Comptroller. Three (3) complete copies of the Agency response shall be provided to the Contract Dispute Resolution Board and one to the Contractor. Extensions of time for submittal of the Agency response shall be given as necessary upon a showing of good cause or, upon consent of the parties, for an initial period of up to thirty (30) Days.
- 27.7.3 Further Proceedings. The Contract Dispute Resolution Board shall permit the Contractor to present its case by submission of memoranda, briefs, and oral argument. The Contract Dispute Resolution Board shall also permit the Agency to present its case in response to the Contractor by submission of memoranda, briefs, and oral argument. If requested by the City Corporation Counsel, the Comptroller shall provide reasonable assistance in the preparation of the Agency's case. Neither the Contractor nor the Agency may support its case with any documentation or other material that was not considered by the Comptroller, unless requested by the Contract Dispute Resolution Board. The Contract Dispute Resolution Board, in its discretion, may seek such technical or other expert advice as it shall deem appropriate and may seek, on its own or upon application of a party, any such additional material from any party as it deems fit. The Contract Dispute Resolution Board, in its discretion, may combine more than one dispute between the parties for concurrent resolution.
- 27.7.4 Contract Dispute Resolution Board Determination. Within forty-five (45) Days of the conclusion of all written submissions and oral arguments, the Contract Dispute Resolution Board shall render a written decision resolving the dispute. In an unusually complex case, the Contract Dispute Resolution Board may render its decision in a longer period, not to exceed ninety (90) Days, and shall so advise the parties at the commencement of this period. The Contract Dispute Resolution Board's decision must be consistent with the terms of the Contract. Decisions of the Contract Dispute Resolution Board shall only resolve matters before the Contract Dispute Resolution Board and shall not have precedential effect with respect to matters not before the Contract Dispute Resolution Board.

- 27.7.5 Notification of Contract Dispute Resolution Board Decision. The Contract Dispute Resolution Board shall send a copy of its decision to the Contractor, the ACCO, the Engineer, the Comptroller, the City Corporation Counsel, the CCPO, and the PPB. A decision in favor of the Contractor shall be subject to the prompt payment provisions of the PPB Rules. The Required Payment Date shall be thirty (30) Days after the date the parties are formally notified of the Contract Dispute Resolution Board's decision.
- 27.7.6 Finality of Contract Dispute Resolution Board Decision. The Contract Dispute Resolution Board's decision shall be final and binding on all parties. Any party may seek review of the Contract Dispute Resolution Board's decision solely in the form of a challenge, filed within four (4) months of the date of the Contract Dispute Resolution Board's decision, in a court of competent jurisdiction of the State of New York, County of New York pursuant to Article 78 of the Civil Practice Law and Rules. Such review by the court shall be limited to the question of whether or not the Contract Dispute Resolution Board's decision was made in violation of lawful procedure, was affected by an error of Law, or was arbitrary and capricious or an abuse of discretion. No evidence or information shall be introduced or relied upon in such proceeding that was not presented to the Contract Dispute Resolution Board in accordance with this Article 27.
- 27.8 Any termination, cancellation, or alleged breach of the **Contract** prior to or during the pendency of any proceedings pursuant to this Article 27 shall not affect or impair the ability of the **Commissioner** or Contract Dispute Resolution Board to make a binding and final decision pursuant to this Article 27.

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

- 28.1 While the Contractor or any of its Subcontractors is performing Work on a time and material basis or Extra Work on a time and material basis ordered by the Commissioner under Article 25, or where the Contractor believes that it or any of its Subcontractors is performing Extra Work but a final determination by Agency has not been made, or the Contractor or any of its Subcontractors is performing disputed Work (whether on or off the Site), or complying with a determination or order under protest in accordance with Articles 11, 27, and 30, in each such case the Contractor shall furnish the Resident Engineer daily with three (3) copies of written statements signed by the Contractor's representative at the Site showing:
 - 28.1.1 The name, trade, and number of each worker employed on such Work or engaged in complying with such determination or order, the number of hours employed, and the character of the Work each is doing; and
 - 28.1.2 The nature and quantity of any materials, plant and equipment furnished or used in connection with the performance of such **Work** or compliance with such determination or order, and from whom purchased or rented.
- 28.2 A copy of such statement will be countersigned by the **Resident Engineer**, noting thereon any items not agreed to or questioned, and will be returned to the **Contractor** within two (2) **Days** after submission.
- 28.3 The Contractor and its Subcontractors, when required by the Commissioner, or the Comptroller, shall also produce for inspection, at the office of the Contractor or Subcontractor, any and all of its books, bid documents, financial statements, vouchers, records, daily job diaries and reports,

and cancelled checks, and any other documents relating to showing the nature and quantity of the labor, materials, plant and equipment actually used in the performance of such Work, or in complying with such determination or order, and the amounts expended therefor, and shall permit the Commissioner and the Comptroller to make such extracts therefrom, or copies thereof, as they or either of them may desire.

- 28.4 In connection with the examination provided for herein, the Commissioner, upon demand therefor, will produce for inspection by the Contractor such records as the Agency may have with respect to such Extra Work or disputed Work performed under protest pursuant to order of the Commissioner, except those records and reports which may have been prepared for the purpose of determining the accuracy and validity of the Contractor's claim.
- 28.5 Failure to comply strictly with these requirements shall constitute a waiver of any claim for extra compensation or damages on account of the performance of such **Work** or compliance with such determination or order.

ARTICLE 29. OMITTED WORK

- 29.1 If any Contract Work in a lump sum Contract, or if any part of a lump sum item in a unit price, lump sum, or percentage-bid Contract is omitted by the Commissioner pursuant to Article 33, the Contract price, subject to audit by the EAO, shall be reduced by a pro rata portion of the lump sum bid amount based upon the percent of Work omitted subject to Article 29.4. For the purpose of determining the pro rata portion of the lump sum bid amount, the bid breakdown submitted in accordance with Article 41 shall be considered, but shall not be the determining factor.
- 29.2 If the whole of a lump sum item or units of any other item is so omitted by the **Commissioner** in a unit price, lump sum, or percentage-bid **Contract**, then no payment will be made therefor except as provided in Article 29.4.
- 29.3 For units that have been ordered but are only partially completed, the unit price shall be reduced by a pro rata portion of the unit price bid based upon the percentage of **Work** omitted subject to Article 29.4.
- 29.4 In the event the Contractor, with respect to any omitted Work, has purchased any non-cancelable material and/or equipment that is not capable of use except in the performance of this Contract and has been specifically fabricated for the sole purpose of this Contract, but not yet incorporated into the Work, the Contractor shall be paid for such material and/or equipment in accordance with Article 64.2.1(b); provided, however, such payment is contingent upon the Contractor's delivery of such material and/or equipment in acceptable condition to a location designated by the City.
- 29.5 The Contractor agrees to make no claim for damages or for loss of overhead and profit with regard to any omitted Work.

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

30.1 If the Contractor shall claim to be sustaining damages by reason of any act or omission of the City or its agents, it shall submit to the Commissioner within forty-five (45) Days from the time such damages are first incurred, and every thirty (30) Days thereafter to the extent additional damages are being incurred for the same condition, verified statements of the details and the amounts of such

damages, together with documentary evidence of such damages. The Contractor may submit any of the above statements within such additional time as may be granted by the Commissioner in writing upon written request therefor. Failure of the Commissioner to respond in writing to a written request for additional time within thirty (30) Days shall be deemed a denial of the request. On failure of the Contractor to strictly comply with the foregoing provisions, such claims shall be deemed waived and no right to recover on such claims shall exist. Damages that the Contractor may claim in any action or dispute resolution procedure arising under or by reason of this Contract shall not be different from or in excess of the statements and documentation made pursuant to this Article 30. This Article 30.1 does not apply to claims submitted to the Commissioner pursuant to Article 11 or to claims disputing a determination under Article 27.

- 30.2 In addition to the foregoing statements, the Contractor shall, upon notice from the Commissioner, produce for examination at the Contractor's office, by the Engineer, Architect or Project Manager, all of its books of account, bills, invoices, payrolls, subcontracts, time books, daily reports, bank deposit books, bank statements, check books, and cancelled checks, showing all of its acts and transactions in connection with or relating to or arising by reason of this Contract, and submit itself and persons in its employment, for examination under oath by any person designated by the Commissioner or Comptroller to investigate claims made or disputes against the City under this Contract. At such examination, a duly authorized representative of the Contractor may be present.
- 30.3 In addition to the statements required under Article 28 and this Article 30, the Contractor and/or its Subcontractor shall, within thirty (30) Days upon notice from the Commissioner or Comptroller, produce for examination at the Contractor's and/or Subcontractor's office, by a representative of either the Commissioner or Comptroller, all of its books of account, bid documents, financial statements, accountant workpapers, bills, invoices, payrolls, subcontracts, time books, daily reports, bank deposit books, bank statements, check books, and cancelled checks, showing all of its acts and transactions in connection with or relating to or arising by reason of this Contract. Further, the Contractor and/or its Subcontractor shall submit any person in its employment, for examination under oath by any person designated by the Commissioner or Comptroller to investigate claims made or disputes against the City under this Contract. At such examination, a duly authorized representative of the Contractor may be present.
- 30.4 Unless the information and examination required under Article 30.3 is provided by the Contractor and/or its Subcontractor upon thirty (30) Days' notice from the Commissioner or Comptroller, or upon the Commissioner's or Comptroller's written authorization to extend the time to comply, the City shall be released from all claims arising under, relating to or by reason of this Contract, except for sums certified by the Commissioner to be due under the provisions of this Contract. It is further stipulated and agreed that no person has the power to waive any of the foregoing provisions and that in any action or dispute resolution procedure against the City to recover any sum in excess of the sums certified by the Commissioner to be due under or by reason of this Contract, the Contractor must allege in its complaint and prove, at trial or during such dispute resolution procedure, compliance with the provisions of this Article 30.
- 30.5 In addition, after the commencement of any action or dispute resolution procedure by the Contractor arising under or by reason of this Contract, the City shall have the right to require the Contractor to produce for examination under oath, up until the trial of the action or hearing before the Contract Dispute Resolution Board, the books and documents described in Article 30.3 and submit itself and all persons in its employ for examination under oath. If this Article 30 is not complied with as required, then the Contractor hereby consents to the dismissal of the action or dispute resolution procedure.

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

ARTICLE 31. THE RESIDENT ENGINEER

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

ARTICLE 32. THE ENGINEER OR ARCHITECT OR PROJECT MANAGER

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

ARTICLE 33. THE COMMISSIONER

33.1 The **Commissioner**, in addition to those matters elsewhere herein expressly made subject to his/her determination, direction or approval, shall have the power:

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

ARTICLE 34. NO ESTOPPEL

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

CHAPTER VIII: LABOR PROVISIONS

ARTICLE 35. EMPLOYEES

- 35.1 The Contractor and its Subcontractors shall not employ on the Work:
 - 35.1.1 Anyone who is not competent, faithful and skilled in the Work for which he/she shall be employed; and whenever the Commissioner shall inform the Contractor, in writing, that any employee is, in his/her opinion, incompetent, unfaithful or disobedient, that employee shall be discharged from the Work forthwith, and shall not again be employed upon it; or

- 35.1.2 Any labor, materials or means whose employment, or utilization during the course of this Contract, may tend to or in any way cause or result in strikes, work stoppages, delays, suspension of Work or similar troubles by workers employed by the Contractor or its Subcontractors, or by any of the trades working in or about the buildings and premises where Work is being performed under this Contract, or by Other Contractors or their Subcontractors pursuant to other contracts, or on any other building or premises owned or operated by the City, its Agencies, departments, boards or authorities. Any violation by the Contractor of this requirement may, upon certification of the Commissioner, be considered as proper and sufficient cause for declaring the Contractor to be in default, and for the City to take action against it as set forth in Chapter X of this Contract, or such other article of this Contract as the Commissioner may deem proper; or
- 35.1.3 In accordance with Section 220.3-e of the Labor Law of the State of New York (hereinafter "Labor Law"), the Contractor and its Subcontractors shall not employ on the Work any apprentice, unless he/she is a registered individual, under a bona fide program registered with the New York State Department of Labor. The allowable ratio of apprentices to journey-level workers in any craft classification shall not be greater than the ratio permitted to the Contractor as to its work force on any job under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered as above, shall be paid the wage rate determined by the Comptroller of the City for the classification of Work actually performed. The Contractor or Subcontractor will be required to furnish written evidence of the registration of its program and apprentices as well as all the appropriate ratios and wage rates, for the area of the construction prior to using any apprentices on the Contract Work.
- 35.2 If the total cost of the Work under this Contract is at least two hundred fifty thousand (\$250,000) dollars, all laborers, workers, and mechanics employed in the performance of the Contract on the public work site, either by the Contractor, Subcontractor or other person doing or contracting to do the whole or a part of the Work contemplated by the Contract, shall be certified prior to performing any Work as having successfully completed a course in construction safety and health approved by the United States Department of Labor's Occupational Safety and Health Administration that is at least ten (10) hours in duration.
- 35.3 In accordance with Local Law Nos. 30-2012 and 33-2012, codified at sections 6-132 and 12-113 of the Administrative Code, respectively,
 - 35.3.1 The Contractor shall not take an adverse personnel action with respect to an officer or employee in retaliation for such officer or employee making a report of information concerning conduct which such officer or employee knows or reasonably believes to involve corruption, criminal activity, conflict of interest, gross mismanagement or abuse of authority by any officer or employee relating to this Contract to (a) the Commissioner of the Department of Investigation, (b) a member of the New York City Council, the Public Advocate, or the Comptroller, or (c) the CCPO, ACCO, Agency head, or Commissioner.
 - 35.3.2 If any of the Contractor's officers or employees believes that he or she has been the subject of an adverse personnel action in violation of Article 35.3.1, he or she shall be entitled to bring a cause of action against the Contractor to recover all relief necessary to make him or her whole. Such relief may include but is not limited to: (a) an injunction to restrain continued retaliation, (b) reinstatement to the position such employee would have had but for the retaliation or to an equivalent position, (c) reinstatement of full fringe benefits and seniority rights, (d) payment of two times back

pay, plus interest, and (e) compensation for any special damages sustained as a result of the retaliation, including litigation costs and reasonable attorney's fees.

- 35.3.3 The Contractor shall post a notice provided by the City in a prominent and accessible place on any site where work pursuant to the Contract is performed that contains information about:
 - 35.3.3(a) how its employees can report to the New York City Department of Investigation allegations of fraud, false claims, criminality or corruption arising out of or in connection with the **Contract**; and
 - 35.3.3(b) the rights and remedies afforded to its employees under Administrative Code sections 7-805 (the New York City False Claims Act) and 12-113 (the Whistleblower Protection Expansion Act) for lawful acts taken in connection with the reporting of allegations of fraud, false claims, criminality or corruption in connection with the **Contract**.
- 35.3.4 For the purposes of this Article 35.3, "adverse personnel action" includes dismissal, demotion, suspension, disciplinary action, negative performance evaluation, any action resulting in loss of staff, office space, equipment or other benefit, failure to appoint, failure to promote, or any transfer or assignment or failure to transfer or assign against the wishes of the affected officer or employee.
- 35.3.5 This Article 35.3 is applicable to all of the Contractor's Subcontractors having subcontracts with a value in excess of \$100,000; accordingly, the Contractor shall include this rider in all subcontracts with a value a value in excess of \$100,000.
- 35.4 Article 35.3 is not applicable to this **Contract** if it is valued at \$100,000 or less. Articles 35.3.1, 35.3.2, 35.3.4, and 35.3.5 are not applicable to this **Contract** if it was solicited pursuant to a finding of an emergency.
 - 35.5 Paid Sick Leave Law.
 - 35.5.1 Introduction and General Provisions.
 - 35.5.1(a) The Earned Sick Time Act, also known as the Paid Sick Leave Law ("PSLL"), requires covered employees who annually perform more than 80 hours of work in New York City to be provided with paid sick time. 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").

² Pursuant to the PSLL, if fewer than five employees work for the same employer, as determined pursuant to New York City Administrative Code § 20-912(g), such employer has the option of providing such employees uncompensated sick time.

- 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 there are links to the PSLL and the associated Rules as well as additional resources for employers, such as Frequently Asked Questions, timekeeping tools and model forms, and an event calendar of upcoming presentations and webinars at which the Contractor can get more information about how to comply with the PSLL. The Contractor acknowledges that it is responsible for compliance with the PSLL notwithstanding any inconsistent language contained herein.
- 35.5.2 Pursuant to the PSLL and the Rules: Applicability, Accrual, and Use.
 - 35.5.2(a) An employee who works within the City of New York for more than eighty hours in any consecutive 12-month period designated by the employer as its "calendar year" pursuant to the PSLL ("Year") must be provided sick time. Employers must provide a minimum of one hour of sick time for every 30 hours worked by an employee and compensation for such sick time must be provided at the greater of the employee's regular hourly rate or the minimum wage. Employers are not required to provide more than 40 hours of sick time to an employee in any Year.
 - 35.5.2(b) An employee has the right to determine how much sick time he or she will use, provided that employers may set a reasonable minimum increment for the use of sick time not to exceed four hours per **Day**. In addition, an employee may carry over up to 40 hours of unused sick time to the following Year, provided that no employer is required to allow the use of more than forty hours of sick time in a Year or carry over unused paid sick time if the employee is paid for such unused sick time and the employer provides the employee with at least the legally required amount of paid sick time for such employee for the immediately subsequent Year on the first **Day** of such Year.
 - 35.5.2(c) An employee entitled to sick time pursuant to the PSLL may use sick time for any of the following:
 - such employee's mental illness, physical illness, injury, or health condition
 or the care of such illness, injury, or condition or such employee's need for
 medical diagnosis or preventive medical care;
 - ii. such employee's care of a family member (an employee's child, spouse, domestic partner, parent, sibling, grandchild or grandparent, or the child or parent of an employee's spouse or domestic partner) who has a mental

- illness, physical illness, injury or health condition or who has a need for medical diagnosis or preventive medical care;
- iii. closure of such employee's place of business by order of a public official due to a public health emergency; or
- iv. such employee's need to care for a child whose school or childcare 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 PSLL. However, an employer may not require documentation specifying the nature of a medical condition or otherwise require disclosure of the details of a medical condition as a condition of providing sick time and health information obtained solely due to an employee's use of sick time pursuant to the PSLL must be treated by the employer as confidential.
- 35.5.2(e) If an employer chooses to impose any permissible discretionary requirement as a condition of using sick time, it must provide to all employees a written policy containing those requirements, using a delivery method that reasonably ensures that employees receive the policy. If such employer has not provided its written policy, it may not deny sick time to an employee because of noncompliance with such a policy.
- 35.5.2(f) Sick time to which an employee is entitled must be paid no later than the payday for the next regular payroll period beginning after the sick time was used.
- 35.5.3 Exemptions and Exceptions. Notwithstanding the above, the PSLL does not apply to any of the following:
 - 35.5.3(a) an independent contractor who does not meet the definition of employee under section 190(2) of the New York State Labor Law;
 - 35.5.3(b) an employee covered by a valid collective bargaining agreement in effect on April 1, 2014, until the termination of such agreement;
 - 35.5.3(c) an employee in the construction or grocery industry covered by a valid collective bargaining agreement if the provisions of the PSLL are expressly waived in such collective bargaining agreement;
 - 35.5.3(d) an employee covered by another valid collective bargaining agreement if such provisions are expressly waived in such agreement and such agreement provides a benefit comparable to that provided by the PSLL for such employee;
 - 35.5.3(e) an audiologist, occupational therapist, physical therapist, or speech language pathologist who is licensed by the New York State Department of Education and who calls in for work assignments at will, determines his or her own schedule, has the ability to reject or accept any assignment referred to him or her, and is paid an average hourly wage that is at least four times the federal minimum wage;

- 35.5.3(f) an employee in a work study program under Section 2753 of Chapter 42 of the United States Code:
- 35.5.3(g) an employee whose work is compensated by a qualified scholarship program as that term is defined in the Internal Revenue Code, Section 117 of Chapter 20 of the United States Code; or
- 35.5.3(h) a participant in a Work Experience Program (WEP) under section 336-c of the New York State Social Services Law.
- 35.5.4 Retaliation Prohibited. An employer may not threaten or engage in retaliation against an employee for exercising or attempting in good faith to exercise any right provided by the PSLL. In addition, an employer may not interfere with any investigation, proceeding, or hearing pursuant to the PSLL.

35.5.5 Notice of Rights.

- 35.5.5(a) An employer must provide its employees with written notice of their rights pursuant to the PSLL. Such notice must be in English and the primary language spoken by an employee, provided that DCA has made available a translation into such language. Downloadable notices are available on DCA's website at http://www.nyc.gov/html/dca/html/law/PaidSickLeave.shtml.
- 35.5.5(b) Any person or entity that willfully violates these notice requirements is subject to a civil penalty in an amount not to exceed fifty dollars for each employee who was not given appropriate notice.
- 35.5.6 Records. An employer must retain records documenting its compliance with the PSLL for a period of at least three years, and must allow DCA to access such records in furtherance of an investigation related to an alleged violation of the PSLL.

35.5.7 Enforcement and Penalties.

- 35.5.7(a) Upon receiving a complaint alleging a violation of the PSLL, DCA has the right to investigate such complaint and attempt to resolve it through mediation. Within 30 **Days** of written notification of a complaint by DCA, or sooner in certain circumstances, the employer must provide DCA with a written response and such other information as DCA may request. If DCA believes that a violation of the PSLL has occurred, it has the right to issue a notice of violation to the employer.
- 35.5.7(b) DCA has the power to grant an employee or former employee all appropriate relief as set forth in New York City Administrative Code § 20-924(d). Such relief may include, among other remedies, treble damages for the wages that should have been paid, damages for unlawful retaliation, and damages and reinstatement for unlawful discharge. In addition, DCA may impose on an employer found to have violated the PSLL civil penalties not to exceed \$500 for a first violation, \$750 for a second violation within two years of the first violation, and \$1,000 for each succeeding violation within two years of the previous violation.
- 35.5.8 More Generous Polices and Other Legal Requirements. Nothing in the PSLL is intended to discourage, prohibit, diminish, or impair the adoption or retention of a more generous sick time policy, or the obligation of an employer to comply with any contract,

collective bargaining agreement, employment benefit plan or other agreement providing more generous sick time. The PSLL provides minimum requirements pertaining to sick time and does not preempt, limit or otherwise affect the applicability of any other law, regulation, rule, requirement, policy or standard that provides for greater accrual or use by employees of sick leave or time, whether paid or unpaid, or that extends other protections to employees. The PSLL may not be construed as creating or imposing any requirement in conflict with any federal or state law, rule or regulation.

35.6 HireNYC: Hiring and Reporting Requirements. This Article 35.6 applies to construction contracts of \$1,000,000 or more. The **Contractor** shall comply with the requirements of Articles 35.6.1-35.6.5 for all non-trades jobs (e.g., for an administrative position arising out of **Work** ant located in New York City). The **Contractor** shall reasonably cooperate with SBS and the **City** on specific outreach events, including "Hire-on-the-Spot" events, for the hiring of trades workers in connection with the **Work**. If provided elsewhere in this **Contract**, this **Contract** is subject to a project labor agreement.

35.6.1 Enrollment. The Contractor shall enroll with the HireNYC system, found at www.nyc.gov/sbs, within thirty (30) days after the registration of this Contract pursuant to Section 328 of the New York City Charter. The Contractor shall provide information about the business, designate a primary contact and say whether it intends to hire for any entry to mid-level job opportunities arising from this Contract and located in New York City, and, if so, the approximate start date of the first hire.

35.6.2 Job Posting Requirements.

35.6.2(a) Once enrolled in HireNYC, the Contractor agrees to update the HireNYC portal with all entry to mid-level job opportunities arising from this Contract and located in New York City, if any, which shall be defined as jobs requiring no more than an associate degree, as provided by the New York State Department of Labor (see Column F of https://labor.ny.gov/stats/2012-2022- NYS-Employment-Prospects.xls). The information to be updated includes the types of entry and mid-level positions made available from the work arising from the Contract and located in New York City, the number of positions, the anticipated schedule of initiating the hiring process for these positions, and the contact information for the Contractor's representative charged with overseeing hiring. The Contractor must update the HireNYC portal with any hiring needs arising from the contract and located in New York City, and the requirements of the jobs to be filled, no less than three weeks prior to the intended first day of employment for each new position, except with the permission of SBS, not to be unreasonably withheld, and must also update the HireNYC portal as set forth below.

35.6.2(b) After enrollment through HireNYC and submission of relevant information, SBS will work with the **Contractor** to develop a recruitment plan which will outline the candidate screening process, and will provide clear instructions as to when, where, and how interviews will take place. HireNYC will screen applicants based on employer requirements and refer applicants whom it believes are qualified to the **Contractor** for interviews. The **Contractor** must interview referred applicants whom it believes are qualified.

35.6.2(c) After completing an interview of a candidate referred by HireNYC, the **Contractor** must provide feedback via the portal within twenty (20) business days to indicate which candidates were interviewed and hired, if any. In addition, the **Contractor** shall provide the start date of new hires, and additional information

reasonably related to such hires, within twenty (20) business days after the start date. In the event the **Contractor** does not have any job openings covered by this Rider in any given year, the **Contractor** shall be required to provide an annual update to HireNYC to that effect. For this purpose, the reporting year shall run from the date of the registration of the **Contract** pursuant to Charter section 328 and each anniversary date.

35.6.2(d) These requirements do not limit the **Contractor's** ability to assess the qualifications of prospective workers, and to make final hiring and retention decisions. No provision of this Article 35.6 shall be interpreted so as to require the **Contractor** to employ any particular worker.

35.6.2(e) In addition, the provisions of this Article 35.6 shall not apply to positions that the **Contractor** intends to fill with employees employed pursuant to the job retention provision of Section 22-505 of the Administrative Code of the City of New York. The **Contractor** shall not be required to report such openings with HireNYC. However, the **Contractor** shall enroll with the HireNYC system pursuant to Article 35.6.1, above, and, if such positions subsequently become open, then the remaining provisions of this Article 35.6 will apply.

35.6.3 Breach and Liquidated Damages. If the Contractor fails to comply with the 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

- 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:
 - The Contractor fails to commence Work when notified to do so by the 48.1.1 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 prepaid envelope.
- 59.2 Contractor's notice address, email address, or fax number may be changed at any time by an instrument in writing, executed and acknowledged by the Contractor, and delivered to the Commissioner.
- 59.3 Nothing herein contained shall, however, be deemed to preclude or render inoperative the service of any notice, direction or other communication upon the **Contractor** personally, or, if the **Contractor** is a corporation, upon any officer thereof.

ARTICLE 60. UNLAWFUL PROVISIONS DEEMED STRICKEN FROM CONTRACT

60.1 If this **Contract** contains any unlawful provision not an essential part of the **Contract** and which shall not appear to have been a controlling or material inducement to the making thereof, the same shall be deemed of no effect and shall, upon notice by either party, be deemed stricken from the **Contract** without affecting the binding force of the remainder.

ARTICLE 61. ALL LEGAL PROVISIONS DEEMED INCLUDED

61.1 It is the intent and understanding of the parties to this **Contract** that each and every provision of **Law** required to be inserted in this **Contract** shall be and is inserted herein. Furthermore, it is hereby stipulated that every such provision is to be deemed to be inserted herein, and if, through mistake or otherwise, any such provision is not inserted, or is not inserted in correct form, then this **Contract** shall forthwith upon the application of either party be amended by such insertion so as to comply strictly with the **Law** and without prejudice to the rights of either party hereunder.

ARTICLE 62. TAX EXEMPTION

62.1 The City is exempt from payment of Federal, State, and local taxes, including sales and compensating use taxes of the State of New York and its cities and counties on all tangible personal property sold to the City pursuant to the provisions of this Contract. These taxes are not to be included in bids. However, this exemption does not apply to tools, machinery, equipment or other property leased by or to the Contractor, Subcontractor or Materialman or to tangible personal property which, even

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 contraction of comparable quality, the Agency shall refer such bids to the Mayor, the Speaker or other officials, as appropriate, who may determine, in accordance with applicable Law, that it is in the best interest of the City that the Contract be awarded to other than the lowest responsible pursuant to Section 313(b)(2) of the City Charter.
 - 69.1.4 In the case of Contracts let by other than competitive sealed bidding, if a prospective Contractor does not agree to these conditions, no Agency, elected official or the City Council shall award the Contract to that bidder unless the Agency seeking to use the goods, services or construction certifies in writing that the Contract is necessary for the Agency to perform its functions and there is no other responsible Contractor who will supply goods, services or construction of comparable quality at a comparable price.
- 69.2 In accordance with Section 6-115.1 of the Administrative Code, the **Contractor** stipulates that such **Contractor** and any individual or legal entity in which the **Contractor** holds a ten (10%) percent or greater ownership interest in the **Contractor** either:
 - 69.2.1 Have no business operations in Northern Ireland, or
 - 69.2.2 Shall take lawful steps in good faith to conduct any business operations they have in Northern Ireland in accordance with the MacBride Principles, and shall permit independent monitoring of their compliance with such principles.
 - 69.3 For purposes of this Article, the following terms shall have the following meanings:
 - 69.3.1 "MacBride Principles" shall mean those principles relating to nondiscrimination in employment and freedom of work-place opportunity which require employers doing business in Northern Ireland to:

- 69.3.1(a) increase the representation of individuals from under-represented religious groups in the workforce, including managerial, supervisory, administrative, clerical and technical jobs;
- 69.3.1(b) take steps to promote adequate security for the protection of employees from under-represented religious groups both at the work-place and while traveling to and from **Work**;
- 69.3.1(c) ban provocative religious or political emblems from the workplace;
- 69.3.1(d) publicly advertise all job openings and make special recruitment efforts to attract applicants from under-represented religious groups;
- 69.3.1(e) establish layoff, recall, and termination procedures which do not in practice favor a particular religious group;
- 69.3.1(f) abolish all job reservations, apprenticeship restrictions and different employment criteria which discriminate on the basis of religion;
- 69.3.1(g) develop training programs that will prepare substantial numbers of current employees from under-represented religious groups for skilled jobs, including the expansion of existing programs and the creation of new programs to train, upgrade, and improve the skills of workers from under-represented religious groups;
- 69.3.1(h) establish procedures to asses, identify, and actively recruit employees from under-represented religious groups with potential for further advancement; and
- 69.3.1(i) appoint a senior management staff member to oversee affirmative action efforts and develop a timetable to ensure their full implementation.
- 69.4 The Contractor agrees that the covenants and representations in Article 69.2 are material conditions to this Contract. In the event the Agency receives information that the Contractor who made the stipulation required by this Article 69 is in violation thereof, the Agency shall review such information and give the Contractor an opportunity to respond. If the Agency finds that a violation has occurred, the Agency shall have the right to declare the Contractor in default in default and/or terminate this Contract for cause and procure supplies, services or Work from another source in the manner the Agency deems proper. In the event of such termination, the Contractor shall pay to the Agency, or the Agency in its sole discretion may withhold from any amounts otherwise payable to the Contractor, the difference between the Contract price for the uncompleted portion of this Contract and the cost to the Agency of completing performance of this Contract either itself or by engaging another Contractor or Contractors. In the case of a requirement Contract, the Contractor shall be liable for such difference in price for the entire amount of supplies required by the Agency for the uncompleted term of Contractor's Contract. In the case of a construction Contract, the Agency shall also have the right to hold the Contractor in partial or total default in accordance with the default provisions of this Contract, and/or may seek debarment or suspension of the Contractor. The rights and remedies of the Agency hereunder shall be in addition to, and not in lieu of, any rights and remedies the Agency has pursuant to this Contract or by operation of Law.

ARTICLE 70. ELECTRONIC FILING/NYC DEVELOPMENT HUB

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

ARTICLE 71. PROHIBITION OF TROPICAL HARDWOODS

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

ARTICLE 72. CONFLICTS OF INTEREST

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

ARTICLE 73. MERGER CLAUSE

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

ARTICLE 74. STATEMENT OF WORK

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

<u>PARTICIPATION GOALS FOR CONSTRUCTION, STANDARD</u> <u>AND PROFESSIONAL SERVICES CONTRACTS OR TASK ORDERS</u>

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

- 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
- 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.

- 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. CITY OF NEW YORK DDC

- (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.
- THE BIDDER/PROPOSER MUST COMPLETE THE SCHEDULE B INCLUDED C. A SCHEDULE B SUBMITTED HEREIN (SCHEDULE B, PART II). 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.
- Where an M/WBE Utilization Plan has been submitted, the Contractor shall, within 30 days of 5. 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

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firms' commencement of work. A list of MBE and WBE firms may be obtained from the DSBS website at www.nyc.gov/buycertified, by emailing DSBS at buyer@sbs.nyc.gov, by calling (212) 513-6356, or by visiting or writing DSBS at 110 William St., New York, New York, 10038, 7th floor. Eligible firms that have not yet been certified may contact DSBS in order to seek certification by visiting www.nyc.gov/getcertified, emailing MWBE@sbs.nyc.gov, or calling the DSBS certification helpline at for MBEs or the goal for WBEs, but not both. No credit shall be given for 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 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 6-129(j), 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 tirms 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@dc.nyc.gov or via facsimile at (718) 391-1886. Bidders, no later than two (2) calendar days prior to the due date for bids, proposals, or Task Orders; provided, close-of-business on the business day before such weekend or holiday, an Agency response will be provided by
- (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.

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Contractor, have executed this agreement in	missioner, on behalf of the City of New York, and quadruplicate, two parts of which are to remain with emptroller of the City, and the fourth to be delivered to
Contractor.	
	THE CITY OF NEW YORK
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	Deputy Commissioner
	CONTRACTOR:
	By: May
	(Member of Firm of Officer of Corporation)
	Title: VICE PRESIDENT / SECRETARY
(Where Contractor is a Corporation, add): Attest:	
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Secretary	
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ACKNOWLEDGEMENT OF PRINCIPAL, IF A CORPORATION

State of County of QUEENS ss:
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VICTORIA AYO-VAUGHAN
Notary Public, State of New York
Registration #01AV5014042 Notary D. 17
Qualified in Queens County Commission Expires July 15, 2017
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ACKNOWLEDGEMENT OF PRINCIPAL, IF A PARTNERSHIP
State of County of ss:
SS:
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acknowledged to me that he executed the same as and for the act and deed of said firm.
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Notary Public or Commissioner of Deeds
ACKNOWLEDGEMENT OF PRINCIPAL, IF AN INDIVIDUAL
County of ss:
On this day of
to me known, and known to me to be the personally appeared
to me known, and known to me to be the person described in and who executed the foregoing instrument;
of the executed the same.
Notary Public or Commission
Notary Public or Commissioner of Deeds

CITY OF NEW YORK DDC

ACKNOWLEDGEMENT BY COMMISSIONER
State of lew County of Weens ss:
On this 3th day of to set, 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

Dollars (\$ 2 2,802,9/1.25) 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. 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.	In conformity with the provisions of Section 6-101 of the Administrative Code of the City of No.
Dollars (\$ \(\frac{1}{2} \) \	Contract amounting to
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MAYOR'S CERTIFICATE OR CERTIFICATE OF THE DIRECTOR OF THE BUDGET

Performance Bond #2 (Pages 104 to 107): Use if the total contract price is more than \$5 Million.

PERFORMANCE BOND #2 (Page 1) Bond No. 015203712

PERFORMANCE BOND #2

That we, JRCruz Corp. 675 Line Road, Aberdeen, NJ 07747		
070 Line Road, Aberdeen, No 07747		
hereinafter referred to as the "Principal," and, Liberty Mutual Insurance Company		
		•
hereinafter referred to as the "Surety" ("Sureties") are YORK, hereinafter referred to as the "City" or to its succe of Twenty Two Million Eight Hundred Two Thousand Nine Hu	essors and assigns in the penal sum	OF NEW
		
(\$22,802,911.25) Dollars, lawful rewhich said sum of money well and truly to be made, executors, administrators, successors and assigns, jointly		
WHEREAS, the Principal is about to enter, or has entered	d, into a Contract in writing with the City	for
FMS ID: SEK20068, E-PIN: 85018B0111001, DDC PIN: 850	2013SE0024C	
Construction of Storm and Combined Sewers and Appurtent Avenue, Borough of Brooklyn	ances in 9th Street Between Smith St. & 2nd	1
a copy of which Contract is annexed to and hereby mad full;	e a part of this bond as though herein se	et forth is
NOW, THEREFORE, the conditions of this or representatives or assigns, shall well and faithfully properties and alterations thereto that may true intent and meaning, including repair and or representations are properties. The periods stated in the Contract, and from all cost and damage which it may suffer by reason.	erform the said Contract and all modi- hereafter be made, according to its term placement of defective work and guar- shall fully indemnify and save harmless	ifications ns and it antees o s the City

shall fully reimburse and repay the City for all outlay and expense which the City may incur in making

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

3rd·	day of Augu	ıst	20 _18	<u> </u>
(Seal)	•	JRCruz Corp.		(L.S.)
			incipal	(L.S.)
•		Mill		•
(2)		Ву:		
(Seal)		Matthew J. Cruz	Vice Pres	ident/Secre
		30	пету	•
		Liberty Mutual Insurance	e Company	,
	,			•
(Seal)		1200 MacArthur Blvd/ Mah	urety	•
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		X/\^		
		Ву:	$\overline{}$	<u> </u>
(01)		Lisa Nosal, Atty-In-Fact (973		<u>73-890-9038)</u>
(Seal)	*	Si	urety	. •
		By:		·
				·
(Seal)		Sı	urety	
		Ву:		
				•
(Seal)		Si	urety	
		D.,,	•	
		By:		•
Bond Premium Rate				
Bond Premium Cost	•	•	•	
Dona i Temmum Cost				
If the Contractor (Principal) i partners.	s a partnership,	the bond should be signed by	each of the indi	viduals who are
If the Contractor (Principal) iduly authorized officer, agent			1 its correct corp	orate name by a
		•		4.
There should be executed an	appropriate nun	pher of counterparts of the bo	ond correspondin	g to the numbe

of counterparts of the Contract.

Performance Bond #2 (Pages 104 to 107): Use if the total contract price is more than \$5 Million.

PERFORMANCE BOND #2 (Page 4)

ACKNOWLEDGMENT OF PRINCIPAL IF A CORPORATION

State of _	New Jersey	·	County of	of Monmo	uth	
On His	√3rd					before me personally
came M	latthew J. Cruz	_ day or				octore me personany
		by me duly	sworn did depos	e and say that	he resides	*
74 Hi	ickory Lane	oy me daiy	aworn and dopos	c and say mai	IIC ICSIGOS	* ***
Lindro	M NJ 07738	· · · · · · · · · · · · · · · · · · ·		that he/she i	s the Vice Presid	dent/Secretary
of the ca	moration describ	d in and s	which executed t	he foregoing	instrument: that he	/she signed his/her name to the
		Ter or me.	unoccors or said	ROSI	ECATAO	d and binding act thereof.
1	Sold I	\mathcal{N}_{\perp}	. 1	ID#	2221271	1
Notary P	ublic or Commis	sioner of D	eeds -	NOTAR	Y PUBLIC	
7	1		1	STATE OF	NEW JERSEY	
	\ <u> </u>	CKNOWI	EDGMENY AS	mmission Ex	DIEST MENT POLICY	M ta bro
	v.'					
State of			County	of		s:
		hensinsa massissa miaa mosajaja aa ayo jaraa yo	· · ·	~ <u></u>		
On this		day of	*	20		before me personally
came	***************************************		···			
to me kn	own who being	by me duly	sworn did depos	e and say that	he/she resides	
at		oy moduly	sworn and dopos	so and say and	, moralio i concos	•
		braus.				*
,	* *			that he/she i	· .	nartner of
			a limited/general	nartnershin e	xisting under the la	partner of ews of the State of
		ther	artnership descr	ihed in and wi	hich executed the fo	oregoing instrument;
and that	he/she signed his	her name t	o the foregoing i	netriment as t	he duly authorized	and hinding act of
said part	nershin	whor marine (o mo totogome i	nsa unioni us i	no dury antinorizzo	and omany nor or
oute pure			*			· · · · · · · · · · · · · · · · · · ·
2				5	*	
Notary P	ublic or Commis	ssioner of D	eedo			
110001	TONO O. COMMIN.	33101101 01 13	>			
	Δ	CKNOWI	EDCMENT	E PRINCIP	AL IF AN INDIV	TDIIAL.
W	2.5	CALL 10 IIIA	ZZZ CINCIDINI C	A A ARMINIA		*
State of		•	County	of		ss:
On this		day of		- 20	•	before me personally
came		duy 01	ζ*	, #V,		corore ine personally
to me kn	own who being	by me duly	y sworn did depo	ce and cay tha	t he/she resides	
at	own, who, come	, by mic daily	sworn aid dopo	se and say the	t no dio resides	Š
543		anija	*	and that he	she is the individua	I whose name is
subscrib	ed to the within	netrument s	and acknowledge	d to me that h	y his/her signature	on the
	ent, said individu			d to me mat o	A mound organization	on the
mou am	an, said marvida	ai CACCILCI	die mstrument.		•	,
				**		
Matany I	Public or Commi		مدماء		*	
Notary 1	Public or Commi	ssioner of L	ecas			
Each exe	emited bond shou	ld be accom	nanied by: (a) an	mronriata ackn	owledgments of the	respective parties; (b) appropriate
						executed by agent, officer or other
represen	tative of Principa	l or Surety:	(c) a duly certifie	d extract from	By-Laws or resolut	ions of Surety under which Power
						ed, and (d) certified copy of lates
publishe	d financial statem	ent of assets	and liabilities of	Surety.		
•			÷. •	****	•	
		4 05	•			
-		Affix	Acknowledgm	ents and Just	ification of Sureti	
CITY O	F NEW YORK				STANDARD C	CONSTRUCTION CONTRACT
	DDC		•	107		March 2017

ACKNOWLEDGEMENT OF SURETY

State of New Jersey]

-ss

County of Passaic

On August 3, 2018, before me personally came Lisa Nosal to me known, who, being by me duly sworn, did depose and say that she is an attorney-in-fact of Liberty Mutual Insurance Company the corporation described in and which executed the within instrument; that she knows the corporate seal of said corporation, and that the seal affixed to the within instrument is such corporate seal, and that she signed the said instrument and affixed the said seal as Attorney-in-Fact by authority of the Board of Directors of said corporation and by authority of this office under the Standing Resolutions thereof.

My Commission expires:

STEPHANIE F. FOY

NOTARY PUBLIC STATE OF NEW JERSEY MY COMMISSION EXPIRES OCTOBER 27, 2018 This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 8058027

Liberty Mutual Insurance Company The Ohio Casualty Insurance Company

West American Insurance Company

POWER OF ATTORNEY

KNOWN ALL PERSONS I	BY THESE PRESENTS: TH	at The Ohio Casualty	Insurance Comp	any is a co	orporation duly	organized	under the	laws of the	State of N	lew Hampsh	ire, that
Liberty Mutual Insurance	Company is a corporation	duly organized unde	r the laws of the	State of I	Massachusetts,	and West	American	Insurance	Company is	a corporati	ion duly
organized under the laws	of the State of Indiana (her	ein collectively called	the "Companies")	pursuant	to and by author	ority herein	set forth,	does hereby	name, con	stitute and a	ppoint,
Lisa Nosal; Pamela J	Boyle: Robert E. Culr	en: Joseph W. Ma	allory: Louis A.	Vlahakes	3						

all of the city of Totowa , state of NJ each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 6th 2018 day of April







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

STATE OF PENNSYLVANIA COUNTY OF MONTGOMERY

On this 6th day of April 2018, before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



COMMONWEALTH OF PENNSYLVANIA

Notarial Seal Teresa Pastella, Notary Public Upper Merion Twp., Montgomery County My Commission Expires March 28, 2021

Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS - Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts - SECTION 5. Surety Bonds and Undertakings, Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-infact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this _

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.





Renee C. Lleweityn, Assistant Secretary



LIBERTY MUTUAL INSURANCE COMPANY

FINANCIAL STATEMENT — DECEMBER 31, 2017

Assets	Liabilities			
Cash and Bank Deposits \$370,003,299	Unearned Premiums \$7,503,154,587			
*Bonds — U.S Government	Reserve for Claims and Claims Expense 19,658,731,454			
*Other Bonds	Funds Held Under Reinsurance Treaties 224,693,828			
	Reserve for Dividends to Policyholders 967,520			
*Stocks	Additional Statutory Reserve			
Real Estate	Reserve for Commissions, Taxes and			
Agents' Balances or Uncollected Premiums 5,258,657,823	Other Liabilities			
Accrued Interest and Rents	Total\$31,489,431,268			
Other Admitted Assets	Special Surplus Funds			
Other Admitted Assets	Capital Stock 10,000,000			
	Paid in Surplus 9,484,316,385			
	Unassigned Surplus 4,860,776,066			
Total Admitted Assets <u>\$46,020,754,541</u>	Surplus to Policyholders <u>14,531,323,273</u>			
	Total Liabilities and Surplus <u>\$46,020,754,541</u>			



* Bonds are stated at amortized or investment value; Stocks at Association Market Values.

The foregoing financial information is taken from Liberty Mutual Insurance Company's financial statement filed with the state of Massachusetts Department of Insurance.

I, TIM MIKOLAJEWSKI, Assistant Secretary of Liberty Mutual Insurance Company, do hereby certify that the foregoing is a true, and correct statement of the Assets and Liabilities of said Corporation, as of December 31, 2017, to the best of my knowledge and belief.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation at Seattle, Washington, this 16th day of March, 2018.

Assistant Secretary

TAMilolajewski.

PAYMENT BOND (Page 1)

PAYME	NT BOND Bond No. 015203712
KNOW ALL PERSONS BY THESE PRESEN	JTS, That we,
JRCruz Corp.	
675 Line Road, Aberdeen, NJ 07747	
hereinafter referred to as the "Principal", and	
Liberty Mutual Insurance Company	
Twenty Two Million Eight Hundred Two Thousand Nine	Hundred Eleven and 25/100
(\$22,802,911.25) Dollars, lawful money of the United and truly to be made, we, and each of us, bind ourse assigns, jointly and severally, firmly by these presents.	States, for the payment of which said sum of money well lives, our heirs, executors, administrators, successors and
WHEREAS, the Principal is about to enter, or	has entered, into a Contract in writing with the City for
FMS ID: SEK20068, E-PIN: 85018B0111001, DDC PIN	: 8502013SE0024C
Construction of Storm and Combined Sewers and Appr Avenue, Borough of Brooklyn	urtenances in 9th Street Between Smith St. & 2nd
a copy of which Contract is annexed to and hereby made	de a part of this bond as though herein set forth in full;
NOW, THEREFORE, the conditions of the representatives or assigns and other Subcontractors to successors and assigns shall promptly pay or cause to be	is obligation are such that if the Principal, his or its whom Work under this Contract is sublet and his or their pe paid all lawful claims for
(a) Wages and compensation for labor p	erformed 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

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.

CITY OF NEW YORK

IN WITNESS WHEREOF, the Principal and the Surety (Sureties) have hereunto set their hands

PAYMENT BOND (Page 3)

Seal)	JRCruz Corp. (L.	S.)
	Principal	
	By:	_
	Matthew L Strong Vice Pro Liberty Mutural Insurance Company	esident/Secreta
Seal)	1200 MacArthur Blvd. Mahwah, NJ 07430	<u>.</u>
•	Surety ()	
	By:	-
	Lisa Nosal, Atty-In-Fact (973-890-0900/Fax 973-890-9038)	
Seal)	Surety	•
,		
	Ву:	-
Seal)	•	
	Surety	
	Ву:	_
•		
Seal)		
	Surety	-
	Ву:	_
	nership, the bond should be signed by each of the i	ndividuals who are
artners.		

of counterparts of the Contract.

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

PAYMENT BOND (Page 4)

State of New Jersey	County of Monm	outh ss:	
	***************************************		atthew I Cruz
to me known who bein	ugust , 2018 , before mog by me duly sworn did depo	ce and say that he resid	les at 74 Hickory Lane
Lincroft, NJ 07738	that	the is the Vice Pres	ident/Secretary of that he knows the seal of said
corporation; that one of	ed in and which executed the the seals affixed to said instruction, and that he signed h	ryment∖is such seal; th	at it was so affixed by order of order.
№ 78	Notary Publi	ic or Commissioner of	Deads ID # 2221271 NOTARY PUBLIC
	NT OF PRINCIPAL, IF A P		STATE OF NEW JERSEY My Commission Expires January 22,
State of	County of	ss:	
On this day of	, hafasa m	a namanally annound	
to me known, and know	n to me to be one of the mem	e personany appeared.	
TO MIC MICH	described in and w	ho executed the for	regoing instrument; and he
acknowledged to me that	at he executed the same as and	d for the act and deed o	of said firm.
A.	*	*	,
	T	·	
*	Notary Publ	ic or Commissioner of	Deeds
ACKNOWLEDGMEN	Notary Publ	* •	Deeds
	NT OF PRINCIPAL, IF AN	INDIVIDUAL	Deeds
State of	NT OF PRINCIPAL, IF AN County of	INDIVIDUAL ss:	
State of day of	NT OF PRINCIPAL, IF AN County of, before m	INDIVIDUAL ss: e personally appeared	
On this day of to me known, and know	County of, before me to me to be the person des	INDIVIDUAL ss: e personally appeared	
State of day of	County of, before me to me to be the person des	INDIVIDUAL ss: e personally appeared	
On this day of to me known, and know	County of, before me to me to be the person des	INDIVIDUAL ss: e personally appeared	
On this day of to me known, and know	County of, before me to me to be the person des	INDIVIDUAL ss: e personally appeared	
On this day of to me known, and know	County of, before m wn to me to be the person deshe executed the same.	INDIVIDUAL ss: e personally appeared	ecuted the foregoing instrument;
On this day of to me known, and know and acknowledged that Each executed parties; (b) appropriate is executed by agent, or By-Laws or resolutions	County of, before m wn to me to be the person deshe executed the same. Notary Public bond should be accompanied duly certified copy of Power fficer or other representative s of Surety under which Powentative was issued, and (d) of Surety.	ss: te personally appeared scribed in and who exception and who except the conference of the conferen	Deeds knowledgments of the respective entificate of authority where bond (c) a duly certified extract from the certificate of authority of its published financial statement of

CITY OF NEW YORK DDC

STANDARD CONSTRUCTION CONTRACT
March 2017

ACKNOWLEDGEMENT OF SURETY

State of New Jersey] |-ss | County of Passaic |

On August 3, 2018, before me personally came Lisa Nosal to me known, who, being by me duly sworn, did depose and say that she is an attorney-in-fact of Liberty Mutual Insurance Company the corporation described in and which executed the within instrument; that she knows the corporate seal of said corporation, and that the seal affixed to the within instrument is such corporate seal, and that she signed the said instrument and affixed the said seal as Attorney-in-Fact by authority of the Board of Directors of said corporation and by authority of this office under the Standing Resolutions thereof.

My Commission expires:

STEPHANIE F. FOY

NOTARY PUBLIC State of New Jersey My Commission expires october 27, 2018 This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 8058030

Liberty Mutual Insurance Company The Ohio Casualty Insurance Company

West American Insurance Company

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Lisa Nosal; Pamela J. Boyle; Robert E. Culnen; Joseph W. Mallory; Louis A. Vlahakes

all of the city of Totowa state of NJ each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 6th day of April 2018

1919 1991

STATE OF PENNSYLVANIA **COUNTY OF MONTGOMERY**

David M. Carey, Assistant Secretary

West American Insurance Company

The Ohio Casualty Insurance Company Liberty Mutual Insurance Company

On this 6th _day of April . 2018, before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.

PAS

COMMONWEALTH OF PENNSYLVANIA

Notarial Seal Teresa Pastella, Notary Public Upper Merion Twp., Montgomery County My Commission Expires March 28, 2021

Member, Pennsylvania Association of Notaries

reresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS - Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts - SECTION 5. Surety Bonds and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-infact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this

To confirm the validity of this Power of Automey validates day. 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

validity



Renee C. Hewellyn Assistant Secretary



LIBERTY MUTUAL INSURANCE COMPANY

FINANCIAL STATEMENT — DECEMBER 31, 2017

Assets	Liabilities				
Cash and Bank Deposits\$370,003,299	Unearned Premiums				
*Bonds — U.S Government	Reserve for Claims and Claims Expense 19,658,731,454				
*Other Bonds	Funds Held Under Reinsurance Treaties				
, , ,	Reserve for Dividends to Policyholders 967,520				
*Stocks	Additional Statutory Reserve				
Real Estate	Reserve for Commissions, Taxes and				
Agents' Balances or Uncollected Premiums 5,258,657,823	Other Liabilities				
Accrued Interest and Rents	Total\$31,489,431,268				
Other Admitted Access 11 100 207 520	Special Surplus Funds \$176,230,822				
Other Admitted Assets	Capital Stock				
	Paid in Surplus				
	Unassigned Surplus 4,860,776,066				
Total Admitted Assets <u>\$46,020,754,541</u>	Surplus to Policyholders <u>14,531,323,273</u>				
	Total Liabilities and Surplus <u>\$46,020,754,541</u>				



* Bonds are stated at amortized or investment value; Stocks at Association Market Values.

The foregoing financial information is taken from Liberty Mutual Insurance Company's financial statement filed with the state of Massachusetts Department of Insurance.

I, TIM MIKOLAJEWSKI, Assistant Secretary of Liberty Mutual Insurance Company, do hereby certify that the foregoing is a true, and correct statement of the Assets and Liabilities of said Corporation, as of December 31, 2017, to the best of my knowledge and belief.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation at Seattle, Washington, this 16th day of March, 2018.

Assistant Secretary

TAMbolajewski.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 8/2/2018

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 EPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

00/551050						
Aberdeen NJ	07747	INSURER F:				
		INSURER E : Endurance American Insurar	nce	10641		
675 Line Road		INSURER D: Columbia Casualty Company		31127		
JRCRUZ Corp.		INSURERC: State Insurance Fund of Ne	ew York	36102		
INSURED		INSURERB:Crum & Forster Indemnity (Company	31348		
Livingston NJ	07039	INSURERA:Starr Indemnity & Liabilit	ty Company	38318		
Suite 255		INSURER(S) AFFORDING COVERAGE		NAIC#		
651 Old Mount Pleasant A	venue	E-MAIL ADDRESS: dgoncalves@taains.com				
TransAmerican Associates	Inc.	PHONE (A/C, No, Ext): (973) 251-2646 FAX (A/C, No): (973) 251-2651				
PRODUCER		CONTACT Danny Goncalves		;		

COVERAGES CERTIFICATE NUMBER:CL1862509628

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	SR TYPE OF INSURANCE		ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	х	CLAIMS-MADE X OCCUR						DAMAGE TO RENTED	1,000,000 50,000
_		CLAIMS-WADE A OCCUR			1000090014181	7/1/2018	7/1/2019	PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$	5,000
								PERSONAL & ADV INJURY \$	1,000,000
	GEN	I'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE \$ 10	0,000,000
	X	POLICY PRO- JECT LOC						PRODUCTS - COMP/OP AGG \$	2,000,000
		OTHER:						\$	
	AUT	OMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	L,000,000
В	X	ANY AUTO						BODILY INJURY (Per person) \$	
_		ALL OWNED SCHEDULED AUTOS			1337439609	7/1/2018	7/1/2019	BODILY INJURY (Per accident) \$	
		HIRED AUTOS NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident) \$	
								\$	
A	X	UMBRELLA LIAB OCCUR	ļ		1000095007181	7/1/2018	7/1/2019	EACH OCCURRENCE \$ 10	0,000,000
E		EXCESS LIAB CLAIMS-MADE						AGGREGATE \$ 10	0,000,000
		DED X RETENTION\$ 10,000			EXC10007347503	7/1/2018	7/1/2019	\$	
		KERS COMPENSATION EMPLOYERS' LIABILITY						X PER OTH- STATUTE ER	
	ANY	PROPRIETOR/PARTNER/EXECUTIVE CER/MEMBER EXCLUDED?	N/A					E.L. EACH ACCIDENT \$	
С	(Man	datory in NH)			G 13237946	4/1/2018	4/1/2019	E.L. DISEASE - EA EMPLOYEE \$	
		s, describe under CRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIMIT \$	
D	PRO	OFESSIONAL LIABILITY			CEO591863631	9/18/2017	9/18/2018	EACH OCCURRENCE 1	1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
CITY OF NEW YORK, INCLUDING ITS OFFICIALS AND EMPLOYEES, THE NEW YORK CITY TRANSIT AUTHORITY (NYCTA),
MANHATTAN AND BRONX SURFACE TRANSIT OPERATION AUTHORITY (MABSTOA), STATEN ISLAND RAPID TRANSIT OPERATION
AUTHORITY (SIRTOA), METROPOLITAN TRANSPORTATION AUTHORITY (MTA), ITS SUBSIDIARIES AND AFFILIATED
COMPANIES AND NATIONAL GRID ARE ADDITIONAL INSUREDS WITH RESPECTS TO OPERATIONS PERFORMED PROJECT ID:
SEK20068. CONSTRUCTION OF STORM AND COMBINED SEWERS AND APPURTENANCES IN 9TH STREET BETWEEN SMITH ST &
2ND AVE, ETC. - BOROUGH OF BROOKLYN.

E-PIN: 85018B01110011, DDC PIN: 8502013SE0024C. 30 DAYS ADVANCE NOTICE

_	DEPARTMENT	OF	DESIGN	AND

CONSTRUCTION
ATTN: INSURANCE RISK MANAGER
30-30 THOMSON AVENUE
4TH FLOOR (IDCNY DULLDING)

4TH FLOOR (IDCNY DUILDING) LONG ISLAND CITY, NY 11101 SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

CANCELLATION

John D Rocco/LISA

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CERTIFICATE HOLDER



CERTIFICATE OF PROPERTY INSURANCE

DATE (MM/DD/YYYY) 08/02/2018

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 PRODUCED. AND THE CERTIFICATE HOLDER

F	EPR	W. THIS CER	RTIFICATE OF IN OR PRODUCE	SURANCE DOES NOT CONSTITUTE R, AND THE CERTIFICATE HOLDER.	A CONTRACT BE	TWEEN THE ISSU	ING INSURER(S), AUTHO	ORIZED		
PRO	DUCE	R			CONTACT Da	nny Goncalves	**********			
Tra	nsAn	nerican Associa	ites Inc.			73) 251-2646	FAX (A/C, No):	(973) 251-2651		
651	Old	Mount Pleasan	t Avenue		E-MAIL do	oncalves@taains.co				
Sui	te 25	5			ADDRESS.	0000070				
Livi	ngsto	on		NJ 07039	CUSTOMER ID:	INSURER(S) AFFOR	PDINC COVERACE	NAIC#		
INSI	JRED				INSURER A : As	pen American Insura		43460		
JR	CRUZ	Corp.			INSURER B:					
675	Line	Road			INSURER C :					
					INSURER D :					
Abe	erdee	n		NJ 07747	INSURER E :					
					INSURER F :					
co	VER	AGES		CERTIFICATE NUMBER: CP186270	, '	· · · · · · · · · · · · · · · · · · ·	REVISION NUMBER:			
			DESCRIPTION OF PR	OPERTY (Attach ACORD 101, Additional Remarks			TEVIOION NOMBEN.			
		ERS FIELD OF			, , , , , , , , , , , , , , , , , , , ,					
								; ;		
T	HIS IS	S TO CERTIFY T	THAT THE POLICIE	S OF INSURANCE LISTED BELOW HAVE E	BEEN ISSUED TO THE	INSURED NAMED A	ABOVE FOR THE POLICY PE	RIOD		
0	IDICA ERTII	NTED. NOTWITI FICATE MAY BE	HSTANDING ANY F E ISSUED OR MAY	REQUIREMENT, TERM OR CONDITION OF PERTAIN, THE INSURANCE AFFORDED B' CH POLICIES. LIMITS SHOWN MAY HAVE E	ANY CONTRACT OR Y THE POLICIES DES	OTHER DOCUMENT CRIBED HEREIN IS:	WITH RESPECT TO WHICH	I THIS		
INSR LTR	Ī	TYPE OF IN		POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	COVERED PROPERTY	LIMITS		
	×	PROPERTY				,	BUILDING	\$		
	CAL	JSES OF LOSS	DEDUCTIBLES				PERSONAL PROPERTY	\$		
		BASIC	BUILDING	1			BUSINESS INCOME	\$		
		BROAD	CONTENTS				EXTRA EXPENSE	s		
	×	SPECIAL	JOSINIENIO				RENTAL VALUE	s		
		EARTHQUAKE		1			BLANKET BUILDING	\$		
Α		WIND		IMZ267018 (ENGINEERS OFFICE)	07/01/2018	07/01/2019	BLANKET PERS PROP	\$		
		FLOOD					BLANKET BLDG & PP	s		
							ENGINEERS	\$ 500,000		
							OFFICE	\$		
		INLAND MARINE		TYPE OF POLICY				\$		
	CAL	ISES OF LOSS						s		
		NAMED PERILS		POLICY NUMBER	1			s		
		'						s		
		CRIME						s		
	TYP	E OF POLICY						s		
								s		
		BOILER & MACH						s		
		EQUIPMENT BRI	EAKDOWN					s		
								s		
								\$		
SPE	CIAL	CONDITIONS / OTH	HER COVERAGES (A	CORD 101, Additional Remarks Schedule, may be	attached if more space i	s required)		4 ·		
E-P	PROJECT ID; SEK20068, E-PIN; 85018B0111001, CONSTRUCTION OF STORM AND COMBINED SEWERS AND APPURTENANCES IN 9TH STREET BETWEEN SMITH ST & 2ND AVENUE, ETC - BOROUGH OF BROOKLYN									
				·						
CE	₹TIF	CATE HOLDE	ER		CANCELLATI	ON				
	CITY OF NEW YORK DEPARTMENT OF DESIGN AND					SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.				
			IOMSON AVENUE OOR (IDCNY BUIL		AUTHORIZED REP	RESENTATIVE		:		
			SLAND CITY	NY 11101			A			

Project ID.: SEK20068

CITY OF NEW YORK

CERTIFICATION BY INSURANCE BROKER OR AGENT

The undersigned insurance broker represents to the City of New York that the attached Certificate of Insurance is accurate in all material respects.

	TransAmerican Associates, Inc.
	[Name of broker or agent (typewritten)]
	651 Old Mount Pleasant Ave., Ste 255, Livingston, NJ 07039
	[Address of broker or agent (typewritten)]
	JRocco@taains.com
	[Email address of broker or agent (typewritten)]
	T: 973-251-2646 / F: 973-251-2651
	[Phone number/Fax number of broker or agent (typewritten)]
	[Signature of authorized official, broker, or agent]
	John D. Rocco, President
	[Name and title of authorized official, broker, or agent (typewritten)]
State of .New Jers	······································
County of Morris) ss.: S)
Sworn to before me	e this <u>2nd</u> day of <u>August</u> , 20 <u>18</u>
(Indrae	Illinon
NOTARY PUBLIC	FOR THE STATE OF New Jersey
ANDREA IVERS NOTARY PUBLIC STATE OF NEW JER MY COMMISSION EXPIRES DE	C RSEY

ANDREA VENSON
NOTARY NUBLIC
STATE OF NEW JERSEY
W COMMISSION EXPIRES DEC. 26, 2020

CERTIFICATE OF WORKERS' COMPENSATION INSURANCE

^^^^^ 223373796

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



SCAN TO VALIDATE AND SUBSCRIBE

POLICYHOLDER
JRCRUZ CORP.

675 LINE ROAD ABERDEEN NJ 07747 CERTIFICATE HOLDER

(IDCNY BUILDING)

CITY OF NEW YORK DEPARTMENT OF DESIGN & CONSTRUCTION 30-30 THOMSON AVE, 4TH FLOOR LONG ISLAND CITY NY 11101

POLICY NUMBER G 1323 794-6 CERTIFICATE NUMBER 482653

STATE OF NEW YORK, EXCEPT AS INDICATED BELOW.

POLICY PERIOD 04/01/2018 TO 04/01/2019

DATE 03/29/2018

THIS IS TO CERTIFY THAT THE POLICYHOLDER NAMED ABOVE IS INSURED WITH THE NEW YORK STATE INSURANCE FUND UNDER POLICY NO. 1323 794-6, COVERING THE ENTIRE OBLIGATION OF THIS POLICYHOLDER FOR WORKERS'

COMPENSATION UNDER THE NEW YORK WORKERS' COMPENSATION LAW WITH RESPECT TO ALL OPERATIONS IN THE

IF YOU WISH TO RECEIVE NOTIFICATIONS REGARDING SAID POLICY, INCLUDING ANY NOTIFICATION OF CANCELLATIONS, OR TO VALIDATE THIS CERTIFICATE, VISIT OUR WEBSITE AT HTTPS://WWW.NYSIF.COM/CERT// CERTVAL.ASP. THE NEW YORK STATE INSURANCE FUND IS NOT LIABLE IN THE EVENT OF FAILURE TO GIVE SUCH NOTIFICATIONS.

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

NEW YORK STATE INSURANCE FUND

DIRECTOR, INSURANCE FUND UNDERWRITING

VALIDATION NUMBER: 477369653



CERTIFICATE OF INSURANCE COVERAGE DISABILITY AND PAID FAMILY LEAVE BENEFITS LAW

PART 1. To be completed by Disability and Paid Family Leave Benefits Carrier or Licensed Insurance Agent of that Carrier

1a. Legal Name and Address JRCRUZ CORP. 675 LINE ROAD ABERDEEN NJ 07747	of Insured (Use street address or	1b. Business Telephone Number of Insured 732 290 0700 1c. Federal Employer Identification Number of Insured or Social Security Number 22 3373796
Work Location of Insured (Only requ limited to certain locations in New Yo)
2. Name and Address of the Coverage (Entity Being Listed NEW YORK CITY DEPARTMEN CONSTRUCTION 3030 THOMSON AVENUE LONG ISLAND CITY NY 11101	as the Certificate Holder)	3a. Name of Insurance Carrier The Guardian Life Insurance Company of America 3b. Policy Number of entity listed in box "1a": 00952226 0001 3c. Policy effective period: 06/13/18 to 06/13/19
☐ B. Disability benefits ☐ C. Paid family leave but 5. Policy covers: ☐ A. All of the employer	I paid family leave benefit only. penefits only.	er the NYS Disability and Paid Family Leave Benefits Law.
Under penalty of perjury, I ce referenced above and that th coverage as described above	e named insured has NY	ed representative or licensed agent of the insurance carrier S Disability and/or Paid Family Leave Benefits insurance
Date Signed: 06/19/18	By: _ (Signal	re offinsurance carrier's authorized representative or NYS Licensed Insurance Agent of that insurance carrier)
Telephone Number: 1-888	3-278-4542 Title	Senior Vice President, Group and Worksite Markets
Insurance Agent If Box "4b, 4c or Disability and Pa	of that carrier, this certificate 5b " is checked, this certificate	by the insurance carrier's authorized representative or NYS Licensed is COMPLETE. Mail it directly to the certificate holder. te is NOT COMPLETE for purposes of Section 220, Subd. 8 of the NYS. It must be mailed for completion to the Workers' Compensation Board, incham. NY 13902-5200.

PART 2. To be completed by NYS Workers' Compensation Board (Only if box "4c or 5b" of Part 1 has been checked)

State Of New York Workers' Compensation Board

According to information maintained by the NYS Workers' Compensation Board, the above-named employer has complied with the NYS Disability and Paid Family Leave Benefits Law with respect to all of his/her employees.

Date Signed:	Ву:	(Signature of NYS Workers' Compensation Board Employee)
Telephone Number:	Title:	, , , , , , , , , , , , , , , , , , , ,

Please Note: Only insurance carriers licensed to write NYS disability and paid family leave benefits insurance policies and NYS licensed insurance agents of those insurance carriers are authorized to issue Form DB-120.1. **Insurance brokers are NOT authorized to issue this form.**

Additional Instructions for Form DB-120.1

By signing this form, the insurance carrier identified in box "3" on this form is certifying that it is insuring the business referenced in box "1a" for disability and/or paid family leave benefits under the New York State Disability and Paid Family Leave Benefits Law. The Insurance Carrier or its licensed agent will send this Certificate of Insurance to the entity listed as the certificate holder in box "2".

The insurance carrier must notify the certificate holder and the Workers' Compensation Board within 10 days IF a policy is cancelled due to non-payment of premiums or within 30 days IF there are reasons other than nonpayment of premiums that cancel the policy or eliminate the insured form coverage indicated on this certificate. (these notices may be sent by regular mail.) Otherwise, this Certificate is valid for one year after this form is approved the by the insurance carrier or its licensed agent, or until the policy expiration date listed in Box 3c, whichever is earlier. 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?

This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policy listed, nor does it confer any rights or responsibilities beyond those contained in the referenced policy.

This certificate may be used as evidence of a Disability and/or Family Leave Benefits contract of insurance only while the underlying policy is in effect.

Please Note: Upon the cancellation of the disability and/or paid family leave benefits policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of NYS Disability and/or Paid Family Leave Benefits Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Disability and Paid Family Leave Benefits Law.

DISABILITY AND PAID FAMILY LEAVE BENEFITS LAW

§220.Subd. 8

(a) The head of a state or municipal department, board, commission or office authorized or required by law to issue any permit for or in connection with any work involving the employment of employees in employment as defined in this article, and not withstanding any general or special statute requiring or authorizing the issue of such permits, shall not issue such permit unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits 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.

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. Contractors must pay the wages and supplements in effect when the worker, laborer, mechanic performs the work. Preliminary schedules for future one-year periods appear in the City Record on or about June 1 each succeeding year. Final schedules appear on or about July 1 in the City Record and on our web site www.comptroller.nyc.gov.

The Comptroller's Office has attempted to include all overtime, shift and night differential, Holiday, Saturday, Sunday or other premium time work. However, this schedule does not set forth every prevailing practice with respect to such rates with which employers must comply. All such practices are nevertheless part of the employer's prevailing wage obligation and contained in the collective bargaining agreements of the prevailing wage unions. These collective bargaining agreements are available for inspection by appointment. Requests for appointments may be made by calling (212) 669-4443, Monday through Friday between the hours of 9 a.m. and 5 p.m.

PUBLISH DATE: 7/1/2017 EFFECTIVE PERIOD: JULY 1, 2017 THROUGH JUNE 30, 2018 Page 1 of 87

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 web Services (MOCS) page Office of Contract Mavor's 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.

> Wasyl Kinach, P.E. **Director of Classifications Bureau of Labor Law**

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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)

BLASTER

<u>Blaster</u>

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

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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

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 $\frac{1}{2}$ hour unpaid lunch. When three (3) shifts are employed, each shift will work seven and one-half (7 $\frac{1}{2}$) hours, but will be paid for eight (8) hours, since only one-half ($\frac{1}{2}$) hour is allowed for mealtime. When two (2) or more shifts are employed, single time will be paid for each shift. The first 8 hours of any and all work performed Monday through Friday inclusive of any off-shift shall be at the single time rate.

(Local #29)

BOILERMAKER

Boilermaker

Effective Period: 7/1/2017 - 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

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)

BRICKLAYER

<u>Bricklayer</u>

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.

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

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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)

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

Christmas Day

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

Paid Holidays

None

Shift Rates

Off shift work commencing between 5:00 P.M. and 11:00 P.M. shall work eight and one half hours allowing for one half hour for lunch. The wage rate shall be 113% of the straight time hourly wage rate.

(Carpenters District Council)

CARPENTER - 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

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)

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

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: \$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

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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)

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)

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

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 (7½) hours paid for eight (8) hours of labor and be permitted one-half (½) hour for mealtime.

(Carpenters District Council)

DERRICKPERSON AND RIGGER

<u> Derrick Person & Rigger</u>

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

Independence Day Labor Day Thanksgiving Day Christmas Day

Paid Holidays

1/2 day on Christmas Eve if work is performed in the A.M.

(Local #197)

DIVER

Diver (Marine)

Effective Period: 7/1/2017 - 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

Mamarial Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

Shift Rates

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

(Carpenters District Council)

DOCKBUILDER - PILE DRIVER

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)

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

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.

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

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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

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.

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.

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Overtime Holidays

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

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Paid Holidays

None

(Local #3)

ELECTRICIAN - ALARM TECHNICIAN

(Scope of Work - Inspect, test, repair, and replace defective, malfunctioning, or broken devices, components and controls of Fire, Burglar and Security Systems)

Alarm Technician

Effective Period: 7/1/2017 - 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

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Martin Luther King Jr. Day President's Day Memorial Day Independence Day Labor Day Columbus Day Veteran's Day Thanksgiving Day Day after Thanksgiving Christmas Day

Shift Rates

Night Differential is based upon a ten percent (10%) differential between the hours of 4:00 P.M. and 12:30 A.M. and a fifteen percent (15%) differential for the hours 12:00 A.M. to 8:00 A.M.

Vacation

At least 1 year of employment......ten (10) days 5 years or more of employment.....fifteen (15) days 10 years of employment......twenty (20) days Plus one Personal Day per year

Sick Days:

One day per Year. Up to 4 vacation days may be used as sick days.

(Local #3)

ELECTRICIAN-STREET LIGHTING WORKER

Electrician - Electro Pole Electrician

Effective Period: 7/1/2017 - 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

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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

Paid Holidays

Christmas Day

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

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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)

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

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Overtime Description

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

Overtime

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

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

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

Paid Holidays

New Year's Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Shift Rates

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

Vacation

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

(Local #1)

ENGINEER

Engineer - Heavy Construction Operating Engineer I

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

Effective Period: 7/1/2017 - 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

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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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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, Gunite 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

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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

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Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day
Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

Engineer - Building Work Maintenance Engineers I

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

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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)

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

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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 Holidavs

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 Dav**

Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

(Operating Engineer Local #15-D)

ENGINEER - FIELD (BUILDING CONSTRUCTION)

(Construction of Building Projects, Concrete Superstructures, etc.)

Field Engineer - BC Party Chief

Effective Period: 7/1/2017 - 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

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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)

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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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)

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).

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

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).

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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)

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.

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 foading 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

PUBLISH DATE: 7/1/2017 EFFECTIVE PERIOD: JULY 1, 2017 THROUGH JUNE 30, 2018 Page 38 of 87

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

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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

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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

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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

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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).

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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)

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

Two shifts may be utilized with the first shift working 8:00 A.M. to the end of the shift at the straight time of pay. The second shift will receive one hour at double time rate for the last hour of the shift. (eight for seven, nine for eight).

(Carpenters District Council)

GLAZIER

(New Construction, Remodeling, and Alteration)

<u>Glazier</u>

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

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.)

<u>Craft Jurisdiction for repair, maintenance and fabrication</u>

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.

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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)

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)

IRON WORKER - ORNAMENTAL

Iron Worker - Ornamental

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

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)

IRON WORKER - STRUCTURAL

<u>Iron Worker - Structural</u>

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)

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

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Overtime

Time and one half the regular rate after an 8 hour day. Time and one half the regular rate for Saturday. Double time the regular rate for Sunday.

Overtime Holidays

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

New Year's Day

Memorial Day
Independence Day
Labor Day
Columbus Day
Thanksgiving Day
Christmas Day

Paid Holidays

Labor Day Thanksgiving Day

Shift Rates

When two shifts are employed, single time rate shall be paid for each shift. When three shifts are found necessary, each shift shall work seven and one half hours (7 $\frac{1}{2}$), but shall be paid for eight (8) hours of labor, and be permitted one half hour for lunch.

(Local #731)

LANDSCAPING

(Landscaping tasks, 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

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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

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: \$37.90

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)

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

<u> Mason Tender Tier B</u>

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)

METALLIC LATHER

Metallic Lather

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

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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)

MILLWRIGHT

<u>Millwright</u>

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.

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Double time the regular rate for Sunday.

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

Overtime Holidays

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

New Year's Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
Christmas Day

Paid Holidays

1/2 day on Christmas Eve if work is performed in the A.M. 1/2 day on New Year's Eve if work is performed in the A.M.

Shift Rates

The first shift shall receive the straight time rate of pay. The second shift receives the straight time rate of pay plus fifteen (15%) per cent. Members of the second shift shall be allowed one half hour to eat, with this time being included in the hours of the workday established. There must be a first shift to work a second shift. All additional hours worked shall be paid at the time and one-half rate of pay plus fifteen (15%) per cent for weekday hours.

(Local #740)

MOSAIC MECHANIC

Mosaic Mechanic - Mosaic & Terrazzo Mechanic

Effective Period: 7/1/2017 - 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.

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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)

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

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Overtime

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

Overtime Holidays

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

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

(District Council of Painters #9)

PAINTER - 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

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circumstances beyond the control of the employer, up to amaximumof 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

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

Paid Holidays

New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Shift Rates

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

Local 8A-28A

PAINTER - 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

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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)

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

Supplemental Benefits shall be paid for each hour worked, up to forty (40) hours per week for the period of May 1st to November 15th or up to fifty (50) hours per week for the period of November 16th to April 30th.

Overtime

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

Overtime Holidays

Double time the regular rate for work on the following holiday(s). New Year's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

Paid Holidays

None

Shift Rates

Regular hourly rates plus a ten per cent (10%) differential

(Local #806)

PAPERHANGER

Paperhanger

Effective Period: 7/1/2017 - 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.

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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

Paid Holidays

None

Shift Rates

Christmas Day

Evening shift - 4:30 P.M. to 12:00 Midnight (regular rate of pay); any work performed before 7:00 A.M. shall be at time and one half the regular base rate of pay.

(District Council of Painters #9)

PAVER AND ROADBUILDER

Paver & Roadbuilder - Formsetter

Effective Period: 7/1/2017 - 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

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(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 $\frac{1}{2}$) hours but will be paid for eight (8) hours since only one half (1/2) hour is allowed for meal time.

When two or more shifts are employed, single time will be paid for each shift.

Night Work - On night work, the first eight (8) hours of work will be paid for at the single time rate, except that production paving work shall be paid at 10% over the single time rate for the screed person, rakers and shovelers directly involved only. This differential is to be paid when there is only one shift and the shift works at night. All other workers will be exempt. Hours worked over eight (8) hours during said shift shall be paid for at the time and one-half rate.

(Local #1010)

PLASTERER

Plasterer

Effective Period: 7/1/2017 - 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

Mamarial 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 ($\frac{1}{2}$) hour to eat with this time being included in the seven (7) hours of work.

(Local #262)

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 Dav

Presidential Election Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

Shift Rates

When work commences outside regular work hours, workers receive an hour additional (differential) wage and supplement payment. Eight hours pay for seven hours work or nine hours pay for eight hours work.

(Mason Tenders District Council)

PLUMBER

<u>Plumber</u>

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

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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)

PLUMBER (MECHNICAL EQUIPMENT AND SERVICE)

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

<u>Plumber</u>

Effective Period: 7/1/2017 - 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)

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

Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays

None

Shift Rates

30% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shifts Monday to Friday. 50% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shift work performed on weekends. For shift work on holidays, double time wages and fringe benefits shall be paid.

(Plumbers Local #1)

PLUMBER: PUMP & TANK

Oil Trades (Installation and Maintenance)

Plumber - Pump & Tank

Effective Period: 7/1/2017 - 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

(Plumbers Local #1)

POINTER, WATERPROOFER, CAULKER, SANDBLASTER, **STEAMBLASTER**

(Exterior Building Renovation)

<u>Journey</u>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)

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)

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.

<u>Sheet Metal Worker - Fan Maintenance</u>

(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: JULY 1, 2017 THROUGH JUNE 30, 2018 Page 72 of 87 **PUBLISH DATE: 7/1/2017**

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)

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

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)

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

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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)

STEAMFITTER

Steamfitter I

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

Wage Rate per Hour: \$55.50

Supplemental Benefit Rate per Hour: \$55.29

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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.

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

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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

STEAMFITTER - REFRIGERATION AND AIR CONDITIONER (Maintenance and Installation Service Person)

Refrigeration and Air Conditioner Mechanic

PUBLISH DATE: 7/1/2017 EFFECTIVE PERIOD: JULY 1, 2017 THROUGH JUNE 30, 2018 Page 78 of 87

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.

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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)

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

Memorial Day Independence Day Labor Day Thanksgiving Day Christmas Day

Paid Holidays

1/2 day on Christmas Eve if work is performed in the A.M.

Shift Rates

For all work outside the regular workday (8:00 A.M. to 3:30 P.M. Monday through Friday), the pay shall be straight time plus a ten percent (10%) differential.

(Bricklayers District Council)

TAPER

Drywall Taper

Effective Period: 7/1/2017 - 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)

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

Paid Holidays

Christmas Day

New Year's Day
Lincoln's Birthday
Washington's Birthday
Memorial Day
Independence Day
Labor Day
Columbus Day
Election Day
Veteran's Day
Thanksgiving Day
Christmas Day

Employees have the option of observing either Martin Luther King's Birthday or the day after Thanksgiving instead of Lincoln's Birthday

Shift Rates

For any workday that starts before 8A.M. or ends after 6P.M. there is a 10% differential for the applicable worker's hourly rate.

Vacation

After 6 months.......one week.

After 12 months but less than 7 years......two weeks.

After 7 or more but less than 15 years......three weeks.

After 15 years or more but less than 25 years......four weeks.

(C.W.A.)

TILE FINISHER

Tile Finisher

Effective Period: 7/1/2017 - 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 (1½) times the regular straight time rate of pay for the seven hours of actual off-shift work.

(Local #7)

TILE LAYER - SETTER

Tile Layer - Setter

Effective Period: 7/1/2017 - 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 (1½) times the regular straight time rate of pay for the seven hours of actual off-shift work.

(Local #7)

TIMBERPERSON

<u>Timberperson</u>

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

Wage Rate per Hour: \$48.00

Supplemental Benefit Rate per Hour: \$49.16

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

Paid Holidays

None

Shift Rates

Christmas Day

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)

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

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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

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For Repair-Maintenance Work on Existing Equipment and Facilities - Time and one half the regular rate after a 7 hour day, or for Saturday, or for Sunday. Double time the regular rate for work on a holiday.

For Small-Bore Micro Tunneling Machines - Time and one-half the regular rate shall be paid for all overtime.

Overtime

Double time the regular rate after an 8 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

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

Paid Holidays

New Year's Day
Lincoln's Birthday
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Election Day
Veteran's Day
Thanksgiving Day
Christmas Day

(Local #147)

WELDER

TO BE PAID AT THE RATE OF THE JOURNEYPERSON IN THE TRADE PERFORMING THE WORK

OFFICE OF THE COMPTROLLER

CITY OF NEW YORK

220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

APPENDIX

Pursuant to Labor Law §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)

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

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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)

BRICKLAYER

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

Bricklayer (First 750 Hours)

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)

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

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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)

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)

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)

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)

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

<u>Derrickperson & Rigger (stone) - Second Year: 2nd Six Months</u>

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)

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)

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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

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

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)

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)

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 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)

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: \$24.77

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)

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)

FLOOR COVERER

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

Floor Coverer (First Year)

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

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

Supplemental Rate Per Hour: \$31.14

(Carpenters District Council)

GLAZIER

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

Glazier (First Year)

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

Wage Rate Per Hour: 40% of Journeyperson'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 Journeyperson'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)

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)

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)

IRON WORKER - ORNAMENTAL

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

<u>Iron Worker (Ornamental) - 1st Ten Months</u>

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

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

Supplemental Rate Per Hour: \$40.62

<u>Iron Worker (Ornamental) - 17 - 22 Months</u>

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

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

Supplemental Rate Per Hour: \$46.70

(Local #580)

IRON WORKER - STRUCTURAL

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

<u>Iron Worker (Structural) - 1st Six Months</u>

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)

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

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

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

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

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

Supplemental Rate Per Hour: \$40.63

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

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

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

Supplemental Rate Per Hour: \$40.63

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

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

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

Supplemental Rate Per Hour: \$40.63

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

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 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)

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

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

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

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

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

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

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

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

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

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

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)

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

<u> Mason Tender - Third Year</u>

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

Wage Rate per Hour: \$24.29

Supplemental Benefit Rate per Hour: \$19.70

<u> Mason Tender - Fourth Year</u>

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

Wage Rate per Hour: \$26.95

Supplemental Benefit Rate per Hour: \$19.70

(Local #79)

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)

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)

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)

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)

PAINTER

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

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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)

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

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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)

PAINTER - STRUCTURAL STEEL

(Ratio of Apprentice to Journeyperson: 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 Journeyperson's rate

Painters - Structural Steel (Second Year)

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

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

Painters - Structural Steel (Third Year)

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

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

(Local #806)

PLASTERER

(Ratio of Apprentice to Journeyperson: 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 Journeyperson's rate

Supplemental Rate Per Hour: \$13.59

Plasterer - First Year: 2nd Six Months

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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)

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

<u>Plasterer Tender - Second Year</u>

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

Wage Rate per Hour: \$22.54

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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)

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

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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)

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

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

Wage Rate per Hour: \$34.12

Supplemental Benefit Rate per Hour: \$20.90

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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)

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)

SHEET METAL WORKER

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

Sheet Metal Worker (0-6 Months)

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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

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)

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.

PUBLISH DATE: 7/1/2017 EFFECTIVE PERIOD: JULY 1, 2017 THROUGH JUNE 30, 2018 Page 33 of 36

(Local #638)

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)

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)

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

PUBLISH DATE: 7/1/2017 EFFECTIVE PERIOD: JULY 1, 2017 THROUGH JUNE 30, 2018 Page 35 of 36

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)

TIMBERPERSON

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

<u> Timberperson - First Year</u>

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

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

Supplemental Rate Per Hour: \$32.79

<u>Timberperson - Second Year</u>

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

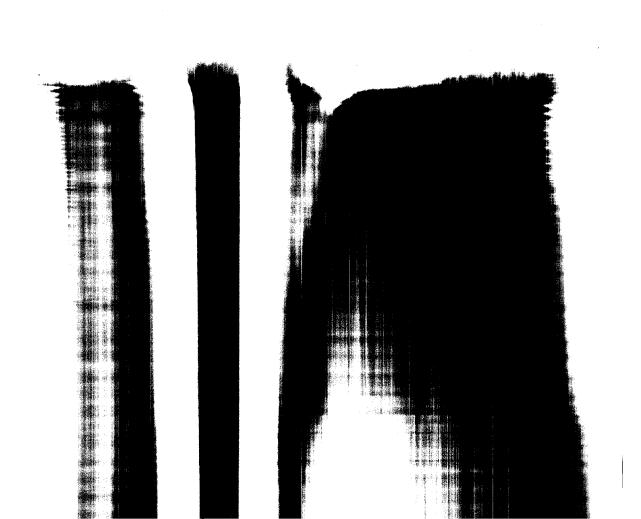
Supplemental Rate Per Hour: \$32.79

Timberperson - Fourth Year

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



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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)

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

<u> Timberperson - Fourth Year</u>

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)

PUBLISH DATE: 7/1/2017 EFFECTIVE PERIOD: JULY 1, 2017 THROUGH JUNE 30, 2018 Page 36 of 36



THE CITY OF NEW YORK OFFICE OF THE COMPTROLLER 1 CENTRE STREET ROOM 1120 NEW YORK, N.Y. 10007-2341

TELEPHONE: (212) 669-31 FAX NUMBER: (212) 669-8-

ALAN G. HEVESI COMPTROLLER

MEMORANDUM

November 6, 2000

To

Agency Chief Contracting Officers

From:

Re:

Leonard A. Mancusi

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



INFRASTRUCTURE DIVISION BUREAU OF DESIGN

VOLUME 2 OF 3

	Contractor
Dated	
APPROVED AS TO FORM CERTIFIED AS TO LEGAL AUTHORITY	
	Acting Corporation Counsel
Dated	



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 www1.nyc.gov/site/ddc/index.page

VOLUME 3 OF 3

SCHEDULE A SPECIFICATIONS AND REVISIONS TO STANDARD SPECIFICATIONS

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED FOR:

PROJECT ID: SEK20068

FOR THE CONSTRUCTION OF STORM AND COMBINED SEWERS AND APPURTENANCES IN:

 9^{TH} STREET BETWEEN SMITH STREET AND 2^{ND} AVENUE 2^{ND} AVENUE BETWEEN 9^{TH} STREET AND 7^{TH} STREET

CAPITAL PROJECT WM-1 FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN:

2ND AVENUE BETWEEN 9TH STREET AND 7TH STREET

Together With All Work Incidental Thereto
BOROUGH OF BROOKLYN
CITY OF NEW YORK

FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION PREPARED BY IN-HOUSE DESIGN



March 2, 2018

18-107

VOLUME 3 OF 3

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	STANDARD HIGHWAY SPECIFICATIONS	R-1 to R-2
SW - PAGES	SEWER AND WATER MAIN SPECIFICATIONS	SW-1 to SW-27
EP7 - PAGES	GAS COST SHARING (EP-7) STANDARD	
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HAZ-PAGES	SPECIFICATIONS FOR HANDLING, TRANSPORTATION	ſ
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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

The following New York City Department of Transportation (NYCDOT) reference documents are available on-line at:

http://www.nyc.gov/html/dot/html/about/dotlibrary.shtml#spec 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. Specifications for furnishing all labor and material necessary and required for the installation, removal or relocation of street lighting equipment in the City of New York, 1992.
- 2. Standard Drawings, Division of Street Lighting
- 3. Specifications for Traffic Signals and Intelligent Transportation Systems Construction and Equipment
- 4. 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. Standards for Green Infrastructure, latest version, available only on-line

http://www.nyc.gov/html/dep/html/stormwater/green_infrastructure_stand ards.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

SPECIFICATIONS AND STANDARDS OF NEW YORK CITY

Standard Specifications and Drawings for New York City Fire Department Communications facilities are available from the FDNY Facilities Management Bureau, Plant Operations Engineering, 316 Sgt. Beers Avenue Cluster 1 Box 16, Fort Totten, N.Y. 11359.

Contact: Mr. Ed Durkin, Tel. (718) 281-3933

Tree Planting Standards of the City of New York Parks & Recreation are available at the following Department of Parks & Recreation website: http://www.nycgovparks.org/pagefiles/53/Tree-Planting-Standards.pdf

SPECIFICATIONS AND STANDARDS OF PRIVATE UTILITIES

The Following reference document for Private Utility Work is available for pick up between 8:30 A.M. and 4:00 P.M. at 30-30 Thomson Avenue, First Floor Bid Procurement Room, L.I.C., N.Y. 11101.

1. CET SPECIFICATIONS AND SKETCHES dated November 2010

SCHEDULE A

(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT (INCLUDING GENERAL CONDITIONS RELATED TO ARTICLE 22 – INSURANCE) PART I. REQUIRED INFORMATION

INFORMATION FOR BIDDERS SECTION 26 BID SECURITY	Required provided the TOTAL BID PRICE set forth on the Bid Form is \$1,000,000. or more.
The Contractor shall obtain a bid security in the amount indicated to the right.	Certified Check: 2% of Bid Amount or Bond: 10% of Bid Amount
INFORMATION FOR BIDDERS SECTION 26 PERFORMANCE AND PAYMENT BONDS	Required for contracts in the amount of \$1,000,000 or more.
The Contractor shall obtain performance and payment bonds in the amount indicated to the right.	Performance Security and Payment Security shall each be in an amount equal to 100% of the Contract Price.
INFORMATION FOR BIDDERS DEPARTMENT OF DESIGN AND CONSTRUCTION SAFETY REQUIREMENTS	■ Project Safety Representative
The Contractor shall provide the safety personnel as indicated to the right.	☐ Dedicated, full-time Project Safety Manager
CONTRACT ARTICLE 14 DATE FOR SUBSTANTIAL COMPLETION	
The Contractor shall substantially complete the Work in the number of calendar days indicated to the right.	See Page SA-4
CONTRACT ARTICLE 15 LIQUIDATED DAMAGES	
If the Contractor fails to substantially complete the Work within the time fixed for substantial completion plus authorized time extensions or if the Contractor, in the sole determination of the Commissioner, has abandoned the Work, the Contractor shall pay to the City the amount indicated to the right.	For Each Consecutive Calendar Day Over Completion Time Specified: \$4000.00
CONTRACT ARTICLE 17. SUB-CONTRACTOR The Contractor shall not make subcontracts totaling an amount more than the percentage of the total Contract price indicated to the right.	Not to exceed 35 % of the Contract price

CONTRACT ARTICLE 21.	
RETAINAGE	- 0.0 6.1 1 6.1 14.1
The Commissioner shall deduct and retain until	5 % of the value of the Work
the substantial completion of the Work the percent	
value of the Work indicated to the right.	
CONTRACT ARTICLE 22.	See pages SA-5 through SA-12
(Per Directions Below)	Coo pages of to through of the
CONTRACT ARTICLE 24.	
<u>DEPOSIT GUARANTEE</u>	
As security for the faithful performance of its	
obligations, the Contractor , upon filing its	1% of Contract price
requisition for payment on Substantial	1 70 01 0011111100 p1100
Completion, shall deposit with the Commissioner	
a sum equal to the percentage of the Contract	
price indicated to the right.	
CONTRACT ARTICLE 24.	Eighteen (18) Months, excluding
PERIOD OF GUARANTEE	Trees
Deriods of maintenance and guarantee other than	11000
Periods of maintenance and guarantee other than the period set forth in Article 24.1 are indicated to	Twenty-four (24) Months for Tree
the right.	Planting
CONTRACT ARTICLE 74.	
STATEMENT OF WORK	
The Contractor shall from ich all labor and	Addenda, numbered:
The Contractor shall furnish all labor and	Addenda, numbered.
materials and perform all Work in strict accordance with the Contract Drawings ,	
Specifications, and all Addenda thereto, as	
shown in the column to the right.	
CONTRACT ARTICLE 75.	
COMPENSATION TO BE PAID TO CONTRACTOR	
<u></u>	Amount for which the Contract was
The City shall pay and the Contractor shall accept	Awarded:
in full consideration for the performance of the	
Contract, subject to additions and deductions as	
provided herein, the total sum shown in the	Dallam
column to the right, being the amount at which	Dollars
the Contract was awarded to the Contractor at a	/ c
public letting thereof, based upon the Contractor's	(\$)
bid for the Contract.	
CONTRACT ARTICLE 79.	
PARTICIPATION BY MINORITY-OWNED AND	See M/WBE Utilization Plan in the Bid
WOMEN-OWNED BUSINESS ENTERPRISES IN CITY PROCUREMENT	Booklet
	1

STANDARD HIGHWAY SPECIFICATIONS SECTION 6.40 LIQUIDATED DAMAGES FOR ENGINEER'S FIELD OFFICE

If the Contractor fails to satisfactorily provide the field office and all equipment specified in **Section 6.40 - Engineer's Field Office**, and/or if a cited deficiency exceed seventy two (72) hours after notice from the Engineer in writing, or is permitted to recur, liquidated damages will be assessed in the amount specified herein for each subsequent calendar day or part thereof that a cited deficiency resulting in nonpayment, as described in **Section 6.40.5**, is not corrected.

\$ <u>500.00</u> for each calendar day of deficiency

STANDARD HIGHWAY SPECIFICATIONS SECTION 6.70 LIQUIDATED DAMAGES FOR MAINTENANCE AND PROTECTION OF TRAFFIC

- \$ 250.00 for each instance of failure to comply with the Maintenance and Protection of Traffic requirements within three (3) hours after written notice from the Engineer.
- \$ 500.00 for each and every hour of failing to open the entire width of roadway to traffic the morning following a night/weekend work operation.

STANDARD HIGHWAY SPECIFICATIONS SECTION 7.13 LIQUIDATED DAMAGES FOR MAINTENANCE OF SITE

If the Contractor fails to comply, within three (3) consecutive hours after written notice from the Engineer, with the requirements of **Section 7.13** - **Maintenance of Site**, the Contractor shall pay to the City of New York, until such notice has been complied with or rescinded, the sum specified above per calendar day, for each instance of such failure, as liquidated damages and not as a penalty, for such default.

\$ 800.00 for each calendar day, for each occurrence

Date for Substantial Completion (Reference: Article 14)

The Contractor shall substantially complete the Work within the Final Contract Duration determined in accordance with the terms and conditions set forth herein.

The Base Contract Duration for this project is ______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.

\checkmark	YES	NO

When the Final Contract Duration is indicated above to be adjusted by the table below, the table may increase the Base Contract Duration depending on the date of scheduled substantial completion to avoid a scheduled substantial completion of the Work during the winter months. The date of scheduled substantial completion shall be determined by adding the Base Contract Duration to the date specified to commence work in the written Notice to Proceed. The Final Contract Duration shall then be determined as follows:

- (a) Find the row that corresponds to the month of substantial completion based on the Base Contract Duration added to the date specified to commence work in the written Notice to Proceed.
- (b) Find the number of days to be added to the Base Contract Duration in the table below. Add that number of days to the Base Contract Duration to obtain the Final Contract Duration in consecutive calendar days.

Month of Substantial Completion based on the Base Contract Duration	Number of Days of adjustment
January	150
February	120
March March	90
April	60
May	30
June	0
July	0
August	0
September	0
October	0
November –December 15	0
December 16 – December 31	180

In addition, should Item No. 9.30, "Storm Water Pollution Prevention," exist in the Contract and the required Storm Water Pollution Prevention Plan (SWPPP) does not conform to NYSDEC's recommended Standards, an additional 60 ccd shall be added to the above Final Contract Duration.

(GENERAL CONDITIONS RELATING TO ARTICLE 22 – INSURANCE)

PART II. TYPES OF INSURANCE, MINIMUM LIMITS AND SPECIAL CONDITIONS

<u>Note</u>: All certificate(s) of insurance submitted pursuant to Contract Article 22.3. 3 must be accompanied by a Certification by Broker consistent with Part III below and include the following information:

- For each insurance policy, the name and NAIC number of issuing company, number of policy, and effective dates;
- Policy limits consistent with the requirements listed below;
- Additional insureds or loss payees consistent with the requirements listed below;
 and
- The number assigned to the Contract by the City (in the "Description of Operations" field).

Insurance indicated by a blackened box (■) or by X in a □ to left will be required under this contract

Types of Insurance (per Article 22 in its entirety, including listed paragraph)	Minimum Limits and Special Conditions
	The minimum limits shall be \$3,000,000 per occurrence and \$6,000,000 per project aggregate applicable to this Contract.
■ Commercial General Liability Art. 22.1.1	Additional Insureds: 1. City of New York, including its officials and employees, with coverage at least as broad as ISO Form CG 20 10 and CG 20 37, 2. All person(s) or organization(s), if any, that Article 22.1.1(b) of the Contract requires to be named as Additional Insured(s), with coverage at least as broad as ISO Form CG 20 26. The Additional Insured endorsement shall either specify the entity's name, if known, or the entity's title (e.g., Project Manager), 3. The New York City Transit Authority (NYCTA), Manhattan and Bronx Surface Transit Operation Authority (MaBSTOA), Staten Island Rapid Transit Operation Authority (SIRTOA), Metropolitan Transportation Authority (MTA), its subsidiaries and affiliated companies. The Contractor shall furnish two (2) certificates of insurance to and the policy shall be endorsed to provide thirty (30) days advance notice to the Director, Risk Management, MTA Risk and Insurance Management Standards, Enforcement and Claims Unit, 2 Broadway, 21st Floor, New York, NY 10004, of any material change and/or cancellation. 4. National Grid

■ Workers' Compensation Art. 22.1.2
 ■ Disability Benefits Insurance Art. 22.1.2
 ■ Employers' Liability Art. 22.1.2
 ■ Jones Act Art. 22.1.3

■ U.S. Longshoremen's and Harbor Workers
Compensation Act Art. 22.1.3

Workers' Compensation, Employers' Liability, and Disability Benefits Insurance: Statutory per New York State law without regard to jurisdiction.

Note: The following forms are acceptable: (1) New York State Workers' Compensation Board Form No. C-105.2, (2) State Insurance Fund Form No. U-26.3, (3) New York State Workers' Compensation Board Form No. DB-120.1 and (4) Request for WC/DB Exemption Form No. CE-200. The City will not accept an ACORD form as proof of Workers' Compensation or Disability Insurance.

Jones Act and U.S. Longshoremen's and Harbor Workers' Compensation Act: Statutory per U.S. Law.

Additional Requirements:

- (1) NYCTA "OUTSIDE CONTRACT" INSURANCE REQUIREMENTS: Workers' Compensation Insurance (including Employer's Liability Insurance) with limits of not less than \$2,000,000, which limit may be met by a combination of primary and excess insurance meeting the statutory limits of New York State.
- (2) Two (2) certificates of such insurance shall be furnished to the Director, Risk Management, MTA Risk and Insurance Management Standards, Enforcement and Claims Unit, 2 Broadway, 21st Floor, New York, NY 10004.

	☐ Required: 100% of total bid amount
	☐ Required: 100 % of total bid amount for Item(s):
Art. 22.1.4	Contractor the Named Insured; the City both an Additional Insured and one of the loss payees as its interests may appear.
	If the Work does not involve construction of a new building or gut renovation work, the Contractor may provide an installation floater in lieu of Builders Risk insurance.
	Note: Builders Risk Insurance may terminate upon Substantial Completion of the Work in its entirety.
	\$ <u>2,000,000</u> per accident combined single limit
	If vehicles are used for transporting hazardous materials, the Contractor shall provide pollution liability broadened coverage for covered vehicles (endorsement CA 99 48) as well as proof of MCS 90
Art. 22.1.5	Additional Insureds:
	 (1) <u>City of New York, including its officials and employees.</u> (2) <u>The New York City Transit Authority (NYCTA), Manhattan and Bronx Surface Transit Operation Authority (MaBSTOA), Staten Island Rapid Transit Operation Authority (SIRTOA), Metropolitan Transportation Authority (MTA), its subsidiaries and affiliated companies.</u>
Art. 22.1.6	\$_5,000,000 per occurrence \$_5,000,000 aggregate Additional Insureds: 1. City of New York, including its officials and employees, and 2
	Art. 22.1.5

☐ Marine Protection and Indemnity Art. 22.1.7(a)	\$each occurrence \$aggregate Additional Insureds: 1. City of New York, including its officials and employees, and 2. 3.
☐ Hull and Machinery Insurance Art. 22.1.7(b)	\$ per occurrence \$ aggregate Additional Insureds: 1. City of New York, including its officials and employees, and 2. 3.
☐ Marine Pollution Liability Art. 22.1.7	\$\frac{1,000,000}{1,000,000}\$ per occurrence \$\frac{1,000,000}{2}\$ aggregate Additional Insureds: 1. City of New York, including its officials and employees, and 2. 3.

SA-8

[OTHER]

Art. 22.1.8

■ Railroad Protection Liability Policy

(ISO-RIMA or equivalent form) approved by Permittor covering the work to be performed at the designated site and affording protection for damages arising out of bodily injury or death, physical damage to or destruction of property, including damage to the Insured's own property and conforming to the following:

- Policy Endorsement CG 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.

- \$ <u>2,000,000</u> per occurrence
- \$ <u>6,000,000</u> annual aggregate

Named Insureds:

 New York City Transit Authority (NYCTA), the Manhattan and Bronx Surface Transit Operation Authority (MaBSTOA), the Staten Island Rapid Transit Operation Authority (SIRTOA), MTA Capital Construction Co., the Metropolitan Transportation Authority (MTA) including its subsidiaries and affiliates, and the City of New York (as Owner) and all other indemnified parties.

[OTHER]. Art. 22.1.8

■ Professional Liability

- A. The Contractor's Professional Engineer shall maintain and submit evidence of Professional Liability Insurance in the minimum amount of \$1,000,000 per claim. The policy or policies shall include an endorsement to cover the liability assumed by the Contractor under this Contract arising out of the negligent performance of professional services or caused by an error, omission or negligent act of the Contractor's Professional Engineer or anyone employed by the Contractor's Professional Engineer.
- B. Claims-made policies will be accepted for Professional Liability Insurance. All such policies shall have an extended reporting period option or automatic coverage of not less than two (2) years. If available as an option, the Contractor's Professional Engineer shall purchase extended reporting period coverage effective on cancellation or termination of such insurance unless a new policy is secured with a retroactive date, including at least the last policy year.

[OTHER]	Art. 22.1.8	Fire insurance, extended coverage an		
■ Engineer's Field Office		vandalism, malicious mischief and burglary, and theft insurance coverage in		
Section 6.40, Standard Highway Specifications		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.				

SA-10

SCHEDULE A (GENERAL CONDITIONS TO CONSTRUCTION CONTRACT) (GENERAL CONDITIONS RELATING TO ARTICLE 22 – INSURANCE)

PART III. CERTIFICATES OF INSURANCE

All certificates of insurance (except certificates of insurance solely evidencing Workers' Compensation Insurance, Employer's Liability Insurance, and/or Disability Benefits Insurance) must be accompanied by one of the following:

(1) the Certification by Insurance Broker or Agent on the following page setting forth the required information and signatures;

-- OR --

(2) copies of all policies as certified by an authorized representative of the issuing insurance carrier that are referenced in such certificate of insurance. If any policy is not available at the time of submission, certified binders may be submitted until such time as the policy is available, at which time a certified copy of the policy shall be submitted.

CITY OF NEW YORK <u>CERTIFICATION BY INSURANCE BROKER OR AGENT</u>

The undersigned insurance broker represents to the City of New York that the attached Certificate of Insurance is accurate in all material respects.

	[Name of broker or agent (typewritten)]
	[Address of broker or agent (typewritten)]
	[Email address of broker or agent (typewritten)]
	[Phone number/Fax number of broker or agent (typewritten)]
	[Signature of authorized official, broker, or agent]
	[Name and title of authorized official, broker, or agent (typewritten)]
State of)) ss.:
County of) 55)
Sworn to before	me this day of, 20
NOTARY PUBLIC	C FOR THE STATE OF

SCHEDULE A

(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)

PART IV. ADDRESS OF COMMISSIONER

Wherever reference is made in Article 7 or Article 22 to documents to be sent to the **Commissioner** (e.g., notices, filings, or submissions), such documents 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)

(NO TEXT ON THIS PAGE)

R - PAGES

REVISIONS TO STANDARD SPECIFICATIONS

NOTICE

The Specification Bulletin(s) ("SB(s)") referenced in this Section (R-Pages) may consist of revisions to the following Standard Specifications:

- New York City Department of Transportation ("NYC DOT") Standard Highway Specifications, dated 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 SUPERSEDED BY SB 18-001
- 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
- SB 17-010 MILLED ASPHALTIC CONCRETE AGGREGATE
- SB 17-011 DETECTABLE WARNING UNIT COLOR

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- SB 17-012 TEMPORARY HOUSE CONNECTION MATERIAL
- SB 18-001 RODENT AND WATERBUG PEST CONTROL
- SB 18-002 COLOR SURFACE TREATMENT FOR PAVEMENTS
- SB 18-003 WATER AND SEWER GENERAL PROVISIONS

The SB(s) are available online at:

http://www1.nyc.gov/site/ddc/resources/specification-bulletins.page or for pickup between 8:00 AM and 4:00 PM at 30-30 Thomson Avenue, 3rd Floor, Division of Infrastructure, Long Island City, NY 11101. Contacts:

- Mr. Richard Jones, (718) 391-1417
- Mr. Salman Macktoom, (718) 391-2041

(NO FURTHER TEXT THIS PAGE)

3/30/2018 R-2

SEWER AND WATER MAIN REVISIONS TO SPECIFICATIONS

NOTICE

The Standard Sewer and Water Main Specifications of the Department of Environmental Protection (dated July 1, 2014), Sewer Design Standards of the Department of Environmental Protection (dated (September 2007) Revised January 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 HIGHWAY SPECIFICATIONS
- C. REVISIONS TO THE STANDARD SEWER AND WATER MAIN SPECIFICATIONS
- D. REVISIONS TO THE SPECIFICATIONS FOR TRUNK MAIN WORK

(NO TEXT ON THIS PAGE)

SEWER AND WATER MAIN REVISIONS TO SPECIFICATIONS

NOTICE

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- A. NOTICE TO BIDDERS
- B. REVISIONS TO THE STANDARD HIGHWAY SPECIFICATIONS
- C. REVISIONS TO THE STANDARD SEWER AND WATER MAIN SPECIFICATIONS
- D. REVISIONS TO THE SPECIFICATIONS FOR TRUNK MAIN WORK

(NO TEXT ON THIS PAGE)

PROJECT ID.: SEK20068

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 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.
- (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.

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.

(10)The Contractor is advised that where the existing roadway pavement is designated to be replaced from curb to curb, then no full depth saw cutting of pavement for sewer and water main trenches will be required, except at the limits of full width pavement restoration. No separate or additional payment will be made for any saw cutting.

- (11) The Contractor shall exercise extreme caution and take all necessary precautions in placing sheeting and excavating to prevent any damage to the existing NYC TRANSIT'S structures and its appurtenances during construction work throughout the project area. The Contractor shall take full responsibility to protect the said NYC TRANSIT's structures and its appurtenances and any damage cause by the Contractor's operation shall be made good by the Contractor to the satisfaction of the Engineer at no additional cost to the City.
- (12) The Contractor shall submit shop drawings to NYC Transit Authority showing all the details and methods of construction, such as, sheeting and bracing, including the Contractor's procedure and sequence of construction, supporting and/or protection of the existing TA's structures and its appurtenances, with necessary design calculations for approval prior to starting of the construction. The design shall be made by New York State Licensed Professional Engineer skilled in this type of construction and as further evidenced by the imprint of Professional Engineer's seal and signature on all drawings. The cost of this work shall be deemed included in the price bid for all items of work under this contract.
- (13)The Contractor shall submit a Preconstruction Report prior to start of construction to the construction to NYC Transit Authority, NYCDOT and NYCDDC in compliance with **New York City Department of Environmental Protection Standard Sewer and Water Main Standards Section 76.11**. No work may begin until NYCDDC has accepted the preconstruction report.
- (14)The Contractor is notified that at some locations there presently exists sewers, manholes, water mains, etc., which are to remain undisturbed and are in close proximity to the line of the proposed work. The Contractor shall exercise extreme care, minimize the trench width of the proposed sewers and take all necessary precautions in placing sheeting and during excavation of the trenches to prevent any damage to the existing structures, pavement, curbs, and sidewalks that are to remain while working adjacent to them. Should any damage occur to any portion of the existing structures that are to remain due to the Contractor's operations, the Contractor shall make all repairs to the existing structures to the satisfaction of and as directed by the Engineer. The cost of such repair shall be borne by the Contractor, at no cost to the City.
- (15) All sanitary house connections along 9th Street shall connect to the new 12" ESVP Sanitary Sewer main only. The new sanitary sewers are designed based on existing receiving and built outlet structures. Therefore, property owners may be required to install ejector pumps in order to discharge their sanitary flow from their property into new sanitary connections.
- (16)The Contractor is advised that there's no record to verify whether there are any existing storm Leader House Connection drains on the existing storm sewers within the project limit. However, if any existing Leader House Connections are encountered during trench excavation, the Contractor shall reconnect them to the proposed storm sewer as ordered by the Engineer. The cost of the work, including but not limited to, investigations; sheeting and bracing; earth excavation; clean backfill; restoration of disturbed and damaged sidewalk, curbs, grass, steps etc. required and necessary to reconnect the existing Leader House Connection drain shall be deemed included in the prices bid for Item No. 52.41D08R 8" D.I.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION).
- (17) The Contractor shall replace disturbed or damaged existing bus pads due to the interference with the construction of sewer or water mains with new ones. New bus pads shall be constructed in compliance with the New York City Department of Transportation (NYCDOT) Standard Highway Specifications Section 4.05 AX – High-Early Strength Reinforced Concrete Pavement (Bus Stop)

- (18) The Contractor is advised that no additional or separate payment shall be made for the support of existing wall and/or abutment to remain in the modification of Outfall No. 1 or construction of Outfall No. 2. If disturbed or damaged, it shall be replaced in kind at the cost of Contractor.
- (19) The Contractor shall coordinate all work within the 9th Street bridge over the Gowanus Canal with NYCDOT Division of Bridges and NYCDDC prior to and during construction. The Contractor shall also schedule a meeting with NYCDOT Division of Bridges prior to start of construction to review means and methods of construction. Contractor is required to conduct test pits within existing bridge abutment to confirm existing conditions of the abutment wall where new storm outfall and pipe to be constructed. The Contractor is required to submit details for the excavation and restoration of the 9th Street bridge approach slab and the reconstruction of the pressure relief joint for review and approval by NYCDOT Division of Bridges prior to construction. The Contractor shall also refer to additional notes and special requirements as listed on the contract drawings.
- (20) The Contractor is advised that he shall submit shop drawings and calculations detailing sheeting, shoring design steel sheet piling design grunting and dewatering system with supporting calculations to NYCDOT and NYCDDC for approval prior to excavation. Shop drawings and calculations shall include original seal and signature of NYS Licensed Professional Engineer.
- (21) The Contractor is advised that the Department of Design and Construction is in the process of filing permit application with the United States Army Corps of Engineers (USACE) for Nationwide Permit 7: Outfall structures and Associated Intake Structures and Nationwide Permit 33: Temporary Construction, Access, and Dewatering pertaining to required permits needed to perform the proposed modification work for the proposed outfalls. No work shall commence until such permit has been obtained for this project by the Contractor. No additional or separate payment shall be made for the work of complying with USACE requirements; for the required updating of permits and obtaining of permits.
- (22) The Contractor is advised that the Department of Design and Construction is in the process of filing permit application with the New York State Department of Conservation (NYSDEC) under the Environmental Conservation Law, Article 25 for Tidal Wetland and 401 Water Quality Certification. No work shall commence until such permit has been obtained for this project by the Contractor. No additional or separate payment shall be made for the work of complying with NYSDEC requirements; for the required updating of permits and obtaining of permits. The cost of such work shall be deemed included in the prices for bid for all contract items of work.
- (23)The Contractor is advised that the Department of Design and Construction has contacted the New York State Department of State (NYSDOS) pertaining to required permits needed to perform the proposed modification work on the proposed outfalls. No work shall commence until such permit has been obtained for this project by the Contractor. No additional or separate payment shall be made for the work of complying with NYSDOS requirements; for the required updating of permits and obtaining of permits. The cost of such work shall be deemed included in the prices for bid for all contract items of work.
- (24) The Contractor is advised that at certain locations within the project limit, existing manholes, seepage basins, basins, sewers and water mains that are to be abandoned may fall partially or totally within the trench of proposed sewer or water main. These existing structures shall be removed in part or in whole as necessary and required in order to accommodate the installation of the new sewer or water main. After the removal of the said structures, the resultant voids shall be satisfactorily filled and compacted up to the subgrade of the new sewer or water main by the Contractor. No separate or additional payment will be made for the removal and filling of the said existing structures, additional excavation, sheeting and bracing, providing bulkheads and all other items necessary to complete this work, the cost therefore shall be deemed included in the prices bid for all contract items of work.
- (25) The Contractor is advised that at certain locations within the project limit, the existing sewers to be removed, are lower than the proposed sewers. It might be necessary for the Contractor to excavate below the subgrade of the said proposed sewer to remove the existing sewers in part or in whole as

directed by the Engineer in order to accommodate the installation of the proposed sewer. After the removal of the said sewers, the Contractor shall satisfactorily fill and compact the affected area in accordance with the specifications, up to the subgrade of the proposed sewers. No separate or additional payment will be made for the above work, including but not limit to, investigations, removal of the said storm sewers, labor, materials, equipment, insurance etc., and incidentals required to complete the work. The cost shall be deemed included in the prices bid for all items of work.

- (26) The Contractor shall be strictly limited in headroom and/or space as to the placement of his lifting equipment such as crane and/or pile-driving machine etc., on the roadway within the project area. The Contractor shall exercise extreme care, and take all necessary precautions in any operation during construction to prevent any damages to the existing structures and their appurtenances while working adjacent to them. The cost of additional and special care work due to such headroom and/or space restriction shall be deemed included in the prices bid for all items of work. No additional payment will be made.
- (27) The Contractor shall install Inline Check Valves at the Outfall as shown in the contract drawings. All valves shall be Series CM-SL slip-in CheckMateTM Valves as manufactured by Tideflex Technologies®, A Division of Red Valve Company, Carnegie, PA 15106, Tel. No. (412) 279-0044 or approved equal. All valves shall be manufactured in the U.S.A. The cost of such work shall be deemed included in the price bid for item 51.11C003 CHAMBER NO. 3.

DATED APRIL 9, 2018 PROJECT ID.: SEK20068

B. REVISIONS TO THE STANDARD HIGHWAY SPECIFICATIONS

(1) Refer to Standard Highway Specifications Volume II (August 1, 2015), Page 652: Add the following new Section HW-900H:

ITEM HW-900H

ALLOWANCE FOR CITY WORK ACCELERATION

Under this Section, the Contractor will be paid for City work deemed necessary by DDC's Commissioner to accelerate the City work items in the project during critical periods but the use of this item will expire on the original contract substantial completion date. Such accelerated City work includes:

- A. 100% of the premium portions of overtime pay for working during non-scheduled work hours which must be defined as those hours of work outside the permissible hours stated in the original contract OCMC Traffic Stipulations; or.
- B. The premium portion of overtime pay for overtime actually worked beyond the 40-hour work week but within the permissible hours of work stated in the original contract OCMC Traffic Stipulations; or.
- C. All other incidental expenditures caused by modifications of project site regulations or administrative requirements ordered by the Commissioner that result in additional costs to perform contract work as specified.

Such accelerated City work must be paid for under this item in accordance with the requirements of **Articles 25 and 26** of the Standard Construction Contract.

Payment made under this Fixed Sum item must cover the cost of all labor, materials, plant, equipment, insurance, and incidentals necessary to accelerate the City work as ordered by DDC's Commissioner.

No guarantee is given that this allowance item will in fact be required in this contract. The estimated "fixed sum" amount shown in the Bid Schedule is included in the total bid solely to insure a method of payment for any accelerated work performed by the Contractor, as directed by DDC's Commissioner.

Payment will be made under:

Item No.	Item	Pay Unit
HW-900H	ALLOWANCE FOR CITY WORK ACCELERATION	F.S.

C. REVISIONS TO THE STANDARD SEWER AND WATER MAIN SPECIFICATIONS

- (2) Refer to Subsection 10.15 Notice to Utility Companies, Etc., to Remove Structures Occupying Place of Sewers, Water Mains or Appurtenances, Page I-11:

 Add the following to Subsection 10.15:
 - (1) NATIONAL GRID

There are NATIONAL GRID facilities in the area of construction. The Contractor shall notify NATIONAL GRID at least seventy-two (72) hours prior to the start of construction by contacting Mr. Neville Jacobs Jr. at (718) 963-5612.

- (3) 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) NEW YORK CITY FIRE DEPARTMENT

The Contractor shall notify the Bureau of Fire Communications at least thirty (30) days prior to the start of construction by contacting Mr. Ed Durkin at (718) 624-3752 and/or Mr. Nick Varone at (718) 624-4194.

- (3) N.Y.C. DEPARTMENT OF TRANSPORTATION
 - a) The Contractor shall notify Mr. Michael Lofesse/ Ghanshyyam 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.
 - b) The Contractor shall notify Mr. Udaya Kumar Dommaraju, P.E., Director, NYCDOT Division of Bridges, 55 Water Street, 5th Floor, New York, N.Y. 10041 at (212) 839-4029 at least thirty (30) days prior to the start of construction.
- (4) N.Y.C. DEPARTMENT OF PARKS AND RECREATION

The Contractor shall notify the Parks Department at least seventy-two (72) hours prior to the start of construction by contacting Mr. Daniel Grulich at (718) 760-6927.

- (5) N.Y.C. TRANSIT AUTHORITY
 - (a) The Contractor shall notify Outside Projects at least fourteen (14) days prior to the start of construction.

The Contractor shall contact:

Mr. Mohamed Adam, P.E.
Project Engineer-Outside Projects
New York City Transit
2 Broadway, 7th Floor
New York, N.Y. 10004
Attention Ms. Alina Avadanei
Telephone No. (646) 252-3641

(b) The Contractor is advised that bus routes as well as bus stops, within the scope of this project may be affected during construction operations. The Contractor shall notify the Transit Authority at least two (2) weeks prior to the start of construction, in order to make the necessary arrangements as required under the NYC TRANSIT GENERAL NOTES included in Section 10.25, paragraph (A), Section 10.25 paragraph (B), and Section 10.25 paragraph (C) of this SW-PAGES.

Arrangements shall be made through:

Ms. Sarah Wyss
Director of Short Range, Bus Service Planning (SRB)
New York City Transit
2 Broadway, 17th Floor
New York, N.Y. 10004
Telephone No. (646) 252-5517
sarah.wyss@nyct.com

- (c) In addition, the Contractor is advised that construction operations might affect subway lines and stations; and NYCT facilities (i.e. manholes, ducts, etc.). The Contractor shall notify the Transit Authority as required and specified in Section 10.25 paragraph (A), Section 10.25 paragraph (B), and Section 10.25 paragraph (C) of this SW-PAGES.
- (4) Refer to Subsection 10.25 Contractor to Carry Out Agreement Between City and Railroad Company or Property Owner(s), Page I-14:

 Add the following to Subsection 10.25:
 - (A) NYC TRANSIT GENERAL NOTES

For NYC TRANSIT notes see the contract drawings.

(B) NYC TRANSIT INSURANCE REQUIREMENTS

N.Y.C. TRANSIT INSURANCE: The Contractor (Permittee) shall indemnify and save harmless the City of New York and the New York City Transit (Permittor) in accordance with the following "Insurance Requirements" and proof that the necessary insurance is in effect will be required before work can commence:

NYCT "OUTSIDE CONTRACT" INSURANCE REQUIREMENTS

- (1) The Permittee at its sole cost and expense shall carry and maintain policies of insurance at all times during the period of performance under this Agreement as herein set forth below:
- (A) Workers' Compensation Insurance: (including Employer's Liability Insurance) with limits as specified in Schedule 'A', which limit may be met in combination of primary and excess insurance meeting the statutory limits of New York State. The policy shall be endorsed to include Longshoreman's and Harbor Workers' Compensation Act/Maritime Coverage Endorsement and/or Jones Act Endorsement when applicable.
- (B) Commercial General Liability Insurance: (ISO 2001 Form or equivalent) approved by Permittor in the Permittee's name with limits as specified in Schedule 'A' for each occurrence on a combined single limit basis for injuries to persons (including death) and damages to property. The limits may be provided in the form of a primary policy or combination of primary and umbrella/excess policy. When the minimum contract amounts can only be met when applying the umbrella/excess policy, the Umbrella/Excess Policy must follow form of the underlying policy and be extended to "drop down" to become primary in the event primary limits are reduced or aggregate limits are exhausted. Such insurance shall be primary and non-contributory to any other valid and collectible insurance and must be exhausted before implicating any Permittor/MTA policy available.

Such policy should be written on an occurrence form, and shall include the following coverages:

- Additional Insured Endorsement (I.S.O. Form CG 20 26 07/04) version or equivalent approved by the Permittor, shall name the indemnitees as referenced under Section B of this agreement as Additional Insureds.
- · Contractual Liability assumed by the Permittee under this agreement;
- Personal and Advertising Injury;
- Products-Completed Operations;
- Independent Contractors:
- "XCU" (Explosion, Collapse, and Underground Hazards) where necessary;
- Contractual Liability Exclusion, applicable to construction or demolition operations to be performed within 50 feet of railroad tracks, must be removed, where necessary; and
- Additional Insured Endorsement (I.S.O. Form CG 20 26 07/04 version or equivalent) approved
 the Permittor naming: New York City Transit Authority (NYCTA), the Manhattan and Bronx
 Surface Transit Operating Authority (MaBSTOA), the Staten Island Rapid Transit Operating
 Authority (SIRTOA), MTA Capital Construction Co., the Metropolitan Transportation Authority
 (MTA) including its subsidiaries and affiliates, and the City of New York (as Owner).
- (C) <u>Business Automobile Liability:</u> (ISO Form CA 00 01 10 01 or equivalent) approved by the Permittor is required if Permittee's vehicle enters Permittor's property. The insurance must be in the name of the Permittee or its contractor entering the Permittor property with limits of liability in the amount of not less than \$2,000,000 each accident for claims for bodily injuries (including death) to persons and for damage to property arising out of the ownership, maintenance or use of any owned, hired or non-owned motor vehicle.
- (D) Railroad Protective Liability Insurance policy shall be required as specified in Schedule 'A'
- (E) <u>Environmental Insurance</u>: In the event environmental or pollution exposures exist, the Permittee shall require the environmental contractor or sub-contractor to provide the applicable insurance covering such exposure. The limits and types of insurance provided must be satisfactory to the Permittor and approved prior to the start of the work.
- (F) General Insurance Requirements Applicable to Insurance Policies:
 - (a) All of the insurance required by this Article shall be with Companies licensed or authorized to do business in the State of New York with an A.M. Best Company rating of not less than A-/VII or better and reasonably approved by the Permittor/MTA and shall deliver evidence of such policies.
 - (b) Except for Workers Compensation, all references to forms and coverages referred to above shall be the most recent used by the Insurance Services Office, Inc. (ISO) or equivalent forms approved by the Insurance Department of the State of New York, provided, however, that excess coverages may be written on forms reasonable acceptable to Permittor containing provisions other than those contained in ISO forms but otherwise conforming in substance to the requirements of this Article.
 - (c) The Permittee or its Contractor performing the work shall furnish evidence of all plolicies before any work is started to the Permittor:

For NYCT Contract Inspection C/O Mr. John Malvasio Director, MOW Engineering 130 Livingston Street, Room 8044F Brooklyn, NY 11201

These policies must: (i) be written in accordance with the requirements of the paragraphs above, as applicable; (ii) be endorsed in form acceptable to include a provision that the policy

will not be canceled, materially changed, or not renewed, unless otherwise indicated within at least thirty (30) days prior written notice to the Permittor c/o MTA Risk and Insurance Management (MTA RIM) Department – Standards, Enforcement & Claims Unit, 2 Broadway – 21st Floor, New York, NY 10004; and (iii) state or be endorsed to provide that the coverage afforded under the contractor's policies shall apply on a primary and not on an excess or contributing basis with any policies which may be available to the Permittor/MTA, and also that the contractor's policies, primary and excess, must be exhausted before implicating any Permittor/MTA policy available. (iv) In addition, the contractor's policies shall state or be endorsed to provide that, if a subcontractor's policy contains any provision that may adversely affect whether contractor's policies are primary and must be exhausted before implicating any Permittor/MTA policy available, contractor's and subcontractor's policies shall nevertheless be primary and must be exhausted before implicating any Permittor/MTA policy available. Except for Professional Liability, policies written on claims made basis are not acceptable. At least two (2) weeks prior to the expiration of the policies, contractor shall endeavor to provide evidence of renewal or replacement policies of insurance, with terms and limits no less favorable than the expiring policies. Except as otherwise indicated in the detailed coverage paragraphs below, self insured retentions and policy deductibles shall not exceed \$100,00, unless such increase deductible or retention is approved by Permitto/MTA. The Permittee shall be responsible for all claim expense and loss payments within the deductible or self insured retention. The insurance monetary limits required herein may be met through the combined use of the insured's primary and umbrella/excess policies.

- (d) Certificates of Insurance may be supplied as evidence of policies of the above policies, except for Policy (D) Railroad Protective Liability. However, if requested by the Permittor, the Permittee shall deliver to the Authority within forty-five (45) days of be request, a copy of such policies, certified by the insurance carrier as being true and complete. The Railroad Protective Liability Insurance Policy must be provided, ACORD or Manuscript form, pending issuance of Original Policy. The Original Policy must be submitted to MTA RIM within thirty (30) days of the Binder Approval.
- (e) If a Certificate of Insurance is submitted, it must: (1) be provided on the Permittor Certificate of Insurance Form of MTA Certificate of Insurance From for Joint Agency Agreements; (2) be signed by an authorized representative of the insurance carrier or producer and notarized; (3) disclose any deductible, self-insured retention, sub-limit, aggregate limit or any exclusions to the policy that materially change the coverage; (4) indicate the Additional Insureds and Named Insureds as required herein, along with a physical copy of the Additional Insured Endorsement (ISO) Form CG 20 26 07/04 version or equivalent) as applicable and the endorsement(s) must include policy information; (5) reference the Contract number on the face of the certificate; and (6) expressly reference the inclusion of all required endorsements.
- (f) The minimum amounts of insurance required in the detail description of policies (A), (B), (C), and (D) above shall not be construed to limit the extent of the Permittee's liability under this Agreement.
- (g) If, at any time during the period of this Agreement, insurance as required is not in effect, or proof thereof is not provided to the Permittor, the Permittor shall have the options to: (i) direct the Permittee to suspend work or operation with no additional cost or extension of time due on account thereof; or (ii) treat such failure as an Event of Default.

(C) NYC TRANSIT CURRENT AND FUTURE PROJECTS

The Contractor is notified of the following:

- (1) The following subway lines are within the area of this project:
 - (a) The IND 6th Avenue Line F & G Train is running above 9th Street

DATED APRIL 9, 2018

(2) The Contactor can obtain NYC Transit Structural Drawings by contacting Mr. Chenthitta Gopalakrishnan at (646) 252-3614.

The Contractor shall also obtain from Mr. Vasanth K. Battu the following Drawing showing Power Engineering Activities for the area of this project:

- Drawing No. P-687 Duct Assignment Vicinity of Node NF 23 and Fourth Ave Station -Smith St. Line - IND-Brooklyn
- Drawing No. P-688 Duct Assignment Between Nodes NF 23 And NF 22 Smith Street Line – IND Brooklyn
- (3) The project might have an impact at the following stations:
 - (a) Smith-9th Street Station for the IND F Train 6th Avenue Line

Should it become necessary to close any of the entrances for the above station, see Note No. 14.35 from the General Notes that are made part of the contract drawings.

(4) The following tables showing NYC Transit's current and planned projects that may impact and/or interfere with this project might require the Contractor to coordinate construction work with NYCT contractors. These tables are for information only:

Smith 9th Street Station/Sixth Avenue Line - IND/Brooklyn

Contract	Project Title	Design Manager/ Telephone No.	Construction Manager/ Telephone No.	Resident Engineer/ Telephone No.
MW49- 5926 C42000	Elevated Struct RehabViaduct PH3: Undrside/CUL	L. Powerman (646) 252-4569	C. Delgado (646) 210-3699	A. Norouzi (917) 299-3738
MW18- 7394 E33841	7394 TL: 4 Av-Church	J. Payyapilli (646) 252-3329	M. Maddela (646) 252-3975	E. Alvaro (646) 252-3682
ST07- 6401 A35994	Station Rehab Rehab: Smith – 9 th Sts/PRP	D. Foell (646) 252-4317	C. Velenovsky (718) 643-1954	C. Velenovsky (718) 643-1954
MW38- 5926 S32745	926 Interlock: 4 2745 Av/CUL W49- Elevated Structure 926 Rehab	L. Powerman (646) 252-4569	C. Delgado (646) 210-3699	A. Norouzi (917) 299-3738
MW49- 5926 C34763		L. Powerman (646) 252-4569	C. Delgado (646) 210-3699	N/A
MW18- 6980 E33833	Tunnel Lighting TL: 4 th Ave-Church EXP/CUL	J. Payyapilli (646) 252-3329	Y. Shukla/ (646) 252-3690	E. Alvaro (646) 252-3682

- (5) 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 the Traffic Stipulations (eight (8) pages) that are attached to the end of this SW-PAGES, and as directed by the Engineer.

- (6) Refer to Subsection 40.02.15 Disposal of Water from Trenches, Page IV-9: Add the following to Subsection 40.02.15:
 - (A) The Department of Design and Construction has <u>not</u> filed application for Dewatering Permit with the New York State Department of Conservation (NYSDEC), under the Environmental Conservation Law (ECL), Title 15 of Article 15, for a Temporary Well Point System Permit. However, it is anticipated that the criteria for rate of pumping specified here before in this section will be exceeded in areas of construction; the Contractor shall be responsible for applying and obtaining the necessary dewatering permit prior to the dewatering of trenches within the scope of this project.

As part of the permit application the Contractor will be required to comply with all the requirements of **Section 40.14** of this SW-PAGES.

Copies of all materials submitted to NYSDEC shall be sent to the New York City Department of Design and Construction (NYCDDC), Infrastructure/Design.

The following minimum requirements set forth by the New York Department of Environmental Conservation shall be complied with prior to the start of work in areas of construction requiring dewatering permit:

- (1) An analysis must be made of water samples taken. The results are to be submitted to the Regional Permit Administrator. An analysis shall be made for Biological Oxygen Demand (BOD), salinity, oil, and grease. The samples shall be analyzed by a laboratory certified by the New York State Health Department and the results are to be submitted directed to the New York State Department of Environmental Conservation by the laboratory.
- (2) Prior to setting any wells, well points or header pipes, the Contractor shall submit to the NYSDEC a layout of the complete dewatering system including the location of the discharge point. When permitted by the NYSDEC, discharge of groundwater on the beach areas shall be done in such a manner as to eliminate any erosion or siltation and will require the installation of splash blocks and/or settling basins.

The Contractor is advised that all items required in obtaining a permit, must be submitted to, and approved by the NYSDEC prior to the commencement of any work in areas of construction requiring dewatering permit. No payment for any item of work will be made, and no shop drawing shall be approved for the areas of construction until such time that a written approval is obtained from the NYSDEC.

(B) The Contractor is advised that all work shall be governed by the provisions and requirements of the obtained permit, and their said provisions and requirements shall be made a part of the contract and the Contractor shall be responsible for strict adherence thereto.

The cost of all work required for applying, complying and obtaining required dewatering permits including the cost for any required updating of permits shall be deemed included in the prices bid for all item of this contract. No additional or separate payment will be made for any work required in order to comply with these requirements.

(7) Refer to Page IV-34:
Add the following new Section 40.14:

SECTION 40.14 DEWATERING PERMITS

PROJECT ID.: SEK20068

40.14.1 DESCRIPTION

Under this contract, and at locations where groundwater will be present in the trenches and excavations, the Contractor is required to install, maintain and operate a temporary dewatering system of sufficient size and capacity to control ground and surface water flow into the excavation and to allow all work to be accomplished in the "dry condition".

The Contractor shall be required to obtain the following permits in order to operate a temporary dewatering system.

- (A) A Dewatering/Discharge Permit from the New York City Department of Environmental Protection (NYCDEP);
- (B) A Long Island Well Permit from the New York State Department of Environmental Conservation (NYSDEC), under the Environmental Conservation Law (ECL), Title 15 of Article 15, implemented by 6NYCRR Part 601 Water Supply and Part 602 Long Island Well. This permit is required only in the Boroughs of Brooklyn and Queens to withdraw water using a well point or deep well system where the total capacity of such well or wells is in excess of 45-gallons per minute (or 64,800-gallons per day); and,
- (C) An Industrial State Pollutant Discharge Elimination System (SPDES) or a Non-Jurisdictional Determination Letter in compliance with Title 8 and 7 of Article 17 of the Environmental Conservation Law of New York State, respectively.

The Contractor is advised that the provisions and requirements of the aforementioned permits shall govern all work, and the said provisions and requirements are hereby made a part of the sewer contract and the Contractor shall be responsible for strict adherence thereto.

No dewatering work shall commence until the above-mentioned Permits have been obtained for this project.

The Contractor is advised that in order to comply with all the permits requirements, the Contractor will be required to submit maps, test data, etc. prior to the start of work. In order to expedite the processing of the permit and its requirements, the Contractor shall be required to obtain the services of an independent Environmental Scientist as herein described below in **Subsection 40.14.2** to perform this work and act as liaison with NYSDEC and NYCDEP.

40.14.2 QUALIFICATIONS

The Environmental Scientist utilized to perform the work required under this section must have adequate experience in work of this nature (obtaining Long Island Well Permit/Dewatering Permit) and must have previous experience in working with the NYSDEC and the NYCDEP, designing equivalent dewatering systems, and have successfully obtained the type of permits required under this contract. Prior to the start of work, the Contractor will be required to submit the name and resume of the Environmental Scientist for approval.

40.14.3 NYSDEC DEWATERING PERMITS

The dewatering system shall be designed by the Environmental Scientist using accepted and professional methods of design and engineering consistent with the best modern practices.

The material to be submitted shall include, but not be limited to the following:

(1) Site Plan - Scaled, showing construction activity (e.g. excavation, pathway of the pipe, new outfalls, etc.) locations of well points, header pipes and pumps, and all staging and storage areas.

Also included herein shall be a layout of the complete dewatering system including the location of the discharge point. When permitted by the NYSDEC, discharge of groundwater on beach areas shall be done in such a manner as to prevent any erosion or siltation and will require the design and installation of splash blocks and/or settling basins.

- (2) Dewatering System Specifications:
 - (a) Number of Well Points
 - (b) Diameter of Well Points
 - (c) Spacing of Well Points
 - (d) Length to Screen
 - (e) Depth to Bottom of Screen
 - (f) Static Water Level
 - (g) Drawdown Required

- (h) Total Volume Pumped
- (i) Number of Pumps
- (i) Capacity of Pumps
- (k) Duration of Pumping
- (I) Initial and Average GPM
- (m) Estimated Daily Pumpage
- (n) Flow Meter
- (3) Cross Section Scaled, showing well points, riser, header, annular material (if used) and other equipment associated with each point. A typical construction style drawing may be utilized. Should the Contractor be permitted to use a deep well system, all information regarding it must be submitted.
- (4) Drawdown Contour Map Based upon a review of the surrounding area affected by the dewatering and upon boring within the project area and characteristics of the soils, the depth and pumping rate of dewatering system and the duration of the pumping, the Environmental Scientist shall submit both a narrative and diagram showing the anticipated maximum cone of depression which shall be shown from both above and in cross section on scaled diagrams. Contour lines on diagrams shall be labeled to show depth from land surface.
- (5) Description of Site and Adjacent Areas A short narrative shall be prepared describing the land use in the area paying attention to any potential sources of groundwater contamination that may migrate into the well's cone of depression, such as gas stations, chemical plants, wrecking yards, sanitary landfills, etc. Latest map of the area shall be included in the narrative.
- (6) Groundwater Analysis The Environmental Scientist shall develop and submit a sampling and analysis program subject to NYSDEC Approval (a minimum of one groundwater sample from a site well shall be collected and analyzed). A laboratory certified by the New York State Health Department shall analyze the samples. The sampling and analysis program must include but is not limited to the following:

NYSDEC REGION 2 - DEWATERING PROJECTS SAMPLING INFORMATION

NO.	PARAMETERS	TYPE	EPA METHOD	DETECTION
1	рН	Grab	150.1	EPA min
2	Temperature	°F	After Pumping	EPA min
3	Fecal Coliform	Grab	5-Tubes/3-Dilutions	2-MPN/100-ml
4	Oil & Grease	Grab	413.1	EPA min
5	BOD5	Grab	405.1	EPA min
6	Total Suspended Solids	Grab	160.2	EPA min
7	Settleable Solids	Grab	160.5	EPA min
8	Chlorides	Grab	325.1-325.3	EPA min
9	Benzene	Grab	602	EPA min
10	Toluene	Grab	602	EPA min
11	Xylenes	Grab	602	EPA min
12	Ethylbenzene	Grab	602	EPA min
13	PCB's	Grab	608	(See Note 1)
14	Pesticides	Grab	608	EPA min
15	13 Priority Metals	Grab	200 series	EPA min
16	Acids Base/Neutrals	Grab	625-GC/MS	EPA min
17	Halogenated Volatiles	Grab	601-GC	EPA min
18	Nitrate/Nitrite	Grab	300 or 353.3	EPA min
19	Aromatic Volatiles	Grab	602-GC	EPA min
20	Cyanide (total or amenable)	Grab	335.1/335.2	EPA min

NOTE:

(1) List each individual aroclor found and report the concentration of each aroclor tested. Use the N.Y.S. detection limit, which is 0.065-µg/l.

Small dewatering projects with a total estimated pumped volume up to 15-Million Gallons (MG) require sampling analysis for parameters No.'s 1 through 12.

Medium dewatering projects with a total estimated pumped volume between 15-MG and 60-MG require sampling analysis for parameters No.'s 1 through 14.

Large dewatering projects with a total estimated pumped volume greater than 60-MG require sampling analysis for parameters No.'s 1 through 20.

Samples are to be collected after development of the well by a licensed well driller.

A laboratory certified by the NYS Department of Health must conduct all testing.

Irrespective of the aforementioned sampling requirements based on total estimated pumped volumes, the Department may require sampling of additional parameters if the proposed dewatering site is suspected of being contaminated.

40.14.4 SUBMISSION OF DEWATERING PLAN

The Environmental Scientist will be required to submit two (2) copies of the Dewatering Plan (together with all reports, materials, designs, drawings, maps and plans) to the Infrastructure Engineering Support Unit for review and approval. Once approved the Environmental Scientist shall submit in triplicate the Final Dewatering Plan to both the NYSDEC and the NYCDEP. The Dewatering Plan should be bound

and bear the name of the Contractor, NYSDEC Application Number and the Signature of the preparer. All drawings and maps shall be on sheets 27-inches by 40-inches and to scale not less than 1"=30'.

40.14.5 **DAMAGES**

The Contractor shall be responsible for and shall repair at no cost to the City any damage caused by inadequate or improper design and operation of the dewatering system, and any mechanical or electrical failure of the dewatering system.

40.14.6 SYSTEM REMOVAL

The Contractor shall remove all dewatering equipment and temporary electrical service from the site. All wells shall be removed or cut off a minimum of three (3) feet below the final ground surface and capped. Holes left from pulling wells or wells that are capped shall be grouted in a manner approved by the Engineer.

40.14.7 PAYMENTS

No additional or separate payment will be made for any work described herein. The costs for all labor, materials, equipment, permit fees, samples, tests, reports, services and insurance required or necessary to perform all the work described herein shall be deemed included in the price bid for all items of work.

(8) Refer to Page IV-34:
Add the following new Section 40.15:

SECTION 40.15 OUTFALL PERMITS

40.15.1 DESCRIPTION

Under this contract, at location(s) where outfall(s) are being constructed, and where work is being performed within area(s) of tidal wetlands, the Contractor shall be required to comply with the following permits while performing outfall work within navigable waters and/or work within tidal wetland areas.

- (A) A Protection of Waters Permit from the New York State Department of Environmental Conservation (NYSDEC), under the Environmental Conservation Law (ECL), Title 5 of Article 15, implemented by 6NYCRR Part 608 - Protection of Waters: (i) For the Excavation and Fill In Navigable Waters; and, (ii) Part 401 - Water Quality Certification; and,
- (B) A Tidal Wetlands Permit from the New York State Department of Environmental Conservation (NYSDEC), under the Environmental Conservation Law (ECL), Article 25, implemented by 6NYCRR Part 661 Tidal Wetlands,
- (C) A Department of The Army Permit from the U.S. Army Corps of Engineers, under Code of Federal Regulations, Title 7 - Outfall Structures and Associated Intake Structures, implemented by: (i) Section 10 of the Rivers and Harbors Act; (ii) Section 404 of the Clean Water Act; and,
- (D) A Department of The Army Permit from the U.S. Army Corps of Engineers, under Code of Federal Regulations, Title 33 Temporary Construction, Access, and Dewatering, implemented by: (i) Section 10 of The Rivers and Harbors Act; and, (ii) Section 404 of the Clean Water Act; and,
- (E) A Coastal Consistency Concurrence Certification from the New York State Department of State (NYSDOS).

To expedite the Permit process, the Department of Design and Construction has filed a joint application for (A), (B), (C), (D) and (E) above. As the application is being processed it shall be the Contractor's responsibility to comply with the requirements of the said permits. The Application ID number will be provided to the Contractor at the Preconstruction meeting.

The Contractor is advised that the provisions and requirements of the aforementioned permits shall govern all work, and the said provisions and requirements are hereby made a part of the sewer contract and the Contractor shall be responsible for strict adherence thereto.

No work shall commence until the above-mentioned Permits have been obtained for this project, and a copy of each permit transmitted to the Engineer.

The Contractor is advised that in order to comply with all the permits requirements, the Contractor will be required to submit maps, test data, etc. prior to the start of work. In order to expedite the processing of the permit and its requirements, the Contractor shall be required to obtain the services of an independent Wetland Specialist and, if required, an Environmental Scientist as herein described below in **Subsection 40.15.2** to perform this work and act as liaison with NYSDEC and NYCDEP.

40.15.2 QUALIFICATIONS

The Wetland Specialist and/or Environmental Scientist utilized to perform the work required under this section must have adequate experience in work of this nature (obtaining Protection Of Waters, Tidal Wetlands and Department Of The Army Permits) and must have previous experience in working with the NYSDEC and the NYCDEP and have successfully obtained the type of permits required under this contract. Prior to the start of work, the Contractor will be required to submit the name and resume of the Wetland Specialist and/or Environmental Scientist for approval.

40.15.3 NYSDEC PERMITS

The Wetland Specialist and/or Environmental Scientist shall prepare and submit all appropriate data and perform tasks as specified and required by the NYSDEC and/or Army Corps of Engineers.

The data to be prepared and submitted and the tasks to be performed shall include, but not be limited to the following:

- (1) The Wetland Specialist shall flag/stake the limits of the wetlands. These boundary locations are to be surveyed and plotted on a site plan whereon the adjacent areas shall then be drawn using the regulated wetland limit as a baseline. This site plan shall depict all existing conditions including descriptions of all vegetation.
- (2) An overlay of the site plan described above depicting the Contractor's proposed construction operations, including areas of equipment and material storage, and access roads.
- (3) Development of a sedimentation and erosion control plan including the location and specification for installing hay bales and siltation fencing between the construction right-of-way, staging areas, stockpiled materials and wetland adjacent areas.
- (4) Plans and specifications for the restoration/revegetation of all disturbed wetlands and regulated adjacent areas impacted by the Contractor's operations.
- (5) Upon completion of sewer, outfall and other related work on this project, the Contractor shall commence with the restoration/revegetation plan. All planting and revegetation shall be done under the supervision of the Wetland Specialist.
- (6) Should dewatering be required within the project area information regarding all dewatering activities must be submitted to and approved by NYSDEC in accordance with **Subsection 40.02.15**.
- (7) Wherever dewatering is extensive or of long duration and the cone of depression will extend to wetland areas the Wetlands Specialist shall develop and implement a program to monitor

groundwater levels in the wetlands (e.g. install hand driven well points) and surface water levels in water bodies. Prior to construction, the Wetlands Specialist shall gather information on any rare, endangered or threatened species and base-line data on existing vegetation and wildlife. Monitoring of these parameters shall continue throughout the construction to assure no adverse impacts to habitat within wetlands and water bodies from dewatering.

(8) The Wetland Specialist shall also submit a plan for mitigation should the monitoring of wetlands reveal any adverse effects to vegetation, etc.

40.15.4 SUBMISSION OF REPORT

The Wetland Specialist and/or Environmental Scientist will be required to submit two (2) copies of a Report (together with all appropriate data, maps, site plans and surveys, mitigation plan, reports, materials, designs and drawings) to the Infrastructure Engineering Support Unit for review and approval. Once approved the Wetland Specialist and/or Environmental Scientist shall submit in triplicate this report to both the NYSDEC and the NYCDEP. The Report should be bound and bear the name of the Contractor, NYSDEC Application Number and the Signature of the preparer. All drawings and maps shall be on sheets 27-inches by 40-inches and to scale not less than 1"=30'.

40.15.5 **DAMAGES**

The Contractor shall be responsible for and shall repair at no cost to the City any damage caused to the outfall location(s) and tidal wetland areas by inadequate or improper designs and construction operations by the Contractor.

40.15.6 AREAS TO BE LEFT CLEAN

The Contractor shall remove all material and equipment from the outfall location(s) and area(s) of tidal wetlands after completion of work at the site(s). The locations and areas shall be left in a clean and neat condition in accordance with the requirements and directions of the Engineer, the NYSDEC and the Army Corps of Engineers.

40.15.7 PAYMENTS

No additional or separate payment will be made for any work described herein. The costs for all labor, materials, equipment, permit fees, samples, tests, reports, services and insurance required or necessary to perform all the work described herein shall be deemed included in the price bid for all items of work.

SECTION 51.61R OUTFALL STRUCTURES WITH ABUTMENT AND BRIDGE RESTORATION

51.61R.1 DESCRIPTION

The outfall structures with abutment and bridge restoration shall be constructed of the sizes and dimensions and to the lines and grades and within the limits of payment as shown, specified and ordered. a All work necessary from the face of outfall No 2 to chamber No 3 included but not limited to bridge structure, abutment, furnishing, delivering and laying pipe, installing granite walls and all necessary incidentals in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

51.61R.2 MATERIALS

(A) Concrete used for outfall structures with abutment and bridge restoration (including headwalls, reinforced concrete sewer outfalls, cradles and encasements, chambers, manholes and catch basins) shall comply with the requirements of **General Specification 11 -Concrete, as modified in Section 23.01**; and,

shall contain entrained air of six percent (6%), and a corrosion inhibitor. The corrosion inhibitor shall consist of a calcium nitrite solution, containing 30 ±2% calcium nitrite solids by weight and having a specific gravity of 1.27 ±0.02. The corrosion inhibitor when used in the manufacturing process shall not produce a significant amount of chloride ions in the final product (less than 1,000-ppm). The ph shall be greater than 8. The admixture shall not contain chemicals that produce a condition injurious to the quality and durability of the concrete or reinforcing steel. The corrosion inhibitor must be added to the mix immediately after air entraining and retarding admixtures have been introduced into the batch. Acceptance of calcium nitrite based corrosion inhibitor shall be based upon it being listed in the most current New York State Department of Transportation's "Approved List of Calcium Nitrite Based Corrosion Inhibitors".

- (B) Reinforcement shall comply with the requirements of **General Specification 11 -Concrete, as modified in Section 23.01**.
- (C) Structural steel shall comply with the requirements of Section 23.05.
- (D) The cement used for outfall structure (including headwalls and reinforced concrete sewer outfalls) shall be Type-V cement. (This shall not include cement for concrete cradles and encasements, chambers, manholes, catch basins and precast reinforced concrete pipes for sewers, such cement shall be Type-II.)

In lieu of Type-V cement, the Contractor will be permitted to utilize Type-II cement with the addition of seven and one-half percent (7-1/2%) Micro Silica Fume. Types of additives utilized must have been previously approved by New York State Department of Transportation.

- (E) Reinforced concrete sewers, precast reinforced concrete pipe sewers, vitrified pipe sewers and ductile iron pipe sewers shall comply with the requirements of **Sections 50.11, 50.21, 50.31 and 50.41**, respectively, except as otherwise amended in the plans and specifications.
- (F) Chambers, manholes, drop-pipe manholes, catch basins and catch basin connections shall comply with the requirements of **Sections 51.11, 51.21, 51.31, 51.41 and 52.11**, respectively, except as otherwise amended in the plans and specifications.
- (G) Boulders shall be clean natural stones. Recycled material will not be permitted. The shape of stones shall be such so as to provide a consistent pattern that provides for a minimum of voids between all adjacent stones. Stones shall be seven hundred (700) pounds in nominal weight. (The absolute minimum weight of stone that will be accepted shall be five hundred (500) pounds.)
- (H) Tide gates shall be stainless steel low-flow flap gates as manufactured by H. Fontaine Ltd., or approved equivalent. Tide gates shall consist of: Stainless steel for flaps and frames, and thimbles when required shall be in accordance with ASTM A240 Type 316L; Bolts, studs, nuts and anchor bolts shall be in accordance with ASTM A276 Type 316, and ASTM F593 and F594 GR2 for Type 316; Hinges shall consist of stainless steel pin and have Ultra-High Molecular Weight Polyethylene (UHMWPE) bushings in accordance with ASTM D4020; and, Seals shall be made of Ethylene Propylene Diene Terpolymers (EPDM) in accordance with ASTM D2000.
- (I) Steel Sheet Piling shall comply with the requirements of ASTM A690, and with the applicable sections of **Section 24.01** as determined solely by the Engineer.
- (J) Composite Sheet Piling shall be manufactured entirely from a glass fiber reinforced polymer composite that meets or exceeds the characteristics listed in this specification. All sheet piling shall be wholly and completely manufactured in an ISO certified production facility, and shall conform dimensionally to ASTM D3917; and conform to ASTM D4385, Level I for all criteria except for the following, which shall conform to Level II:
- (a) Die Parting Line
- (b) Exposed Underlayer
- (c) Fiber Prominence
- (d) Grooving
- (e) Inclusion

- (f) Internal Shrinkage Cracks
- (g) Saw Burn
- (h) Stop Marks

(K) Permeation Grouting

K.1.01. Scope of Work

A. The work covered by these specifications consists of furnishing all materials, equipment, labor, and supplies required for the subsurface injection of a grout as specified herein.

K.1.02. Qualifications

A. The entity that will perform the subsurface permeation grouting must have, within the last five (5) consecutive years prior to the bid opening, successfully completed in a timely fashion at least three (3) projects similar in scope and type to the required work. The entity must submit a list of projects where it has performed subsurface permeation grouting under similar conditions.

K.1.03. Method and Extent of Work

- (A) The work consists of injecting a cement grout by means of controlled pressure, through grout casings drilled into the old concrete abutment beneath the existing eastern approach slab of the 9th Street Bridge over the Gowanus Canal in Brooklyn, NY.
- (B) The objective of the grout injection is, firstly, to stabilize rubble and loose material within the abutment to enable an approximately 7-ft wide by 10.5-ft deep excavation to be made through the abutment; and, secondly to prevent excessive groundwater ingress during said excavation.
- (C) The Contract Drawings define the areas where the grouting work is to take place. The Contractor shall develop a suitable Grouting Plan to achieve the objectives outlined in Section K1.03.B by grouting these areas.
- (D) At least seven days after the completion of the grouting, the Contractor or his subcontractor shall take three core samples drilled within the work area at locations to be shown on the Grouting Plan and based on information in the Contract Drawings, or as otherwise directed by the Engineer, to verify the effectiveness of the grouting operations. The boring contractor, under the direct supervision of the Engineer, shall take the Core Samples in increments no greater than 5-ft to an approximate depth of 13.5-ft below the existing ground surface. Recovered cores shall be stored in 5-ft core boxes, provided by the boring contractor. The cores shall be delivered to the Engineer.

K.1.04 Special Conditions

- (A) The Contractor shall visit the site and be thoroughly familiar with all existing conditions.
- (B) The Contractor shall take special care so as not to heave the existing abutment, roadway or adjacent street pavements, or damage any neighboring structures during the work. Should evidence of heave or damage become apparent, it shall be brought to the attention of the Engineer immediately who may direct the Contractor to stop his grouting operation. However, the sole responsibility for the protection of the abutment, roadway, sidewalks, neighboring structures, underground utility pipes and such, shall be that of the Contractor. Any repairs to damage of the abutment, roadway, sidewalks, utilities and neighboring structures or their contents shall be the responsibility of the Contractor. Said repairs may include, but not be limited to, cleanup of any grout spills or eruptions inside buildings, structures, sewer structures, or utility pipes.

The Engineer and his representatives shall at all times have access to the work. Drilling of the grout casings and injection of grout material shall be in accordance with the requirements of these specifications, following the Grout Plan to be approved by the Engineer and under the direct supervision of the Engineer, or his representative on the site. However, this shall in no way relieve the Contractor of his responsibility for performing his work carefully, as may be required or directed, as specified in the paragraph above.

K.1.05. Submissions

(A) GROUT PLAN. The contractor shall submit for approval by the Engineer, a detailed grout plan indicating grout hole locations, depths, inclinations (where applicable), numbering, sequencing, grout pressures and rates, grout take limits to be used, termination criteria for each grout increment and anticipated grout bulb at each grout hole. Grout plans shall include nearby utilities. The grout plan shall be stamped and sealed by a New York State Professional Engineer.

- (B) EQUIPMENT AND GROUT PLACEMENT PROCEDURES. The Contractor shall submit for approval by the Engineer, a detailed description of the equipment and grout placement procedure he intends to use, including grout casings, mixer, injection pump, pressure gauges, grout material, etc., and typewritten procedures describing the exact sequence of installation.
- (C) MONITORING PLAN. The Contractor shall submit for approval by the Engineer, a detailed typewritten monitoring plan to measure movement and vibrations. Movement shall be measured at the monitoring locations shown in the Contract Drawings. The plan shall include, but not be limited to, the following: (1) names and numbers of monitoring personnel; (2) optical survey instruments or electronic measuring devices to be used to monitor movements (3) electronic devices used to monitor vibrations and their location (4) recording and reporting procedures including frequency of monitoring movement must be monitored at least three times per day.
- (D) SOURCE, KIND AND QUALITY OF MATERIALS. The Contractor shall submit for approval the source, kind and quality of the cement and aggregates to be used in the work along with proportions to be used for the cement grout mix. The approved formula shall not be changed without written permission of the Engineer. The approval of materials shall not preclude subsequent withdrawal of such approval in case of development of quantities objectionable to the Engineer.
- (E) CHECK CORE SAMPLES. The Contractor shall submit the name of the boring contractor and a description of the drilling equipment he intends to use to drill the three core samples.
- (F) DELIVERY OF SUBMISSIONS. All submissions shall be delivered to the Engineer no later than 5 working days from the date of notification of contract award. If requested, the Contractor shall provide additional clarification or make changes to his submissions, at no additional cost to the City.

Once a submission has been approved, no change shall be made to it without the written permission of the Engineer.

MATERIALS

K.2.01. Cement Grout

- (A) The Contractor shall design a grout mix, to be approved by the Engineer, capable of achieving the objectives outlined in Section 1.03.B following the approved Grouting Plan. The approved formula shall not be changed without the written permission of the Engineer. The approval of materials shall not preclude subsequent withdrawal of such approval in case of development of quantities objectionable to the Engineer. The laboratory shall be approved by QACS and accredited by AASHTO re: source for all testing performance.
- (B) Grout mix shall have a minimum compressive strength of 4,000psi to match the existing abutment.
- (C) Cement shall be Portland cement conforming to all of the requirements of ASTM C150 for Portland cement, Type I or Type II or approved equal. When weighted in a conventional manner, Portland cement shall weigh not less than 94 pounds per cubic foot.
- (D) Cement furnished shall be in cloth or paper bags and clearly labeled as to type and manufacturer. A sufficient quantity of cement shall be stored near the work site to ensure that the grouting operations will not be delayed by shortage of cement. In the event the cement is found to contain lumps or foreign matter

of a nature and in amounts that, in the opinion of the Engineer, may be deleterious to the grouting operations, screening through a Standard 100-mesh screen may be required. No additional payment will be made for such screening.

- (E) Water used shall be from New York Mains.
- (F) Admixtures for reducing water, accelerating set, reduce grout bleed etc. may be used in accordance with manufacturer's recommendations as shown on the approved mix design.
- (G) Cement, aggregates or admixtures that fail to meet the requirements of these specifications shall not be incorporated into the work.

K.2.02. Grout Casings

(A) The Contractor shall select grout casings capable of achieving the objectives outlined in Section K.1.03.B, following the approved Grouting Plan.

K.2.03. Grout Plant and Equipment

(A) The Contractor shall select plant and equipment capable of achieving the objectives outlined in Section K.1.03.B and in accordance with approved documentation detailed in Section K.1.05. Mixes shall be of the colloidal type and shall be a double drum where one batch can be mixing while the second batch is being pumped.

EXECUTION

- K.3.01. Storage and Handling of Materials and Equipment
- (A) Unless otherwise specified, all materials shall be new and of the specified quality. Materials shall be delivered in the manufacturer's original sealed containers with complete identification of contents of the manufacturer, and kept sealed in the original containers until used.
- (B) The Contractor shall confine his apparatus, store his materials and limit the operations of his workmen to work areas approved by the Engineer.
- (C) The Contractor shall ensure proper delivery and material handling to prevent contamination, segregation or damage to materials. Cement shall be stored in a manner that will permit easy access for inspection and identification of each shipment.

K.3.02. Installation of Grout Casings

- (A) The grout casings shall be drilled to a depth of approximately 13.5-ft below the existing ground surface. Grout casings shall be drilled using a method approved by the Engineer during the submittal phase. The use of compressed air shall not be allowed. Grout casings which fail to reach the specified depth shall be re-drilled as directed by the Engineer.
- (B) Additional grout casing locations may be required during the course of the work as deemed necessary by the Engineer.
- (C) Grout casings shall be installed in such a manner as to ensure that a tight seal is made between the ground and the outer surface of the pipe to prevent grout from escaping up the outside of the grout pipes.

K.3.03. Grout Placement

(A) The Contractor shall inject the cement grout through the grout casings at the rate and pressures shown on approved the Grouting Plan, unless otherwise directed by the Engineer. Grouting shall be undertaken in three phases, numbered (and undertaken) in ascending order, as outlined in the Contract Documents. Grout injection pressures may have to be reduced, as directed by the Engineer, to prevent excessive grout volumes or so as not to damage existing piles, pipes, vaults or other underground

DATED APRIL 9, 2018

structures. While the grout is being injected, the grout casings shall be retracted out of the ground by jacking in one-foot increments until the bottom of the grout casings are raised to the upper grout extent for the given grouting phase shown on the Contract Drawings. At that point the grouting shall stop and the grout casings shall be completely retracted out of the ground. Jacking to the next increment shall only be initiated when the previous increment has met the termination criteria detailed in the approved Grout Plan. Termination criteria shall include, but not be limited to, grout pressure and maximum grout volume per increment.

- (B) The grout shall be injected in such a manner and sequence so as to fill any void within the targeted grout area shown on the Contract Drawings, and stabilize any voids and loose zones within this area.
- (C) Extreme caution shall be exercised to prevent lifting of the abutment, roadway, sidewalks, neighboring structure. Grout injection pressures may have to be reduced to prevent lifting or eruptions of grout. The Contractor shall continuously monitor pavement surfaces located adjacent to the grout holes being grouted. Optical survey instruments or electronic measuring devices shall be used to measure movements at least three time per day, as shown in the Contract Drawings and as approved by the Engineer.
- (D) The Contractor shall take special care so as not to endanger or damage the existing buildings, structures, utilities, etc., that border the site. The Contractor shall have a sufficient number of monitoring personnel during the grouting operations.
- (E) Protection of pavements, foundation walls, floor slabs, underground utilities, and such, shall be the sole responsibility of the Contractor. Repair of damaged pavements or structures or their contents shall be the responsibility of the Contractor, including cleanup of any grout spills or eruptions inside the buildings, subway structures, sewer structures, and utility pipes.
- (F) Accurate records shall be kept of grout mix proportions, grout hole location, the actual sequence of grouting operations, surface elevation, depth driven, inclination, grout depth, start and stop times, grout take at each increment including times and pressures, total grout take, reason for grout completion and any observations. This information will be recorded by the Contractor and delivered to the Engineer at the completion of work.
- (G) During grout placement at least one set of test cubes (minimum six cubes) shall be taken for each batch of grout. Brass holds must be used for all placing and testing of grout cubes and not be removed for a minimum of twelve (12) hours.

K.3.04. Protection

(A) The Contractor shall at all times work in such a manner as to prevent dust and other particles from rising during the drilling operations. The Contractor shall eliminate the creation of dust, or allow any grout constituent particles to be blown into the air or accumulate on the ground during the mixing and grouting operations.

K.3.05. Restoration

(a) At the completion of work, the Contractor and boring subcontractor shall leave the surface free of debris and in the condition it was found; taking all equipment, tools, hoses, barriers, cones, etc. with him off the site at the completion of the grouting and coring operations. Core sample locations shall be backfilled with cement grout.

K.3.06. Time of Completion

(A) The Contractor shall complete the work as described herein within forty-five (45) calendar days from commencement of grouting permeation.

K.3.07. Inspection

(A) The Contractor shall perform his work in such a manner as to allow the access for inspection by the Engineer and his representatives.

- (B) The Engineer or the Engineer's representative must be informed by the Contractor at least 3 days before grouting work is being performed.
- (C) After the subsurface injection grouting is complete, the Contractor shall take three core samples at the approximate locations shown on the Contract Drawings, or as otherwise directed by the Engineer. The cores shall be advanced to the elevation of the lower grout extent shown on the drawings. Core samples shall be taken in no more than 5-ft increments and stored in core boxes provided by the boring contractor. Core samples shall be delivered by the boring contractor to the Engineer who will use them to verify the effectiveness of the grouting program. Based on the results, the Engineer will determine the need for additional grouting.

51.61R.3 CONSTRUCTION METHOD

- (A) GENERAL -The outfall structures with abutment and bridge restoration shall be constructed "in the dry". The Contractor's means and methods of construction for the outfall structure shall be submitted, prior to the start of work, to the Engineer for written approval. The Contractor shall be required to submit plans, details and other substantiating data as necessary to establish the adequacy of the Contractor's proposed means and methods of construction. These documents shall be prepared under the direction of and be signed and sealed by a Professional Engineer licensed to practice in the State of New York.
- (B) GENERAL CONSTRUCTION PROVISIONS -The requirement of **DIVISION IV -GENERAL CONSTRUCTION PROVISIONS** shall apply to the work to be done hereunder.
- (C) The concrete for the footings, cradles, encasements, inverts, etc. shall be deposited continuously for the entire cross section and for such longitudinal distances as approved.
- (D) The concrete for the walls, headwalls, etc. shall be deposited continuously to the height, to the thickness and for such longitudinal distances as approved.
- (E) Boulder Protection Placement -Boulders are placed to prevent scour and erosion at sewer outfalls. The Contractor shall remove all debris and clean and prepare the tidal flat/existing ground, and shall excavate the existing surface to the depth required in order to install the boulder protection where shown, specified or as ordered. Boulder aprons and protections shall be placed in compliance with all permits and as shown, specified or ordered. The layer of boulders shall be placed in order to obtain a minimum of voids between stones. Dropping of boulders into place will not be permitted.
- (F) Steel Sheet Piling and Composite Sheet Piling shall be tested and installed in accordance with the manufacturer's recommendations, as directed by the Engineer, and with the applicable sections of **Section 70.11 -Piles** as determined solely by the Engineer.
- (G) Structure Excavation shall comply with the requirements of relevant subsections from Section 206 in the latest NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS (USC), except as otherwise amended in the plans and specifications.
- (H) Concrete for Structures shall comply with the requirements of relevant subsections from Section 555 in the latest NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS (USC), except as otherwise amended in the plans and specifications.
- (I) Epoxy- Coated Bar Reinforcement for Structures shall comply with the requirements of relevant subsections from Section 556 in the latest NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS (USC), except as otherwise amended in the plans and specifications.

(J) Structural Approach slab with integral wearing surface – type 1 friction shall comply with the requirements of relevant subsections from Section 557 in the latest NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS (USC), except as otherwise amended in the plans and specifications.

- (K) Removal of structural concrete and removal on concrete approach slab shall comply with the requirements of relevant subsections from Section 580 in the latest NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS (USC), except as otherwise amended in the plans and specifications.
- (L) Drilling and grouting bolts or reinforcing bars shall comply with the requirements of relevant subsections from Section 586 in the latest NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS (USC), except as otherwise amended in the plans and specifications.
- (M) All references to "DCES" in the NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS mean the "Engineer". All references to Regional Materials Engineer or Materials Engineer in the NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS mean the "Engineer."
- (N) Permeation Grouting shall comply with the specification included under section 51.61R.2 Materials, paragraph K Permeation Grouting.

51.61R.4 PRICE TO COVER

The unit price bid for item 51.61RF002 "Outfall No. 2 with Abutment and Bridge Restoration" shall be the unit price bid per outfall structure as well as the restoration of the abutment and structure and shall cover the cost of all labor, materials, plant, equipment, samples, tests and insurance required or necessary to construct the outfall structures with abutment and bridge restoration "in the dry" to the lines, grades, sizes, dimensions and within the limits of payment shown on contract drawings, including the earth excavation of all materials of whatever nature encountered (See **Section 40.03 -Earth Excavation**); all sheeting and bracing; temporary steel or composite sheet piling; reinforcement and structural steel; pumping; fluming; bridging; breaking down and filling in of abandoned sewer appurtenances; connections; maintaining flow in sewers; backfilling; fill for grade; preparation of shop drawings and all other required means and methods of construction reports and drawings; obtaining of necessary permits and special construction requirement for constructing "in the dry"; 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.

Also, included in the bid price for the "Outfall No. 2 with Abutment and Bridge Restoration" shall be the cost of all labor, materials and equipment necessary and required, within the limits of payment shown on the contract drawings, to construct permanent steel or composite sheet piling bulkheads; sewers with encasements and foundations; chambers, manholes and catch basins with foundations; headwalls and foundations; retaining walls; tide gates; bar screens (trash racks); permanent fencing; boulders for aprons and protections; all dredging required for placement of stone ballast, riprap, slope pavement aprons, boulder aprons, boulder protections, etc.; to remove all specified or ordered existing sewers, manholes, bulkheads, debris and appurtenances that may be in the line of the work in accordance with **Subsections 10.13 and 10.28** of the specifications; and all other work shown, specified or ordered. No separate payment will be made for the above work.

The unit price bid for 51.61RF002 "Outfall No. 2 with Abutment and Bridge Restoration" shall cover the cost of all labor, material and equipment required to perform all work associated with the permeation grouting. This includes, but is not limited to, the work required for driving and retracting casings in place, furnishing and injecting grout, and drilling and sampling required core samples for testing, as well as providing test results of such samples for quality control purposes. Under the discretion of the engineer, all work associated with the permeation grouting shall be done in full compliance with the requirements of this contract, including, but not limited to, the contract drawings and specifications.

Payment for the cost of furnishing and placing concrete and steel reinforcing bars required to construct Concrete Caps Top Steel or Composite Sheet Piling Bulkheads shall be made under this section.

Payment for Outfall structures with abutment and bridge restoration will be made under the Item Number:

Item No.DescriptionPay Unit51.61RF002OUTFALL NO. 2 STRUCTURE WITH ABUTMENT
AND BRIDGE RESTORATIONEACH

- (9) <u>Refer</u> to Subsection 71.41.4 Specific Pavement Restoration Provisions, Page VII-67: Add the following to Subsection 71.41.4:
 - (1) For 9th Street between Gowanus Canal bridge to 2nd Avenue, requiring new sanitary sewer and storm sewer work, the restoration shall be as follows:
 - (a) The permanent restoration from curb to curb or from edge to edge of existing roadway, shall consist of a minimum of six (6) inches of binder mixture or minimum of six (6) inch concrete base to match the existing pavement as directed by the Engineer.
 - (b) Finally an overlay of two (2) inches of asphaltic concrete wearing course shall be installed over the entire width of the roadway from **curb to curb** or **edge to edge** of existing roadway.
 - (2) For all remaining streets within the project limits, the restoration shall be as follows:
 - (a) The permanent restoration over the trench width and cutbacks only shall consist of a top course of one and one-half (1-1/2) inches of binder mixture on a base course of a minimum of four and one-half (4-1/2) inches of binder mixture, or a top course of a minimum of three (3) inches of binder mixture on a base course of a minimum of six (6) inches of high-early strength concrete, to match the existing pavement as directed by the Engineer.
 - (b) Finally an overlay of two (2) inches of asphaltic concrete wearing course shall be installed over the entire width of the roadway from **curb to curb** or **edge to edge** of existing roadway.
 - (3) The following requirements apply:
 - (a) Before the top course is installed, an additional width of asphalt beyond the edge of new base course shall be saw-cut and removed from all edges of trenches to a depth to accommodate the specified top course and the entire area restored. This additional removal shall be in accordance with paragraph (b) below.
 - (b) Pavement excavation along with saw cutting of pavements for sewer and water main trenches shall be in accordance with **Section 71.21 Pavement Excavation** of the Standard Sewer and Water Main Specifications.
 - (c) At locations requiring the installation of a concrete base course, a reflective cracking membrane shall be installed over joints prior to restoration, the cost of which shall be deemed included in the prices bid for all pavement restoration items. Additionally, appropriate pavement keys as described below shall be used.

- (d) Pavement keys **Type B-1** shall be used to insure a desired four (4) inch curb reveal (two and one-half (2-1/2) inch absolute minimum). Pavement key **Type A** shall be used in all intersections. Both keys are to be per Bureau of Highways Operations Specifications and Standard Details of Construction.
- (e) Unless otherwise specified, the cost for Proctor analyses, in-place soil density tests, tack coating, eradication of temporary roadway markings, stripping or milling of pavement keys and adjustment of city-owned castings for all roadway work shall be deemed included in the prices bid for all pavement restoration items.
- (f) Payment for placement of temporary pavement marking shall be made under Item No. 6.49 TEMPORARY PAVEMENT MARKINGS (4" WIDE).
- (g) Payment for removal of existing pavement markings shall be made under Item No. 6.53 REMOVE EXISTING LANE MARKINGS (4" WIDE).
- (h) Payment for placement of permanent pavement marking with thermoplastic reflectorized pavement markings (crosswalk and lane dividers) shall be made under Item No. 6.44 - THERMOPLASTIC REFLECTORIZED PAVEMENT MARKINGS (4" WIDE).
- (i) Payment for pavement restoration shall be made under the following items:

Item No.	<u>Item</u>	Payment Description
4.02 AF-R	Asphaltic Concrete Wearing Course, 2" Thick	(For 2" asphaltic concrete wearing course overlay from curb to curb or edge to edge.)
4.02 CA	Binder Mixture	(For binder mixture base course over trenches and cutbacks; binder mixture top filler course under asphaltic concrete wearing course when <u>no</u> overlay is required; binder mixture top course when overlay is required; binder mixture in Type A and B Keys; and binder mixture to fill in roadway depressions and to provide a leveling course prior to overlay where ordered.)
4.04 H	Concrete Base for Pavement, Variable Thickness for Trench Restoration (High-Early Strength)	(For concrete base course over trenches and cutbacks.)
4.05 AX	High-Early Strength Reinforced Concrete Pavement (Bus Stop)	(For reinforced concrete pavement at bus stops.)

D. 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 twenty-seven (27) pages plus eight (8) pages of attachments.

NO TEXT ON THIS PAGE



Department of Transportation

POLLY TROTTENBERG, Commissioner

OCMC TRAFFIC STIPULATIONS

February 23, 2015

OCMC FILE NO: CONTRACT NO:

BNEC 14-468

SEK20068

PROJECT:

CONSTRUCTION OF STORM, COMBINED SEWERS AND REPLACEMENT OF WATER MAINS AND

APPURTENANCES

LOCATION(S):

VARIOUS LOCATIONS

PERMISSION IS HEREBY GRANTED TO THE NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION 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 ABOVÉ NOTED PROJECT, SUBJECT TO THE STIPULATIONS, AS NOTED BELOW:

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 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).
- 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.
- 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 ROLITES/BUS STOPS.
- 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.
- 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 AND AWAIT DIRECTION PRIOR TO CONTINUING WORK.
- 7. METERS THE PERMITTEE SHALL NOT REMOVE OR RELOCATE PARKING METERS WITHOUT FIRST OBTAINING APPROVAL FROM NYCOOT PARKING METER DIVISION AT 718-894-8651.
- IEST 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.
- TEMPORARY PARKING REGULATIONS (PAYEMENT MARKINGS THE PERMITTEETS 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 ABUTTING PROPERTIES THE PERMITTEE SHALL COORDINATE ALL ACTIVITIES WITH ABUTTING PROPERTY OWNERS TO ENSURE ACCESS IS PROVIDED TO/FROM ENTRANCES/DRIVEWAYS AT ALL TIMES.

NYC Department of Transportation Bureau of Permit Management and Construction Control 30-30 Thomson Avenue - 2nd Floor South Long Island City, NY 11101 T: 212,639,9621 F: 718,391,3631 www.nyc.gov/dot

OCMC FILE NO:

BNEC 14-468

CONTRACT NO: PROJECT:

SEK20068

CONSTRUCTION OF STORM, COMBINED SEWERS AND REPLACMENT OF WATER MAINS

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11. <u>AUTHORIZED PARKING</u> — PRIOR TO PERFORMING WORK WHICH IMPACTS AUTHORIZED PARKING, THE PERMITTEE SHALL SUBMIT IN WRITING, AND COPY OCMC-STREETS, A REQUEST TO OCCUPY SPACE CURRENTLY USED BY AUTHORIZED VEHICLES. APPROVAL MUST BE RECEIVED FROM AUTHORIZED PARKING PRIOR TO OCCUPYING THESE AREAS.

- 12. NOTIFICATION THE PERMITTEE MUST AT LEAST TWO. (2) WORKING DAYS BEFORE THE START OF CONSTRUCTION NOTIFY THE NYC FIRE DEPARTMENT, NYC POLICE DEPARTMENT, NYCEMS, LOCAL COMMUNITY BOARD, BOROUGH PRESIDENT'S OFFICE-CHIEF ENGINEER, NYCDOT OCMC OFFICE, AND ALL ABUTTING 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

14. ENHANCED MITIGATIONS

- 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,

SPECIAL STIPULATION:

- 1. MUST COORDINATE WITH DOT BRIDGES PRIOR TO START OF ANY WORK.
- 2. STIPULATIONS ONLY APPLY FOR NYCDOT RIGHT OF WAYS: ANY OTHER APPROVALS MUST BE RECEIVED FROM OTHER AGENCIES AND/OR PRIVATE OWNER(S) WITH JURISDICTION.
- 3. IF WORK IS AFFECTING A BIKE ROUTE/LANE, CONTRACTOR MUST POST ADVANCE WARNING SIGNS PRIOR TO WORK ZONE "CONTRUCTION IN BIKE LANE AHEAD PROCEED WITH CAUTION". AND ALSO POST SIGN AT WORK ZONE "CONSTRUCTION IN BIKE LANE, PROCEED WITH CAUTION". SIGNS SHALL BE POSTED IN ACCORDANCE WITH FEDERAL MUTCO.
- 4. CONTRACTOR MUST MAINTAIN ACCESS TO DRIVEWAYS AND BUSINESS IN THE AFFECTED AREAS,
- 5. MUST COORDINATE WITH MTA BUSES.

B. MAINTENANCE AND PROTECTION OF TRAFFIC

PROJECT ID: SEK20068

CONSTRUCTION OF STORM AND COMBINED SEWERS AND APPURTENANCES

WEST 9TH STREET (9TH STREET) BETWEEN SMITH STREET AND 2ND AVENUE

2NO AVENUE BETWEEN WEST 9TH STREET (9TH STREET) AND 8TH STREET

2ND AVENUE BETWEEN 8TH STREET AND 7TH STREET

- Work hours shall be as follows: 9:00 AM to 4:00 PM, Monday Friday
- The contractor shall maintain two 10 foot travel tanes, one 10 foot lane in each direction during working hours.
- The contractor shall restore all travel lanes after working hours.
- The contractor shall maintain 5-foot clear sidewalk for pedestrians at all times

INTERSECTION OF WEST 9th STREET (9th STREET) AND SMITH STREET

INTERSECTION OF WEST 9TH STREET (9TH STREET) AND 2ND AVENUE

INTERSECTION OF 2ND AVENUE AND 8TH STREET

INTERSECTION OF 2ND AVENUE AND 7TH STREET

- Work hours shall be as follows: 9:00 AM to 4:00 PM, Monday Friday
- The contractor shall maintain on one way streets one 12 foot travel lane and on two way streets maintain
 a minimum of two 10 foot travel lanes, one 10 foot travel lane in each direction during working hours.
- The contractor must restore full width of the roadway after working hours.
- The contractor shall maintain 5-foot clear sidewalk for pedestrians at all times.

OCMC FILE NO:

BNEC 14-468

CONTRACT NO: PROJECT:

SEK20068

CONSTRUCTION OF STORM, COMBINED SEWERS AND REPLACMENT OF WATER MAINS

February 23, 2015

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CAPITAL PROJECT ID: WM-1 REPLACEMENT OF WATER MAINS AND APPURTENANCES

2ND AVENUE BETWEEN WEST 9TH STREET (9TH STREET) AND 8TH STREET

2ND AVENUE BETWEEN 8TH STREET AND 7TH STREET

- Work hours shall be as follows: 9:00 AM to 4:00 PM, Monday Friday
- The contractor shall maintain two 10 foot travel lanes, one 10 foot lane in each direction during working hours.
- The contractor shall restore all travel lanes after working hours.
- The contractor shall maintain 5-foot clear sidewalk for pedestrians at all times

INTERSECTION OF WEST 914 STREET (918 STREET) AND 240 AVENUE

INTERSECTION OF 2ND AVENUE AND 8TH STREET

INTERSECTION OF 2ND AVENUE AND 7TH STREET

- Work hours shall be as follows: 9:00 AM to 4:00 PM, Monday Friday
- The contractor shall maintain on one way streets one 12 foot travel lane and on two way streets maintain
 a minimum of two 10 foot travel lanes, one 10 foot travel lane in each direction during working hours.
- The contractor must restore full width of the roadway after working hours.
- The contractor shall maintain 5-foot clear sidewalk for pedestrians at all times.

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 PAIRS / FESTIVALS

- ALL EXCAVATIONS MUST BE PLATED WITH SKID RESISTANT PLATES.
- PLATES MUST BE RECESSED AND FLUSH WITH PAVEMENT.
- ALL PAYEMENT 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.

B. RUNNING / WALKING / BIKING EVENTS

- ALL EXCAVATIONS MUST BE BACKFILLED AND PAYED OR PLATES MUST BE RECESSED AND PAYED OVER FLUSH WITH PAYEMENT.
- ALL PAYEMENT 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 PAYED OR PLATES MUST BE RECESSED AND PAYED OVER FLUSH WITH PAYEMENT.
- FORMATION AND DISPERSAL AREA PLATES MUST BE RECESSED AND FLUSH WITH PAYEMENT (PLATES MUST BE SKID RESISTANT).
- ALL PAVEMENT DEFECTS MUST BE CORRECTED WITHIN OR ADJACENT TO THE WORK ZONE.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DEFECTS WITHIN THE IMMEDIATE VICINITY IF NYCDOT STREET & ARTERIAL
 MAINTENANCE CANNOT MAKE REPAIRS DUE TO PROJECT INTERFERENCE [AS DETERMINED BY NYCDOT].
- ALL EQUIPMENT, TRAILERS AND MATERIAL STORAGE MUST BE REMOVED.

D. MAYORAL EVENTS

- ALL EXCAVATIONS MUST BE BACKFILLED AND PAYED OR PLATES MUST BE RECESSED AND PAYED OVER FLUSH WITH PAYEMENT.
- 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.

OCMC FILE NO:

BNEC 14-468

CONTRACT NO: PROJECT:

SEK2006B

CONSTRUCTION OF STORM, COMBINED SEWERS AND REPLACMENT OF WATER MAINS

February 23, 2015

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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 PERMITTEE IS NOT AUTHORIZED TO ENTER, OCCUPY OR USE ANY PUBLICLY-OWNED OR PRIVATELY OWNED, NON-PAVED, LANDSCAPE OR NON-LANDSCAPED LOCATION WITHOUT SPECIFIC WRITTEN PERMISSION. WHEN THE LOCATION IS WITHIN THE RIGHT-OF-WAY OF A LIMITED-ACCESS ARTERIAL HIGHWAY, WRITTEN APPROVAL FROM THE NYCDOT OCMC-HIGHWAYS IS REQUIRED. WHEN THE LOCATION IS WITHIN THE RIGHT-OF-WAY OF A PUBLIC STREET OR PUBLIC PARK, WRITTEN APPROVAL FROM THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION OR NEW YORK CITY DEPARTMENT OF PARKS AND RECREATION IS REQUIRED. WHEN THE LOCATION IS WITHIN THE RIGHT-OF-WAY OF ANY OTHER JURISDICTION SUCH AS PRIVATE PROPERTY, STATE, FEDERAL ETC., IT IS THE PERMITTEE'S RESPONSIBILITY TO DETERMINE THE PROPERTY OWNER AND OBTAIN THE WRITTEN APPROVAL.
- 7. THE PERMITTEE SHALL ADHERE TO THE NYCDOT BUREAU OF BRIDGES' SPECIAL PROVISIONS FOR LANDSCAPE PROTECTION, MAINTENANCE AND RESTORATION, ITEMS 1.18.15 THROUGH 1.18.19, WHENEVER AND WHEREVER ANY OF THE PERMITTEE'S ACTIVITIES OCCUR WITHIN A LIMITED ACCESS ARTERIAL HIGHWAY RIGHT OF WAY.
- 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-INCHARGE 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.

NICOLAS DAGHER, P.E

EXECUTIVE DIRECTOR

OCMC

XIOMARA AGUILERA PROJECT MANAGER

OCMC-STREETS



Department of Transportation

POLLY TROTTENBERG, Commissioner

OCMC TRAFFIC STIPULATIONS - AMENDMENT (1)

12/15/2016

OCMC FILE NO: CONTRACT NO: BNEC-14-468 SEK20068

PROJECT:

CONSTRUCTION OF STORM, COMBINED SEWERS AND REPLACEMENT OF WATER MAINS AND

APPURTENANCES

LOCATION(S):

9TH STREET: 2ND AVENUE

STIPULATIONS ORIGINALLY DATED 2/23/2015 GRANTING PERMISSION TO THE **NYCDDC** AND ITS DULY AUTHORIZED AGENT, TO ENTER UPON AND RESTRICT THE FLOW OF TRAFFIC AT THE LOCATION(S) BELOW FOR THE PURPOSE OF CARRYING OUT THE ABOVE NOTED PROJECT, IS HEREBY AMENDED AS FOLLOWS:

I. MAINTENANCE AND PROTECTION OF TRAFFIC

A. 9th STREET, BETWEEN SMITH STREET AND 2ND AVENUE

B. 2ND AVENUE, BETWEEN 9TH STREET AND 6TH STREET

- 1. Work hours shall be as follows: 9AM-4PM MONDAY-FRIDAY
- During work hours the contractor may apply a full roadway closure. The contractor shall notify in writing
 by letter NYPD, FDNY, EMS, community board and all property owners on the affected street segment a
 minimum of 7 calendar days prior to closure. When applicable, NYCT or private bus companies must also
 be notified.
- 3. The contractor is required to install, maintain, and remove all necessary temporary parking and regulatory signs and pavement markings and restore to their original condition per NYCDOT standards prior to the expirations of the permits. The contractor must notify NYPD/Traffic Management center 48 hours prior to changing any signs/markings. Approved plans must be onsite.
- Local and emergency access must be provided from each end of the block at the intersections with the use of flagmen and signage.
- 5. The contractor shall maintain minimum 5ft sidewalk opening on the sidewalks all the time and must provide with fladmen at both ends of the work zone to assist nedestrians.
- provide with flagmen at both ends of the work zone to assist pedestrians.

 6. After working hours, the contractor shall maintain a minimum of two 11ft-lanes for traffic (one tone in each direction).
- When working on new chambers, 2nd Avenue may be converted to one-way street serving the southbound direction. During working hours, the contractor may fully close the street and after working hours shall maintain a minimum of one 11ft lane for traffic.
- 8. The contractor must coordinate with NYCDOT Bridges Division prior to closing 9th Street Bridge.
- 9. The contractor must coordinate with businesses on the affected blocks prior to mobilizing.
- 10. The contractor must coordinate with NYCDOT Bike Lanes Division representative Hayes Lord at 2212-839-7205 and e-mail thiord@dot.nyc.gov due to the impacts on the bike lanes.
- The contractor must coordinate with the MTA Bus Operations Planning representative Rozelle Castillo at 646-252-5543 and e-mail <u>Rozelle-castillo@nycl.com</u> regarding the bus route detour during the construction phase.

C. 8th STREET, BETWEEN 2ND AVENUE AND 3RD AVENUE

D. 7th STREET, BETWEEN 2ND AVENUE AND 3ND AVENUE

- 1. Work hours shall be as follows: 7AM-6PM MONDAY-FRIDAY
- During working hours, the contractor shall maintain one 11 ft lane for local and emergency traffic access and a minimum of 5ft wide sidewalk opening.
- After working hours, the contractor shall open the roadway t traffic and may contain an area of 25 linear ft by 8ft wide adjacent to the curb.
- 4. The contractor must coordinate with businesses on the affected blocks prior to mobilizing

E. INTERSECTION OF 7TH STREET AND 2ND AVENUE

F. INTERSECTION OF 6TH STREET AND 2ND AVENUE

1. Work hours shall be as follows: 7AM-6PM MONDAY-FRIDAY

NYC Department of Transportation

Bureau of Permit Management and Construction Control

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AMENDMENT #1

OCMC FILE NO:

APPURTENANCES

BNEC-14-468

12/15/2016

CONTRACT NO:

PROJECT:

SEK20068

CONSTRUCTION OF STORM COMBINED SEWERS AND REPLACEMENT OF WATER MAINS AND

Page 2 of 2

2. During working hours, the contractor shall maintain one 11 ft lane for local and emergency traffic access on both roadways.

After working hours the contractor shall maintain a minimum of one 11ft lane on both streets.

THE CONTRACTOR MUST PROVIDE WITH NYPD TRAFFIC AGENTS AT THE FOLLOWING LOCATIONS DURING THE HOURS OF 8AM-7PM MONDAY-FRIDAY:

INTERSECTION OF 9TH STREET AND SMITH STREET (ONE POST PLUS RELIEF)

INTERSECTION OF 9TH STREET AND 2ND AVENUE (ONE POST PLUS RELIEF)

INTERSECTION OF 9TH STREET AND 3RD AVENUE (ONE POST PLUS RELIEF)

II. GENERAL NOTES

- A. THIS IS NOT A PERMIT. THIS STIPULATION SHEET MUST BE SUBMITTED WITH ALL REQUESTS FOR PERMITS PERTAINING TO THE ABOVE CONTRACT AND PRESENT AT THE WORK SITE ALONG WITH ALL ACTIVE CONSTRUCTION PERMITS WHEN THE APPROVED WORK IS BEING PERFORMED.
- ALL OTHER STIPULATIONS UNDER ORIGINAL NYCDOT STIPULATIONS SHEET BNEC-14-468 DATED 2/23/2015, WHICH HAVE NOT BEEN CHANGED BY THIS AMENDMENT REMAIN IN EFFECT.
- C. THE PERMITTEE IS ADVISED THAT OTHER CONTRACTORS MAY BE WORKING IN THE GENERAL AREA DURING THE TERM OF THIS STIPULATION. IN WHICH EVENT, THE PERMITTEE MAY REQUIRE MODIFICATIONS BY THE OCMC-STREETS.
- D. 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.
- E. 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.
- THE PERMITTEE MUST COMPLY WITH ALL CONSTRUCTION EMBARGOS ISSUED BY THE NYCDOT INCLUDING THE HOLIDAY EMBARGO.

DIRECTOR

OCMC-STREETS

PROJECT MANAGER

OCMC-STREETS



Department of Transportation

POLLY TROTTENBERG, Commissioner

OCMC TRAFFIC STIPULATIONS - AMENDMENT (2)

4/13/2018

OCMC FILE NO: CONTRACT NO: BNEC-14-468 SEK20068

PROJECT:

CONSTRUCTION OF STORM, COMBINED SEWERS AND REPLACEMENT OF WATER MAINS AND

APPURTENANCES

LOCATION(S):

9TH STREET; 2ND AVENUE

STIPULATIONS ORIGINALLY DATED 2/23/2015 GRANTING PERMISSION TO THE **NYCDDC** AND ITS DULY AUTHORIZED AGENT, TO ENTER UPON AND RESTRICT THE FLOW OF TRAFFIC AT THE LOCATION(S) BELOW FOR THE PURPOSE OF CARRYING OUT THE ABOVE NOTED PROJECT, IS HEREBY AMENDED AS FOLLOWS:

I. MAINTENANCE AND PROTECTION OF TRAFFIC

A. 9TH STREET, BETWEEN SMITH STREET AND 2ND AVENUE

- 1. Work hours shall be as follows: 10PM-5AM MONDAY-SUNDAYFOR 3 MONTHS
- During work hours the contractor may apply a full roadway closure. The contractor shall notify in writing by letter NYPD, FDNY, EMS, community board and all property owners on the affected street segment a minimum of 7 calendar days prior to closure. When applicable, NYCT or private bus companies must also be notified.
- No work permitted at intersection of Smith street and 9th street, during the full roadway closure of 9th Street
- No work permitted at intersection of 2nd Avenue and 9th Street, during the full roadway closure of 9th street.
- Contractor must submit a request for Full Roadway Closure with NYC DOT OCMC at 55 Water Street Concourse Level.
- 6. The contractor is required to install, maintain, and remove all necessary temporary parking and regulatory signs and pavement markings and restore to their original condition per NYCDOT standards prior to the expirations of the permits. The contractor must notify NYPD/Traffic Management center 48 hours prior to changing any signs/markings. Approved plans must be onsite.
- Local and emergency access must be provided from each end of the block at the intersections with the use of flagmen and signage.
- 8. The contractor shall maintain minimum 5ft sidewalk opening on the sidewalks all the time and must provide with flagmen at both ends of the work zone to assist pedestrians.
- After working hours, the contractor shall maintain a minimum of two 11ft lanes for traffic (one lane in each direction). Maintain two bike lanes one in each direction.
- 10. When working on new chambers, 2nd Avenue may be converted to one-way street serving the southbound direction. During working hours, the contractor may fully close the street and after working hours shall maintain a minimum of one 11ft lane for traffic.
- 11. The contractor must coordinate with NYCDOT Bridges Division prior to closing 9th Street Bridge,
- 12. The contractor must coordinate with businesses on the affected blocks prior to mobilizing.
- 13. The contractor must coordinate with NYCDOT Bike Lanes Division representative Hayes Lord at 2212-839-7205 and e-mail <u>hlard@dot.nyc.gov</u> due to the impacts on the bike lanes.
- 14. The contractor must coordinate with the MTA Bus Operations Planning representative Philip Spiedel at 646-252-5544 and e-mail <u>Philip:Spiedel@nyct.com</u> regarding the bus route defour during the construction phase.

II. GENERAL NOTES

- A. THIS IS NOT A PERMIT. THIS STIPULATION SHEET MUST BE SUBMITTED WITH ALL REQUESTS FOR PERMITS PERTAINING TO THE ABOVE CONTRACT AND PRESENT AT THE WORK SITE ALONG WITH ALL ACTIVE CONSTRUCTION PERMITS WHEN THE APPROVED WORK IS BEING PERFORMED.
- B. ALL OTHER STIPULATIONS UNDER ORIGINAL NYCDOT STIPULATIONS SHEET BNEC-14-468 DATED 2/23/2015, WHICH HAVE NOT BEEN CHANGED BY THIS AMENDMENT REMAIN IN EFFECT.
- C. THE PERMITTEE IS ADVISED THAT OTHER CONTRACTORS MAY BE WORKING IN THE GENERAL AREA DURING THE TERM OF THIS STIPULATION. IN WHICH EVENT, THE PERMITTEE MAY REQUIRE MODIFICATIONS BY THE OCMC-STREETS.

NYC Department of Transportation

Bureau of Permit Management and Construction Control

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AMENDMENT #2

OCMC FILE NO: CONTRACT NO: BNEC-14-468

4/13/18

PROJECT:

SEK20068

CONSTRUCTION OF STORM COMBINED SEWERS AND REPLACEMENT OF WATER MAINS AND

APPURTENANCES

Page 2 of 2

- D. 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.
- E. 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.
- F. THE PERMITTEE MUST COMPLY WITH ALL CONSTRUCTION EMBARGOS ISSUED BY THE NYCDOT INCLUDING THE HOLIDAY EMBARGO.

NICOLAS DAGHER P.E.

EXECUTIVE DIRECTOR OCMC-STREETS

NICHOLAS WONG

PROJECT MANAGER

OCMC-STREETS

NOTICE

THE PAGES CONTAINED IN THIS SECTION REPRESENT THE GAS COST SHARING WORK THAT SHALL APPLY TO AND BECOME A PART OF THE CONTRACT.

(NO TEXT ON THIS PAGE)

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I - NOTICE TO ALL BIDDERS; GAS COST SHARING WORK

All prospective bidders are hereby advised that, pursuant to the "Gas Facility Cost Allocation Act", ("the Act"), the City of New York has entered into an agreement ("the Agreement") with the gas companies (Con Edison or National Grid (formerly KeySpan Energy Delivery)) operating in their respective areas of the City to "share" the cost of facility relocation and/or support and protection of facilities disturbed by proposed water and/or sewer and related City work specified in this contract. Therefore, bid items, specifications and estimated quantities for the incremental costs of support and protection of certain gas facilities have been included in this contract. The low bid for this contract shall be determined by examining each bid for all work to be performed under this contract including any work of support and protection of gas facilities to be performed. The Contractor shall not seek additional compensation from gas companies except as specifically set forth in its contract.

II - GENERAL PROVISIONS; GAS COST SHARING WORK

1. General:

The Contractor shall perform City work with interferences from existing live and abandoned gas facilities. This shall be defined as utility work. Therefore, this contract includes bid items, specifications and estimated quantities designed to fully compensate him/her for the incremental costs of supporting, protecting, providing accommodations and, avoiding disturbing gas facilities located in the streets shown on the contract drawings. In the event that any other provisions of this contract related to gas facilities (or private utilities) conflict with these provisions, these provisions shall supersede and govern all work related to gas facilities owned by the companies operating in the project area. All utility work, as defined in these specifications, including changes and additions thereto shall be paid solely by the City except when specified otherwise in this contract. Contractor hereby agrees that the facility operator shall not be liable to pay him/her for any work performed including extra utility work. Contractor agrees that its bid prices include all compensation for loss of productivity and efficiency, idle time, delays (including any delays occasioned by negotiation of a contract change), change in operations, mobilization, demobilization, remobilization, added cost or expense, lost of profit, other damages or impact costs that may be suffered by or because of utility work, or the presence of gas facilities in the proximity of City work and that it will not seek additional compensation for these items. All disputes shall be resolved as specified in the contract.

Pursuant to the Act, Agreement, and the New York City Administrative Code, the gas company(ies) has been directed by the Commissioner and is required to perform all maintenance, repairs, replacement, shifting, alteration, relocation, and/or removal work that are not part of this contract. By having bid on this contract, the Contractor understands and agrees that the Commissioner has preasserted any right the City has to require, including the issuance of any directives or so called "order outs" under the New York City Administrative Code, any or all gas companies to maintain, repair, replace, protect, support, shift, alter, relocate, and/or remove all gas facilities that are about to be disturbed by the City contract work. The issuance of additional such directives during the performance of the contract work, where necessary in the sole judgment of the Commissioner, shall be initiated by such Commissioner as set forth in the relevant sections of the Act and Agreement. Contractor further agrees to insert such requirements as set forth herein above into any contracts with its approved subcontractors so that its subcontractors also understand and agree to such contract requirements.

2. Gas Interferences And Accommodations:

During the performance of sewer and water main work funded by the New York City Department of Environmental Protection (NYCDEP), as instructed by the Engineer, the use of any applicable contract bid item is allowed in order to resolve and accommodate all gas facilities interferences with such City work, including the removal of contaminated soil in associated trench excavation. This is in addition to the specified EP-7 bid items in the contract. Payment for such accommodation shall be funded by EP-7 bid item "UTL-GCS-2WS - GAS INTERFERENCES AND ACCOMMODATIONS" (F.S. Fixed Sum). The value of such accommodation shall be computed by multiplying the appropriate unit prices bid to the quantity of work performed, as determined by the Engineer, and applying the total amount thus to be paid

to EP-7 bid item "<u>UTL-GCS-2WS - GAS INTERFERENCES AND ACCOMMODATIONS</u>". When EP-7 bid item "<u>UTL-GCS-2WS - GAS INTERFERENCES AND ACCOMMODATIONS</u>" does not exist, such additional accommodation work shall be at no cost to the City but shall be a matter of adjustment between gas facility operator and Contractor. Private facilities, other than gas, that become in interference due to gas interferences accommodations shall also be accommodated, if so directed by the Resident Engineer, at no additional cost to the City and, provided that its owner agrees to be responsible for all additional costs to Contractor, otherwise, such facility shall be ordered by the City to be maintained, shifted, relocated or replaced by its owner at his/her expenses.

2a. Water Main Accommodations:

When water main construction is to be performed in this contract, Contractor shall be required, if warranted by field conditions, and at locations designated by the Resident or Borough Engineer, to change the vertical or horizontal alignment of water mains including but not limited to all additional labor, material, work method accommodations, furnishing, delivering and laying offset fittings and pipes, etc., necessary in order to complete water main installation and, avoid gas interferences in the project area, including street intersections. Typical work method accommodations shall include, but not be limited to, pier and plate, installation of filter fabric and select fill, etc. Such work shall be performed as directed by the Engineer and in accordance with contract specifications and latest edition of water mains standards and specifications.

2b.Sewer Accommodations:

When sewer construction is to be performed in this contract, Contractor shall be required, if warranted by field conditions, and at locations designated by the Resident or Borough Engineer, to change the horizontal alignment of sewer facilities (if possible) including but not limited to all additional labor, material, work method accommodations, furnishing, delivering and construction of additional manholes or modification of manholes/catch basins, extending chute connections, house connections, using alternate materials and methods, poured-in-place structures, etc., necessary in order to complete sewer installation and, avoid gas interferences in the project area, including street intersections. The term sewer facility shall include, but not be limited to, all sewer pipe and appurtenances, manholes, catch basins, catch basin chutes, etc. Such work shall be performed as directed by the Engineer and in accordance with contract specifications and latest edition of sewer standards and specifications.

3. Quantity Overruns, EP-7 Funded Bid Items:

No quantity overrun, in excess of one hundred twenty five (125) percent, shall be permitted for EP-7 funded bid items (gas) included in this contract, except when Resident Engineer determines that such overruns are caused by field modifications to planned City work, or approved construction methods, or contract scope changes. Overruns not paid by City shall be negotiated and paid to Contractor by gas facility operator who then shall be entitled to reimbursement by NYCDEP under established cost sharing procedures.

4. Changes And Extra Work:

This section is not applicable to work defined under "Emergency Reconstruction Contracts" or so-called "Where and When Contracts" since these projects, by definition, inherently encounter unanticipated gas facilities and cannot be pre-engineered. In all other cases, any contract changes proposed for City work shall also cover and include all associated changes to support and protection of gas facilities affected by such changes to City work. In all other cases where the Contractor finds that City work cannot be performed as planned and specified and/or, as approved because of a need to support, protect and/or alleviate interferences from gas facilities that were not listed and/or shown, or incorrectly shown in contract plans and specifications, he shall immediately notify the Resident Engineer and the facility operators' representative of his findings. Resident Engineer shall promptly examine such claims and determine whether or not such work is covered by contract bid items and /or specifications (contract bid items and specifications shall include city contract items as well as EP-7 items). The Resident Engineer shall also

examine the claim to determine if the application of EP-7 bid item "UTL-GCS-2WS - GAS INTERFERENCES AND ACCOMMODATIONS" is appropriate to resolve the claim. If upon examination, the Engineer determines that such field conditions were unanticipated (not shown and/or listed, or incorrectly shown in contract documents) and are not covered by bid items and contract specifications, he shall then direct the Contractor and the affected facility operator to negotiate the cost of supporting and protecting, and/or alleviating the impact on City work caused by such unanticipated gas facilities with each other with the understanding that the performance of City work shall continue during negotiations. If a cost agreement is reached, the Contractor and facility operator shall adjust such costs between themselves at no additional costs to the City contract. If the Contractor and affected facility operator do not reach an agreement concerning the price to be paid for the extra work within five (5) business days of the Engineer's directive to engage into such negotiations and, after considering: public safety and inconvenience, requirements of laws and regulations applicable to private utilities, integrity of all utility systems, including but not limited to sewer and water, gas, electric, telephone and, cable TV facilities, sound engineering practices, cost (long and short term) to all affected parties, and potential City work delays, then the Resident Engineer, depending on nature and severity of interferences with City work, shall either, direct the facility operator to relocate or replace its facilities at its own discretion and cost, reimbursable by NYCDEP under established gas cost sharing procedures or, direct the Contractor to perform the utility work on actual time, material and equipment costs basis pursuant to relevant contract requirements and amendments. Contract bid prices for any applicable items of work involved shall be applied, or converted to an allowance for time and material charges. Changes shall be for affected portions of utility work and, shall be processed with EP-7 funds.

5. Excavation:

All excavators shall notify the NYC/LI One Call Center at 1-800-272-4480 at least two (2) working days, not including the day of the call, but not more than ten (10) working days in advance of the start of any excavation work. The gas company(ies) will mark out its facilities within the project limits and provide Construction Inspector(s) during all excavation work in close proximity (within twelve (12) inches) to gas facilities. The Contractor shall exercise extreme caution when excavating in the vicinity of any gas facilities. Hand excavation shall be performed within twelve (12) inches of gas facilities. The Contractor prior to excavating underneath these facilities shall adequately support all gas facilities. Standard support details for gas facilities have been included in the specifications. Any damage to gas facilities shall be reported immediately to the gas company(ies). The Contractor shall be responsible for all cost associated with repairs made necessary by damages caused by his operations.

6. Backfilling And Street Restoration:

Backfilling operations and street restorations shall be in accordance with contract requirements.

7. Non-Responsive Bids:

Every gas (EP-7) bid item has a suggested "Not less than" value per unit indicated on contract bid sheet. Bids resulting in cost of less than suggested for EP-7 items are hereby prohibited and if submitted shall be considered NON-RESPONSIVE.

8. Minimum Clearances:

Clearance requirements for City work shall govern and supersede any clearance requirement of gas facility operator. Therefore, a minimum of twelve (12) inches clearance between private utilities and City water mains, sewers or related structures to be installed in this contract shall be maintained. When this clearance is not attainable, the Resident Engineer may allow a minimum of four (4) inches clearance. With less than twelve (12) inches clearance a neoprene/polyethylene shield (to be provided by facility operator) shall be installed as part of all work item specifications. However, if Resident Engineer determines that City work cannot be performed within allowable clearance and no reasonable City accommodation (nocost change to City work) is possible, the City shall direct the facility operator to remove, relocate, shift, or alter their facility(ies) pursuant to the New York City Administrative Code.

9. Work By Facility Operator:

The facility operator may find it necessary to perform the following types of work during performance of City work: accommodating a contractor's request for gas facilities modifications (in order to facilitate City contractor's proposed construction method) or, remedial and emergency work on gas facilities proper with their own resources and materials if an approved method of construction for City work causes unanticipated disturbances to gas facilities or, replacing defective gas facilities when they are exposed by the Contractor and their actual conditions are observable by the facility operator. Also included in the above category of defective gas facilities are: the presence of environmental contaminants attributable to the gas facility in or around gas facilities. If such work is deemed required by the facility operator or if facility operator is directed by the City to address such deficiencies at any time during the course of construction, the Contractor shall modify the construction schedule at no cost to the City and allow the facility operator five (5) business days to perform such work without interferences. Additional costs to the facility operator (in cases of accommodations) or, Contractor (in cases of defective gas facilities) due to such gas work, if any, shall be the responsibility of the parties involved and not of the City. Such costs shall be a matter of adjustment between the Contractor and the facility operator.

10. Materials Furnished By Facility Operator:

It shall be the Contractor's responsibility to inspect material to be installed by him immediately upon delivery and advise the facility operator through its authorized representative, of all damaged materials. The Contractor at no additional costs to the City or the facility operator shall replace any material that is damaged or lost after the Contractor's inspection.

11. Liability And Insurance:

Notwithstanding the provisions of this contract, the existing division of liabilities to third parties shall remain the same as between the City and the company. Therefore, it is specifically agreed by the City, company and Contractor (by bidding on this contract) that for the purpose of any liabilities to third parties, that the City contractor performing work directly and physically relating to gas company facilities in this project, shall be deemed an agent of the company and not an agent of the City, the New York City Municipal Water Finance Authority, or the New York City Water Board. Contractor shall include the company as an additional insured on all insurance policies maintained to comply with the City's insurance requirements.

12. Width And Depth Of Excavation:

Contractor shall not be authorized to deliberately change trench or excavation widths and/or depth specified without Engineer's approval. Enlargement of any side of excavation up to eighteen (18) inches beyond pay limits (or inside face of sheeting) requested by the Contractor for the installation of certain types of sheeting may be granted. However, such enlargements or those greater than allowable shall not be approved when, in the sole judgment of the City, field conditions allow the water mains and sewer work to be performed within the limits specified and, the sole purpose of such enlargement request is to impact adjacent utilities (public or private) whose support and protection are part of this contract. Any approval shall be given at no additional cost to the City contract, including EP-7 funding, and all costs associated with unauthorized enlargements shall be the sole responsibility of the Contractor.

13. Depth And Crossing Angles Of Gas Facilities:

Where gas facilities are shown (or specified as) crossing proposed alignment of sewers, water mains, catch basins and chute connections or any other proposed excavations at specific angles (as measured off plans or sketches or specified in contract), it shall be understood that actual field measurements may deviate (plus or minus) forty-five (45) degrees from those shown or specified. The cover, or depth from street surface to top of facilities, shall be as shown or specified in contract documents, no deviation is to be assumed. Where gas facilities are not shown on contract documents, but their support and protection are otherwise included in this contract then, all references to facilities crossing at "various angles and depth" in the gas sections shall mean that such facilities are crossing sewer, water, catch basin and, catch basin chute, and other excavations at a ninety (90) degree angle to the proposed sheeting line or side of

excavation (for unsheeted trenches) with an allowable deviation of forty-five (45) degrees in any direction, except for catch basin chute excavation where the allowable deviation shall be sixty (60) degrees. Where the cover is not noted or specified, the bottom face of such facilities shall be assumed to be crossing catch basin chutes at a depth of three (3) foot eight (8) inches or less from the street surface. Paragraph No. 2 above shall apply in cases of distribution water main construction. Appropriate bid items and specifications are provided for cases where angle and depth are greater than stated above. This section also applies to work defined in "Emergency Reconstruction Contracts" or so-called "Where and When Contracts". These contracts are not pre-engineered and consequently have no drawings, sketches or determined locations and so, gas facilities encountered will be crossing existing and proposed sewer, water, catch basin/catch basin chutes and all appurtenances at various angles and depths.

14. Maintenance Of Traffic For Gas Work:

All work pertaining to gas bid items and specifications shall be performed within the contract maintenance of traffic plan as specified in the contract document. The bid price for the Maintenance and Protection of Traffic shall cover all work pertaining to gas items. The City shall make compensation for additional maintenance and protection of traffic items in connection with gas item of work only when such additional work is deemed reasonable and necessary by the Resident Engineer and is approved by him prior to its performance.

15. Relocated Gas And Temporary Systems Installation:

In cases where the Contractor is allowed to select the location for temporary construction such as, installation of dewatering headers, wells, well points, etc., he shall not disturb any gas facilities shown on sketches provided in this section. The only exception shall be, if the affected gas company agrees to such relocation and provided that the cost of such relocation is a matter of adjustment between the company and Contractor, and at no cost to the City.

16. Role Of Company Inspector:

In any case in which the City elects to perform some or all support and protection work with its own employees, personnel or contractors, the facility operator shall provide onsite inspectors to approve and certify such support and protection work (exclusive of City accommodations) performed by the City's own employees, personnel, and contractors. Facility operator's inspectors are not authorized to direct City contractor during the performance of contract work. They shall act through the City Resident Engineer and provide him/her required approvals and certifications, prior to preparing partial payments of EP-7 items, in a format and frequency to be prescribed by the appropriate City Head of Construction.

17. Coordination With Gas Company:

The Contractor shall be required to notify the gas company(ies), in writing, at least two (2) weeks prior to the start of final paving in order to allow companies to complete any unfinished gas work located within the area to be paved. Every effort shall be made to maintain gas service with minimum inconvenience to the public.

III - TECHNICAL SECTION

SECTION 6.01 - Trench Crossings; Support And Protection Of Gas Facilities And Services.

1. Description:

Under this section, the Contractor shall provide all labor, materials, equipment, and incidentals required to

support and/or protect the integrity of gas mains, services and appurtenances of any sizes, configurations, and operating pressures crossing trench excavations above subgrade for planned construction of sewers and water mains facilities. A gas service shall be defined as a gas pipe of three (3) inches in diameter or less branching from the main to a customer pick up point or property valve box. A gas main may be any size pipe that is part of a distribution or transmission network other than services described above. Crossings shall be defined as gas facilities spanning the width of excavation (one side to the other side). These crossings may be at various angles and depth as shown on "Gas Cost Sharing Work Standard Sketches Nos. 1 and 1A", and as specified in "General Provisions; Gas Cost Sharing Work Paragraph No. 13" and, at the locations shown or listed in contract documents. The gas company operating in the area, (facility operator), owns these facilities. The work shall be performed in accordance with contract specifications, plans, and at the directions of the Resident Engineer in consultation with the authorized representatives of the facility operator.

2. Method Of Construction:

- A. Protection: In general, the gas facilities shall be protected as required by New York State Industrial Code 753. In particular, the Contractor shall use hand excavation methods (pick and shovel or hand held power tools) directly below the pavement base to expose the gas facilities (marked out by facility operators) and to ascertain the clearances and cover of the facilities with respect to the proposed excavation. Upon exposing the affected facilities sufficiently, at the discretion of the Resident Engineer, to ascertain the foregoing, Contractor shall be permitted to proceed with a combination of hand and machine excavation, as appropriate, outside a zone of protection whose limit shall be defined as a perimeter located twelve (12) inches from the outside face of each gas facility crossings (See "Gas Cost Sharing Work Standard Sketch No. 2"). If the facilities are in direct interference with City work, meaning that "Minimum Clearances" described in "General Provisions; Gas Cost Sharing Work Paragraph No. 8" cannot be maintained, and excavation has to be temporarily or permanently abandoned then this particular location shall become a test pit and dealt with as specified in Section 6.07, and "General Provisions; Gas Cost Sharing Work Paragraphs Nos. 2 and 8".
- B. Support: Gas mains or services crossing excavations equal or less than four (4) feet wide are generally self supporting, unless field conditions as determined by the Resident Engineer require otherwise. The support requirements for gas mains and services crossing excavations greater than four (4) feet wide shall be as shown on the attached "Gas Cost Sharing Work Standard Sketch No. 1" and Contractor shall use sheeting methods that permit the maintenance of gas facilities in their existing locations and configurations. Alternate methods equivalent to those shown on the sketch or accommodations by the facility operator proposed by the Contractor in order to facilitate the execution of the specified work shall be allowable, provided that prior approval is obtained by the Contractor from the Engineer and the facility operator. The support and protection of gas facilities crossings shown on plans, drawings, listings or otherwise identified in this contract shall not be circumvented with the issuance of so called "order outs".

3. Method Of Measurement:

The Contractor shall be paid for supporting and/or protecting gas facilities crossing trench excavations under the appropriate bid items covered by this section. The Contractor shall be directly responsible to the facility operator for the total cost of using any alternate method requiring the use of resources owned by the facility operator. Regardless of the method used, the City shall pay the bid price for the appropriate support and/or protect item of work. The average rate charged by the facility operator for alternate support and protection work such as, disconnecting and reconnecting gas services is listed in attached "Schedule GCS-A".

4. Payment Restrictions:

These items shall not be paid for: gas services crossing unsheeted water main trench excavation; abandoned gas main/services identified by facility operator; gas mains/services crossing trench excavations for fire hydrant branch connections pipes, catch basins and/or chutes (sewer drain pipe), house sewer and/or water services; gas facilities encroaching any face of excavation for sewer and/or

water construction, all of which are covered under other contract sections. Also this item shall not be paid for new gas mains and services crossing water trenches when trenching for such new facilities has been performed by the Contractor in common with trench excavation for City work (overlapping trench limits). The cost of supporting and protecting such gas facilities crossings shall be deemed included in the cost of trench excavation for the new gas facilities. This payment restriction shall apply even if such common trench gas excavation is not part of the contract. The prices bid for items covered by this section represent full compensation to Contractor to completely perform the work described. No other bid items shall be combined with these items in order to pay for gas main and/or services crossing excavations specified herein.

5. Method Of Payment:

Each (Ea.) gas facility crossing trench excavation as described in these specifications shall be counted for payment.

6. Price To Cover:

The cost of timber/steel supports installed for gas facilities shall be included in the bid price. The bid price for each crossing shall also cover all additional supervision, labor, material (except those provided by the facility operator), equipment and insurance necessary to completely maintain the gas facilities without disruption of service to the customers and in accordance with contract plans, specifications and facility operator standards. The price shall also include: changes of method of operations; sheeting modifications where necessary to accommodate the gas facilities crossings; installation and removal of water pipe under gas facilities (so called "snaking"); extra care during excavation (including hand excavation under existing single and multiple gas facilities); extra backfilling and compaction around, over and under gas facilities; installation and removal of sheeting around gas facilities; associated maintenance and protection of traffic; barricades; and traffic plates that may be required to temporarily close and/or complete the work.

SECTION 6.02 - Extra Excavation For The Installation Of Catch Basin Sewer Drain Pipes With Gas Interferences.

1. Description:

Under this item, the Contractor shall provide all labor, materials, equipment, insurance, and incidentals for the extra excavation associated with the installation of catch basin sewer drain pipes (chute) under gas facilities of various sizes crossing the trench excavation at various angles and depth at the locations shown in the contract documents and also, for the support and protection of these facilities during associated excavation and backfill operations. The gas company operating in the area, (facility operator), owns these facilities.

2. Method Of Measurement:

The bid price shall be per location (Each) where extra excavation is required when catch basin sewer drain pipes are installed at an upstream invert depth lower than four (4) feet (up to a maximum of six (6) feet) from the proposed pavement grade because the bottom faces of interfering gas mains and appurtenances are located at a depth greater than three (3) foot eight (8) inches from proposed pavement surface (See "Gas Cost Sharing Work Standard Sketch No. 4").

3. Method Of Construction:

Incremental cost responsibility for chute excavation is determined by the first private facility encountered starting from catch basin structure proper and that prevents the installation of the chute connection at an upstream cover less than or equal to three (3) feet or any other minimum cover required to avoid City facilities (e.g. water, sewer, etc.) as directed by the Resident Engineer.

4. Payment Restrictions:

This item shall not apply and related bid item shall not be paid in cases where:

- A. Upstream invert chute is more than six (6) feet deep because of gas facilities.
- B. Chute cannot be installed above existing gas facilities because of interferences with other private facilities that are not otherwise covered under this contract, regardless of upstream invert depth.

The above cases shall be at no cost to the City, but shall be a matter of adjustment between the Contractor and the facility operator(s).

5. Price To Cover:

The bid price shall cover the additional cost of all additional supervision, labor, materials, equipment and insurance, to complete the installation of catch basins and associated sewer connections in accordance with the contract plans and specifications. The price shall include: excavation by hand around and under single and multiple gas facilities; locating, supporting and protecting gas facilities; backfilling and all other items necessary to perform all work incidental thereto including: installation and removal of drain pipe under gas facilities ("snaking"); widening of trenches to facilitate the above work; subsequent additional backfill and pavement restoration; modifying precast catch basin window to accommodate connection; changing sheeting method and configuration to accommodate gas facility crossings; maintenance and protection of traffic; barricades; and installation of traffic plates that may be required to temporarily close and/or complete the work. The price shall not include removal of ledge rock and/or excavation of boulders in open cut.

SECTION 6.02.1 - Extra Excavation For The Installation Of Catch Basin Sewer Drain Pipes With Upstream Inverts Greater Than Six (6) Feet.

1. Description:

Under this item, the Contractor shall provide all labor, materials, equipment, insurance and incidentals for the extra excavation of catch basin chutes where the upstream invert is greater than six (6) feet under gas facilities of various sizes crossing the trench excavation at various angles and depth at the locations shown in the contract documents or as determined by field conditions and also, for the support and protection of these facilities during the associated excavation, sheeting and backfilling operations.

2. Method Of Measurement:

The bid price shall be per location (Each) where extra excavation and sheeting is required when the catch basin chute installed at an upstream invert depth lower than six (6) feet from the proposed pavement grade because the bottom faces of the interfering gas mains and appurtenances are located at a greater depth than three foot eight inches from the proposed pavement surface only.

3. Method Of Construction:

Incremental cost responsibility for chute excavation is determined by the first private facility encountered during such excavation when initiated from catch basin structure and that prevents the installation of the chute at an upstream cover less than or equal to three (3) feet or any other cover required to avoid City facilities as directed by the Resident Engineer.

4. Payment Restriction:

This item shall not apply and related bid item shall not be paid in cases where: Upstream invert chute is less than or equal to six (6) feet deep because of gas facilities. Section 6.02 shall be paid.

5. Price To Cover:

The bid price shall cover the additional cost of all supervision, labor, materials, equipment and insurance to complete the installation of catch basin and associated sewer connections in accordance with the contract plans and specifications. The price shall include: excavation by hand around and under single and multiple gas facilities; locating, supporting and protecting gas facilities incidental thereto; widening of trenches to facilitate the above work; subsequent additional backfilling and pavement restoration; modifying pre-cast basin window to accommodate connection; the installation of catch basin with deeper sumps as specified; additional sheeting and changes in sheeting method and configuration to accommodate gas facility crossings; maintenance and protection of traffic; barricades; and installation of traffic plates that may be required to temporarily close and/or complete the work.

SECTION 6.03 - Removal Of Abandoned Gas Facilities. All Sizes.

1. Description:

Under this section the Contractor shall provide all labor, materials, equipment, insurance and, incidentals required for the removal of abandoned gas mains, services, or appurtenances thereof, located within the street shown on the contract plans, owned by gas company operating in the project area (facility operator), used or to be used for or in connection with or to facilitate the conveying, transportation, distribution or furnishing of gas (natural or manufactured or mixture of both) for light, heat, or power, but does not include property used solely for or in connection with business of selling, distributing or furnishing of gas in enclosed containers. Such removal shall include only abandoned gas facilities that interfere with (i.e. cause additional work) City work.

2. Determination Of Operating Status Of Gas Facilities:

The Contractor shall notify facility operator, as required by New York State Industrial Code 753. Gas facilities shall not be removed without the approval of the facility operator whose authorized representative shall certify in writing (specific facility or area wide facilities certification) and in a timely manner acceptable to the Resident Engineer that abandoned facilities are free of combustible gas and any other environmental contaminants prior to removal. The Resident Engineer shall rely on facility operator's certification. The facility operator may request the excavation of test pits (See Section 6.07) for this determination ahead of City work and, Contractor shall provide safe access, facilitate and permit facility operator to enter test pit excavations for the purpose of testing gas facilities to be removed by the Contractor. However, facility operator may prefer to make this test during performance of City work, in order to issue the above certification. This shall be permitted provided that it is agreed that additional costs, if any resulting from this choice shall be a matter of adjustment between the Contractor and facility operator only, and at no cost to the City.

3. Restrictions:

The facility operator shall be solely responsible for its contaminated gas facilities, surrounding contaminated soil and their disposal and abatement procedures, unless contract bid items are applicable and provided for such work. In such cases, the quantity removed shall be charged to EP-7 bid item "<u>UTL- GCS-2WS-GAS INTERFERENCES AND ACCOMMODATIONS</u>" at the City bid prices.

4. Method Of Measurement:

Abandoned gas pipeline removal shall be measured for payment per linear foot of pipe and appurtenances removed.

5. Price To Cover:

The price shall cover all additional cost of supervision, labor, materials, equipment, and insurance necessary to complete this work in accordance with the contract plans and specifications, including excavation by hand around and under other City and facility operator owned properties and, where necessary, support and protection of such properties. The price shall also cover breaking, cutting, and/or burning of abandoned gas pipes and their disposal from the site; sealing open ends remaining in the excavation with concrete or caps (caps to be provided by the facility operator) and backfilling of the area where the pipeline has been removed with clean backfill. The price shall also include any required dump charges. This item does not include any type of extra excavation, backfilling, compaction, pavement removal and restoration associated with abandoned gas facilities removal, all of which are covered under Section 6.06.

SECTION 6.03.1 - Removal Of Abandoned Gas Facilities With Possible Coal Tar Wrap. All Sizes. (For National Grid Work Only)

1. Description:

Under this section the Contractor shall provide all labor, materials, equipment, insurance and, incidentals required for the removal of abandoned gas mains, services or appurtenances thereof, located within the street shown on the contract plans, owned by the gas company operating in the project area (facility operator), used or to be used for or in connection with or to facilitate the conveying, transportation, distribution or furnishing of gas (natural or manufactured or mixture of both) for light, heat, or power, but does not include property used solely for or in connection with business of selling, distributing or furnishing of gas in enclosed containers. Such removal shall include only abandoned gas facilities that interfere with (i.e. cause additional work) City work. These gas facilities may be coated with Coal Tar Wrap and so, may require special handling and disposal methods as specified in National Grid Standard Operating Procedure 12-2, Coal Tar Wrap Handling and 12NYCRR56.

2. Determination Of Operating Status Of Gas Facilities:

The Contractor shall notify facility operator, as required by New York State Industrial Code 753. Gas facilities shall not be removed without the approval of the facility operator whose authorized representative shall certify in writing (specific facility or area wide facilities certification) and in a timely manner acceptable to the Resident Engineer that abandoned facilities are free of combustible gas and any other environmental contaminants prior to removal. The Resident Engineer shall rely on the facility operator's certification. The facility operator may request the excavation of test pits (See Section 6.07) for this determination ahead of City work and, the Contractor shall provide safe access, facilitate and permit facility operator to enter test pit excavations for the purpose of testing gas facilities to be removed by the Contractor. However, the facility operator may prefer to make this test during performance of City work, in order to issue the above certification. This shall be permitted provided that it is agreed that additional costs, if any, resulting from this choice shall be a matter of adjustment between the Contractor and the facility operator only, and at no cost to the City contract. Should such investigation result in the determination that the abandoned gas facilities do not contain Coal Tar Wrap then the removal of said facilities shall be covered under separate item (See Section 6.03).

3. Requirements:

The City Contractor shall excavate abandoned gas facility sufficiently, either in its entirety, or at locations determined by Contractor to allow the removal of Coal Tar Wrap (if present on the abandoned gas facility) and to facilitate the safe extraction of manageable lengths of abandoned pipe without damage to adjacent facilities, utilities or City structures either parallel to or crossing above or below abandoned gas facility. The Contractor is to allow access to the designated cutting points within the Contractor's trench by authorized National Grid personnel who will remove the Coal Tar Wrap as per National Grid procedures. This work by National Grid personnel shall be performed in a timely fashion and shall not unduly impede the Contractor's progress and/or productivity. Upon completion of the coating removal, the Contractor shall be allowed to cut, burn or grind the gas facility and remove the section of abandoned pipe. The

Contractor at a site designated by the Contractor shall stockpile the removed pipe. The facility operator will be responsible to provide trucking and disposal services with its own personnel and shall remove the stockpiled pipes during off hours or during such time as agreed to by the Contractor. Since the pipe removed will remain the property of the facility operator and is to be disposed of by the facility operator, the facility operator shall be responsible for any required notifications, filings, dump charges and incidentals associated with the disposal of abandoned gas facilities found to contain Coal Tar Wrap.

4. Method Of Measurement:

Abandoned gas pipeline removal shall be measured for payment per linear foot of pipe and appurtenances removed.

5. Price To Cover:

The price shall cover all additional cost of supervision, labor, materials, equipment and insurance necessary to complete this work in accordance with the contract plans and specifications, including excavation by hand around and under other City and facility operator owned properties and, where necessary, the support and protection of such properties. The cost shall also include hand excavation in the area(s) of proposed abandoned pipe cut(s), cutting and/or burning of abandoned gas pipes and stockpile of removed sections of abandoned pipe and associated maintenance and protection of traffic, blocking and temporary fencing if required. The unit price shall also cover sealing open ends remaining in the excavation with concrete or end caps (end caps to be provided by the facility operator) and backfilling of the area where the abandoned pipeline has been removed with clean backfill material. This item does not include any type of extra excavation, backfilling, compaction, pavement removal and/or restoration (temporary and permanent) associated with abandoned pipe removal ("lost trench"), all of which are covered under separate Section 6.06. The price shall also include allowance for any loss of productivity by the Contractor due to required facility operator work to remove pipe coating and prepare pipe for cutting as well as any change in Contractor's excavation method, additional trucking and/or stockpiling costs.

SECTION 6.03.1a - Removal Of Abandoned Gas Facilities With Possible Coal Tar Wrap. All Sizes. (For Con Edison Work Only)

1. Description:

Under this section the Contractor shall provide all labor, material, equipment, insurance and, incidentals required to prepare abandoned gas mains, services and appurtenances thereof located within the street shown on contract plans, owned by the gas company operating in the project area (facility operator), for removal due to interference with proposed City work. These abandoned gas facilities were, at one time, used for or in connection with or to facilitate the conveying, transportation, distribution or furnishing of gas (natural, manufactured or a combination of both) for light, heat, or power, but does not include property used solely for or in connection with business of selling, distribution or furnishing of gas in enclosed containers. Such preparation for removal shall include only abandoned gas facilities that interfere with (i.e. cause additional work) City work. These gas facilities may be coated with Coal Tar Wrap which may contain asbestos or PCB's and so, may require special handling and disposal methods as specified in Con Edison - ASBESTOS MANAGEMENT MANUAL, CHAPTER 6 - ASBESTOS WORK PROCEDURES, SECTION 06.04 - COAL TAR WRAP REMOVAL. For under 25' (feet) in length and an approved NYC-DEP variance for over 25' (feet).

2. Determination Of Operating Status Of Gas Facilities:

The Contractor shall notify facility operator, as required by New York State Industrial Code 753. Gas Facilities shall not be removed without the approval of the facility operator whose authorized representative shall certify in writing (specific facility or area wide facilities certification) and in a timely manner acceptable to the Resident Engineer that abandoned facilities are free of combustible gas and any other environmental contaminants prior to removal. The Resident Engineer shall rely on the facility

operator's certification. The facility operator may request the excavation of test pits (See Section 6.07) for this determination ahead of City work and Contractor shall provide safe access, facilitate and permit facility operator to enter test pit excavations for the purpose of testing gas facilities. However, the facility operator may prefer to make this test during performance of City work in order to issue the above certification. This shall be permitted provided that it is agreed that additional costs, if any, resulting from this choice shall be a matter of adjustment between the Contractor and the facility operator only, and at no cost the City contract. Should such investigation result in the determination that the abandoned gas facilities do not contain Coal Tar Warp then the removal of said facilities shall be covered under separate item (See Section 6.03).

3. Requirements:

The Contractor shall excavate abandoned gas facility sufficiently, either in it's entirety, or at locations determined by Contractor to allow the removal of Coal Tar Wrap (if present on the abandoned gas facility) and to facilitate the safe extraction of manageable lengths of abandoned pipe without damage to adjacent facilities, utilities or city structures either parallel to or crossing above or below abandoned gas facility. The Contractor is to allow access to the designated cutting points within the Contractors trench by authorized Con Edison personnel who will remove the Coal Tar Wrap as per Con Edison and/or NYC-DEP approved procedures. This access shall conform to all applicable codes, rules & regulations. This work by Con Edison personnel shall be performed in a timely fashion and shall not unduly impede the Contractors progress and/or productivity. Upon completion of the coating removal, the Contractor shall be allowed to cut, burn or grind the gas facility and remove the section of abandoned pipe. Contractor shall designate a specific site to stockpile those removed pipes. The facility operator will be responsible to provide trucking and disposal services with its own personnel and shall remove the stockpiled pipes during off hours or during such time as agreed to by the Contractor. Since the pipe removed will remain the property of the facility operator and is to be disposed of by the facility operator, the facility operator shall be responsible for any required notifications, filings, dump charges and incidentals associated with the disposal of abandoned gas facilities found to contain Coal Tar Wrap.

4. Method Of Measurement:

Abandoned gas facility removal shall be measured for payment per linear foot of pipe and appurtenances removed.

5. Price To Cover:

The price shall cover all additional cost of supervision, labor, materials, equipment and insurance necessary to complete this work in accordance with the plans and specifications, including, but not limited to, excavation by hand around and under other City and facility operator owned properties and, where necessary, the support and protection of such properties. The cost shall also include hand excavation in the area(s) of proposed abandoned pipe cut(s), cutting and/or burning of abandoned gas pipes and stockpile of removed sections of abandoned pipe and associated maintenance of traffic, blocking and temporary fencing if required. The unit price shall also cover sealing open ends remaining in the excavation with concrete or end caps (end caps to be supplied by facility operator) and backfilling of the area where the abandoned pipeline has been removed with clean backfill material. This item does not include any type of extra excavation, backfilling, compaction, pavement removal and/or restoration (temporary and permanent) associated with abandoned pipe removal ("lost trench"), all of which are covered under separate Section 6.06. The price shall also include allowance for any loss of productivity by the Contractor due to required facility operator work to remove pipe coating and prepare pipe for cutting as well as any change in Contractor excavation method, additional trucking and/or stockpiling costs.

SECTION 6.04 - Adjust Hardware To Grade Using Spacer Rings/Adaptors. (Street Repaying.)

1. Description:

Under this section, the Contractor shall provide all labor, supervision, materials, equipment, insurance and incidentals required to adjust to final grade gas street surface hardware located within the contract area boundaries shown on the plans. The gas company operating in the area, (facility operator), owns these facilities. The work shall be performed in accordance with the contract plans, specifications and at the directions of the Resident Engineer in concurrence with authorized representative of the facility operator.

2. Materials:

The facility operator shall furnish and deliver all prefabricated hardware parts required. These include adaptors for the grade adjustment proper and new street hardware if existing ones are found to be defective, all in accordance with the facility operator standards and City rules and regulations. The Contractor shall notify the facility operator of the installation schedule at least three (3) business days before materials are required on the site. Should the facility operator fail to deliver the necessary material according to any schedule mutually agreed upon by the Contractor and facility operator, the City shall not be responsible for any delays attributable thereto, nor for the failure of delivery of such materials. On project where material storage is not permitted on site, the facility operator shall deliver the required material to the Contractor's yard and it shall be the Contractor's responsibility to transport the material to the work site when needed for installation. It shall also be the Contractor's responsibility to inspect the materials to be installed by him immediately upon delivery and advise the facility operator through its authorized representative, of all damaged materials. The Contractor at no additional expense to the City or the facility operator shall replace any material that is damaged or lost after the Contractor's inspection.

3. Method Of Measurement:

The Contractor shall be paid for each six (6) inch round box and/or nine (9) inch square box adjusted to grade regardless of adjustment height requirements.

4. Price To Cover:

The unit price bid for this item shall include all additional labor, supervision, insurance, equipment and, material (except those to be provided by the facility operator), required to adjust each box to grade as required in the contract plans and specifications. The bid price shall also include the removal of existing frames and covers from existing facilities to be salvaged and returned to the facility operator and, all material transportation from the Contractor's material storage yard to the work site. In addition the bid price shall include "chipping" around existing box using appropriate means and methods where grinding is required.

SECTION 6.05 - Adjust Hardware To Grade By Resetting. (Road Reconstruction.)

1. Description:

Under this item, the Contractor shall provide all labor, supervision, materials, equipment, insurance and incidentals required to adjust to the proposed grade gas street surface hardware located within the contract area boundaries shown on the plans. The gas company operating in the area, (facility operator), owns these facilities. The work shall consist of either building up or lowering or resetting the casting by removing the existing frame and cover building up or decreasing the existing installation, replacing the frame and/or cover if damaged or worn out, as determined by the Resident Engineer, with a new frame and/or cover furnished by the owner, and setting the frame and cover to new elevation. The work shall be performed in accordance with the contract plans, specifications and at the directions of the Resident Engineer.

2. Materials:

The facility operator shall furnish and deliver all new hardware parts required. The Contractor shall furnish materials such as mortar, bricks and concrete in compliance with contract requirements. At locations where high-early strength concrete is required under this contract to be placed adjacent to gas facilities,

then the requirement for concrete shall be high-early strength complying with the current New York State Department of Transportation, Standard Specifications for Class F concrete. Existing castings may be replaced as required and deemed necessary by the Engineer and by City rules and regulations. The Contractor shall install the new castings of various sizes furnished by the facility operator. The Contractor shall notify the facility operator of the installation schedule at least three (3) business days before materials are required on the site and, shall provide off-loading services to the facility operator. Should the facility operator fail to deliver the necessary material according to any schedule mutually agreed upon by the Contractor and facility operator, the City shall not be responsible for any delays attributable thereto, nor for the failure of delivery of such materials. Such delays shall be a matter of adjustment between the Contractor and the facility operator. On project where material storage is not permitted on site, the facility operator shall deliver the required material to the Contractor's yard and it shall be the Contractor's responsibility to transport the material to the work site when needed for installation. It shall also be the Contractor's responsibility to inspect the materials to be installed by him, immediately upon delivery and advise the facility operator through its authorized representative, of all damaged materials. Contractor at no additional expense to the City or the facility operator shall replace any material that is damaged or lost after the Contractor's inspection.

3. Methods Of Construction:

The Contractor shall remove and reinstall existing castings or install new castings to the proposed grade. Setting and resetting the castings shall be done with mortar and brick according to the standards of the facility operator. Work shall be performed in a workmanlike manner. Castings that are deemed unacceptable for resetting shall remain the property of the facility operator and he shall be responsible for their removal and proper disposal from site. No traffic shall be allowed on adjusted street hardware until permitted by the Engineer.

4. Method Of Measurement:

The Contractor shall be paid for each gas hardware adjusted to grade regardless of size or adjustment height requirements (up or down).

5. Price To Cover:

The unit price bid for this item shall include all additional labor, supervision, insurance, equipment and, material (except those to be provided by the facility operator), required to adjust each gas hardware to grade as required in the contract plans and specifications. The bid price shall also include the removal of existing frames and covers from existing facilities; building up the existing installations with bricks and mortar, or lowering the existing installation by removing bricks and mortar; replacing damaged frames and/or covers with new frames and/or covers furnished by the facility operator; setting the frames and covers to the new elevations; protect existing installations; repair minor structural damages to existing installations prior to resetting frames; unloading of furnished castings at the Contractor's yard and transporting castings from the Contractor's yard to the job site as required; completing the work in accordance with the contract plans, specifications and, at the directions of the Engineer. In addition the bid price shall include "chipping" around existing gas facilities using appropriate means and methods where grinding is required.

SECTION 6.06 - Special Care Excavation And Backfilling.

1. Description:

Under this section, the Contractor shall provide all labor, materials, equipment, insurance and incidentals required to support and protect the integrity of live gas facilities including mains, services, related structures and appurtenances during excavations. The gas company operating in the area, (facility operator), owns these facilities. The work shall be performed in accordance with the contract plans, specifications and at the directions of the Resident Engineer in consultation with authorized representatives of the facility operator.

2. Applicability Of Section:

This section shall apply to live gas facilities of various sizes located within two (2) feet of any face of unsheeted excavation, (unsheeted excavation refers to any excavation performed for city work and includes excavations performed that are to be subsequently sheeted using approved methods) and paralleling or, encroaching any face of excavation. Also, for crossings greater than forty-five (45) degrees and/or located at a cover depth greater than five (5) feet from existing street surface. Parallel facilities are not exposed at any time during excavation (See "Gas Cost Sharing Work Standard Sketch No. 5"). Encroaching facilities are partially exposed inside the limit of excavation (See "Gas Cost Sharing Work Standard Sketch No. 5"). This section shall also apply to gas facilities crossing catch basins excavation, and catch basins sewer connections (chutes) trench excavation only when extra depth (covered in other section), is not required for chutes installations because of such utilities interferences (See "Gas Cost Sharing Work Standard Sketch No. 3"). This section shall also apply to gas services (if shown or otherwise listed in contract documents) crossing unsheeted excavations for water mains, gas facilities crossing fire hydrant branch connections, house sewer and/or water service connections excavations. This section shall also apply for so called "loss trench", as described further, and for additional excavation (pavement and/or soil), backfilling, compaction, roadway base and pavement restoration due to abandoned gas facilities, only if removed by Contractor. If operating status of gas facilities cannot be determined prior to excavation then such facilities shall be considered live and this section shall fully apply. The excavation around fully exposed live gas facilities along and within limits of excavation (not crossings) shall be covered by this section also (not shown on "Gas Cost Sharing Work Standard Sketch No. 5"), however the support requirement, if any is required, of such facilities is beyond the scope of these specifications and therefore shall be the responsibility of facility operator to determine and prescribe, at no cost to the City contract, but shall be a matter of adjustment between the Contractor and facility operator.

3. Payment Restriction:

No special care excavation shall be paid for abandoned gas facilities paralleling and/or encroaching excavation and therefore are not in direct interference with City work. Except as allowed in this section, the bid item specified under this section shall not be used in combination with items covered under other sections for work done due to a particular gas facility. This item shall not be paid for new gas facilities when trenching for such new facilities has been performed by the Contractor of record in common with trench excavation for City Work (overlapping trench limits). The cost of excavating with care as defined in this section shall be deemed included in the cost of trench excavation for the new gas facilities. This restriction shall apply even if such gas common trench excavation is not part of the contract. If facilities are in direct interference with City work, meaning that "Minimum Clearances" described in "General Provisions; Gas Cost Sharing Work Paragraph No. 8" cannot be maintained and excavation has to be temporarily or permanently abandoned then this particular location shall become a test pit and dealt with as specified in Section 6.07 and "General Provisions; Gas Cost Sharing Work Paragraphs Nos. 2 and 8".

4. Method Of Construction:

All excavation in the vicinity of gas facilities shall be as required by NYS Industrial Code 753. Where these facilities are paralleling and located two (2) feet or less from the limits of the proposed excavation, the Contractor shall use hand excavation methods (pick and shovel or hand held power tools) to ascertain the clearances of these facilities with respect to the proposed excavation. Once the location of these facilities with respect to the proposed excavation is verified to the satisfaction of the Resident Engineer, the Contractor shall then proceed with a combination of hand and machine excavation as required preserving the integrity of the facilities. The installation of timber supports or underpinning, when soil foundation cannot fully support partially exposed pipes, may be required to prevent pipe movement as directed by the Resident Engineer.

5. Method Of Payment:

The unit price for this work item shall be based on cubic yard (CY) of average excavation with care and, is to be considered as an incremental cost for performing City work with gas facilities interferences.

6. Method Of Measurement:

- A. For Paralleling Facilities: Volume calculated as: Depth as measured from existing street surface to the bottom of unsheeted trench excavation allowable by OSHA regulations, multiplied by, the width measured as one (1) foot from the face of excavation toward the center of excavation, multiplied by the length of parallel facility, divided by twenty-seven (27) cubic feet per cubic yard (See "Gas Cost Sharing Work Standard Sketch No. 5"). The gas facility is no longer considered to be in interference once sheeting has been installed, therefore no further compensation for paralleling facilities as described above will be made.
- B. For Encroaching Facilities: Volume calculated as: Depth of trench as allowable by OSHA, maximum up to five (5) feet multiplied by, the width of partially exposed pipe plus one (1) foot, multiplied by the length of facility encroachment, divided by twenty-seven (27) cubic feet per cubic yard (See "Gas Cost Sharing Work Standard Sketch No. 5").
- C. Fully Exposed Gas Facilities: (Not shown on "Gas Cost Sharing Work Standard Sketch No. 5") along and inside trench and/or crossing trench at an angle greater than forty-five (45) degrees and/or a cover depth greater than five (5) feet from the existing street surface. The volume shall be measured as the depth of trench excavation multiplied by the distance measured along the sheeting line between two (2) points of intersections of the gas facilities and the sides of trench excavation, multiplied by the width of trench excavation.
- D. For Additional Excavation And Restoration Due To So Called "Loss Trench", When The Integrity Of Pavement And Soil Above And Around Existing Live Gas Facilities Cannot Be Maintained Due To Its Lack Of Cohesiveness: Volume shall be calculated as: Depth of unsheeted trench excavation multiplied by width measured as distance of facility from closest edge of unsheeted excavation plus, width of facility proper plus, one (1) foot or a maximum width of three (3) feet multiplied by length of facility fully exposed divided by, twenty-seven (27) cubic feet per cubic yard (not shown on "Gas Cost Sharing Work Standard Sketch No. 5").
- E. For Facilities Crossing Excavation For Catch Basins, Or Chutes Installations (When NYCDEP Funded) Or Fire Hydrant Branch Connections, Or Unsheeted Water Main Trench, Or House Sewer And/Or Water Services: Volume calculated as: Depth as measured from existing street surface to the bottom of the trench excavation multiplied by, the width taken as the outside diameter of pipe or the width of structure plus one (1) foot on either side (two (2) feet), multiplied by, the length of exposed facility crossing the trench, divided by twenty-seven (27) cubic feet per cubic yard (not shown on "Gas Cost Sharing Work Standard Sketch No. 5").

Overlapping volume dimensions measured as described above may occur when multiple facilities are paralleling excavations, encroaching excavations or crossing catch basins and catch basin chute installations. In such cases, all such facilities shall be counted as one limited by the extreme pipes, faces (See "Gas Cost Sharing Work Standard Sketch No. 2"). The volume shall then be calculated as described above.

7. Price To Cover:

The bid price shall also cover all additional supervision, labor, material, equipment and insurance necessary to excavate while protecting and maintaining (excluding supports for fully exposed live gas) gas facilities without disruption of service to the public and in accordance with contract specifications. The price shall also include, changes of sheeting method and excavation width configuration where necessary to accommodate gas facilities in their existing locations; difficulties during the installation of catch basins, chute connections, hydrant branch, and house sewer and water connections under or over gas facilities; loss of productivity due to slower rate of excavation (special care) during excavation, including the use of such methods as: hand excavation around existing single and multiple facilities, extra excavation and backfilling due to lost trench because of existing and adjacent gas facilities, compaction, removal of sheeting from the facilities, extra roadway base restoration and temporary pavement, associated

maintenance and protection of traffic, barricades, and traffic plates that may be required to temporarily close and/or complete the work.

SECTION 6.07 - Test Pits For Gas Facilities.

1. Description:

Under this section, the Contractor shall furnish all labor, materials, insurance, equipment and appliances necessary to excavate, sheet and, maintain test pits at locations approved by the Resident Engineer in consultation with the facility operator. Test pits shall be dug in order to ascertain exact locations, cover and invert elevations, clearances, alignment and operating status (live or dead) of existing gas facilities. The Contractor shall inspect jointly with the Resident Engineer and facility operator, gas facilities and other structures uncovered, take all relevant measurements and elevations as directed by the Resident Engineer. Tests to determine operating status of gas facilities shall be performed by facility operator. The pits shall be covered with steel plates during daytime nonworking hours, and uncovered, as required, until the inspection work is completed. Testing of gas facilities may require a maximum of four (4) hours. Then, the pits shall be backfilled with clean fill, and resurfaced with temporary pavement. All traffic shall be maintained and all safety measures as stipulated shall be complied with.

2. Methods Of Construction:

- A. Excavation: Existing pavement to be removed shall be neatly cut along lines of removal with a saw or other approved equipment which leaves a neat straight joint line along the juncture with subsequently replaced pavement. Excavation in the vicinity of utilities and other structures shall be performed using hand tools. Use of hand operated pneumatic and electric jackhammers will be permitted only for breaking pavement and removal of masonry, concrete and boulders, or as otherwise directed by the Resident Engineer. The Contractor shall properly dispose of all materials excavated from test pits away from site. Test pits shall be excavated at locations shown on the contract drawings or as directed by the Resident Engineer. Additional test pits may be required and shall be excavated where required, as ordered by the Resident Engineer. All test pits shall be excavated to a depth and size necessary to locate the existing facilities. Sheeting shall be used when depth of excavation exceeds five (5) feet. The sheeting required shall be furnished and installed in full compliance with the State of New York and Federal Safety Codes requirements and as specified in contract, whichever is more stringent. Care shall be taken that no existing gas facilities or other structures are broken or damaged. All broken or damaged facilities shall be reported immediately to facility operator who shall decide whether such facilities shall be repaired or replaced by company forces or by City contractor and in conformance with "General Provisions; Gas Cost Sharing Work Paragraph No. 9". Contractor shall excavate all material encountered, including large masses of concrete, cemented masonry and boulders, as directed by the Resident Engineer. Any type of excavation protection used, shall satisfy the following:
 - (a) Industrial Code Rule 753.
 - (b) Prevent injury to workers and the public, and avoid damage to existing water, sewer, and gas pipes or other structures, and to pavements and their foundations, through caving or sliding of the banks of the excavation.

Should it become necessary, as determined by the Resident Engineer, to enlarge any test pit in any dimension after sheeting has been placed, the Contractor shall remove portions of the sheeting, as necessary, enlarge the test pits as directed, and replace the sheeting without additional compensation for this work other than for the additional volume of material excavated.

B. Maintenance Of Test Pits: Excavated test pits shall be maintained free of debris and kept dry by the Contractor in order to permit the inspection and measurements and to determine the locations of facilities. In order to accomplish this, Contractor shall, upon completion of excavation and placement of sheeting (if depth greater than five (5) feet), furnish and install adequate steel plates and posting over the excavated pits and shall temporarily remove all equipment debris and workers, and relocate barricades in order to open the full width of street to traffic during nonworking hours. The Contractor shall then, at no additional cost, relocate such barricades, barrels, cones and other warning devices and remove steel plates, as and when directed by the Resident Engineer to facilitate the inspection of exposed facilities. When work is being performed and the pits are not covered with steel plates, the Contractor shall provide complete and safe access to the test pits as may be required, and he shall provide construction barricades and maintain traffic at all times as shown or as directed by the Resident Engineer. Upon completion of test pit inspection by the Resident Engineer, the pit shall be backfilled by the Contractor as specified in contract, except that backfill material shall conform to contract specifications for such purpose.

C. Pavement And Sidewalk Restoration: After backfilling is completed, the Contractor shall construct a temporary pavement consisting of a minimum of four (4) inches thick asphaltic concrete mixture in roadway areas or a two (2) inches thick asphaltic concrete mixture in sidewalk areas in order to maintain existing pedestrian and vehicular traffic. This temporary pavement shall be maintained until permanent pavement and sidewalk replacement is constructed as specified in contract.

3. Measurements:

The quantity to be measured for payment shall be the number of cubic yards of material removed from within the limits of the pit dimensions as directed by the Resident Engineer. The volume occupied by existing pipes or other structures remaining within the maximum payment lines will not be deducted from the total volume measured except, where the cross sectional area of these facilities exceeds four (4) square feet. As determined by the Resident Engineer, the quantity measured for payment may be proportionate to a fair and reasonable estimate of gas responsibility in the total volume excavated.

4. Price To Cover:

The contract price bid per cubic yard for test pits shall cover all additional costs of labor, material, insurance, equipment, appliances and incidentals required to excavate test pits, including removal and disposal of excavated materials, sheeting, steel plating, backfill, compaction and temporary pavement and sidewalk restoration all in accordance with the specifications and as directed by the Resident Engineer. The price shall also include the cost of providing safe access to the excavation by facility operator for the performance of certain test to determine operating status of gas facilities prior to City work. The price shall also include support and protection of all gas facilities crossing excavation, paralleling and/or encroaching any face of excavation.

SECTION 6.08 - "NO TEXT"

SECTION 6.09 - Trench Excavation and Backfill for New Gas Mains and Services (For National Grid Work Only)

1. Description:

Under this section, the contractor shall furnish all labor, materials, equipment, insurance, permits and incidentals required to break/remove roadway and sidewalk pavement, excavate, backfill and restore gas trenches. The trench to be excavated shall be determined by the size of the gas facility to be installed. The work shall be performed in accordance with applicable specifications, and/or at the direction of the Resident Engineer in consultation with the facility operator.

2. Materials:

All materials used to excavate and prepare trenches shall be supplied by the Contractor and be approved by the facility operator in consultation with the Resident Engineer.

3. Method of Construction:

Excavation - The Contractor shall saw cut and/or break and remove existing roadway which may include but is not limited to, asphalt, concrete and cobblestone, utilizing approved equipment that leaves a neat straight joint line along the juncture with subsequently replaced pavement. Prior to starting the trenching operation, the contractor shall excavate the appropriate gas main tie-in pits at the extremities of the gas main sections to be replaced. Test pits shall be excavated to determine exact location of all tie-in pits and at appropriate intervals along proposed trench excavation to verify lane and clearances as shown on the contract plans. The tie-in pits shall be adequately protected by the contractor using wood fencing or steel traffic plates until such time when the facility operator has completed the tie-in work. The Contractor shall be permitted to excavate utilizing a combination of machine and hand excavation, as field conditions warrant, and as directed by the facility operator. The trench shall be adjusted so as to provide for a nominal cover on the new gas facilities or as required based on field conditions, applicable specifications, or as directed by the facility operator in consultation with the Resident Engineer. The width of the trench shall be as directed by the facility operator in consultation of the Resident Engineer. The bottom of the trench shall be graded smooth with a minimum cushion of 3 inches of clean sand and in conformance with applicable specification and be compacted, to minimize initial settlement and to avoid "point" support of new gas facilities. All stones projecting into the trench bottom shall be removed, and the voids backfilled before the new gas facilities are installed. Where streets are not to final grade, the cover shall be measured from the final grade, or the existing grade, whichever provides the deeper trench. Excavation in the vicinity of utilities and other structures shall be performed using hand tools. The contractor shall properly dispose of all materials excavated away from site. Size and location of excavation shall be as directed by the facility operator in consultation with the Resident Engineer. Trenches shall be excavated to a depth and size necessary to facilitate the installation of the new gas facility and in conformance with the applicable specification. All existing facilities that are encountered during trench excavating shall be protected in a manner suitable to the facility operator in consultation with the Resident Engineer. Tight sheeting shall be used, as required, based on field conditions and/or when the depth of excavation is equal to or greater than five feet. Skeleton type sheeting will not be permitted. The sheeting required shall be furnished and installed in full compliance with the State of New York and Federal Safety Code requirements and in compliance with applicable specifications and/or as directed by the facility operator in consultation with the Resident Engineer. Care shall be taken that no existing gas facilities or other structures are broken or damaged. Contractor shall excavate all material encountered necessary to facilitate the installation of the new gas facilities, and as directed by the facility operator. Care should be taken to avoid damage to existing utility facilities and structures, and to pavements and their foundations, and to avoid caving or sliding banks within the excavation.

Maintenance of Trench Excavation - Excavated trenches shall be maintained free of debris and kept dry by the contractor. In order to accomplish this, contractor shall, upon completion of excavation and placement of sheeting (as required and/or if depth is equal to or greater than five feet), furnish and install adequate steel plates, as directed by the facility operator in consultation with the Resident Engineer, and posting over the excavated trenches and shall temporarily remove all equipment debris and workers, and relocate barricades in order to open the full width of street to traffic during non-working hours, as required based on DOT requirements. National Grid forces will perform all live gas main connections, dead gas main cut-outs, and/or service work associated with disconnecting and reconnecting from old to new gas main The Contractor shall then, at no additional cost, relocate such barricades barrels, cones and other warning devices and remove steel plates, as and when directed by the facility operator in consultation with the Resident Engineer to facilitate the installation of the new gas facilities. When work is being performed and the excavations are not covered with steel plates, the Contractor shall provide complete and safe access to the trench as may be required, and shall provide construction barricades and maintain traffic at all times as shown or as directed by the facility operator in consultation with the Resident Engineer. The contractor has the responsibility to maintain and set to grade all National Grid hardware during backfill and payement restoration. Upon completion of installation of the new gas facility, the trench excavation shall be backfilled by the contractor in accordance with Contract requirements and all backfill material shall conform to contract specifications for such purpose.

Pavement and Sidewalk Restoration - After backfilling is completed, the contractor shall install temporary pavement consisting of six inches (6") thick asphaltic concrete mixture in roadway areas or a two inches (2")

thick asphaltic concrete mixture in sidewalk areas in order to maintain existing pedestrian and vehicular traffic. This temporary pavement shall be maintained until permanent replacement as specified in contract. Permanent pavement restoration shall be as required by the appropriate contract specifications and as directed by the Resident Engineer.

4. Method of Measurement:

The quantity to be measured for payment shall be the number of cubic yards (C.Y.) of trench actually excavated, including roadway pavement, base and/or sidewalk concrete removed within the limits of the trench as directed by the Resident Engineer in consultation with the facility operator. The volume occupied by existing pipes or other structures will be deducted from the total volume measured as shown on contract drawing(s) Title: EP-7 SECT. 6.09 GAS SPECIALTY CONTRACTOR WORK, or as encountered based on existing field conditions.

5. Price to Cover:

The unit price bid per cubic yard for excavation shall include the cost of all supervision, labor, material, equipment, insurance and incidentals necessary to complete excavation trenches, including backfill, compaction testing and restoration of trenches and tie-ins pits as specified or shown on the contract, plans. The bid price shall also include the cost of coordinating the sewer and water main work to be performed by the contractor with the gas installation work to be performed by others. The price shall also include, associated maintenance of traffic, and traffic plates and openings and closings of plates as may be required in order to provide access to the facility operator during the new gas facility installation, and installing, removing and maintaining tight sheeting that may be required, cut, break and remove various thickness of surface and base pavement, excavate by hand, furnish, place and compact, in compliance with DOT requirements, clean sand backfill following installation of the gas facility. Any required removing, trucking, storing, and disposing of material shall be deemed included in the unit price. The price shall also include the cost of providing temporary pavement restoration. Permanent pavement restoration shall be deemed included in this item, as required and as directed by the Resident Engineer.

SECTION 6.09a Trench Excavation and Backfill for New Gas Mains and Services (For Con Edison Work Only)

1. Description:

Under this section, the contractor shall furnish all labor, materials, equipment, insurance, permits and incidentals required to break/remove roadway and sidewalk pavement, excavate, backfill and restore gas trenches. The trench to be excavated shall be determined by the size of the gas facility to be installed. The work shall be performed in accordance with applicable specifications, and/or at the direction of the Resident Engineer in consultation with the facility operator.

2. Materials:

All materials used to excavate and prepare trenches shall be supplied by the Contractor and be approved by the facility operator in consultation with the Resident Engineer. Clean sand backfill material shall be used and shall conform to Con Edison specification EO-1181-rev.6, General Specification for Backfilling of Trench and Small Openings.

3. Method of Construction:

Excavation – The Contractor shall saw cut and/or break and remove existing roadway which may include but is not limited to, asphalt, concrete and cobblestone, utilizing approved equipment that leaves a neat straight joint line along the juncture with subsequently replaced pavement. Prior to starting the trenching operation, the contractor shall excavate the appropriate gas main tie-in pits at the extremities of the gas main sections to be replaced. Test pits shall be excavated to determine exact location of all tie-in pits and at appropriate intervals along proposed trench excavation to verify lane and clearances as shown on the contract plans. The tie-in pits shall be adequately protected by the contractor using wood fencing or steel

traffic plates until such time when the facility operator has completed the tie-in work. The Contractor shall be permitted to excavate utilizing a combination of machine and hand excavation, as field conditions warrant, and as directed by the facility operator. The trench shall be adjusted so as to provide for a nominal cover on the new gas facilities or as required based on field conditions, applicable specifications, or as directed by the facility operator in consultation with the Resident Engineer. The width of the trench shall be as directed by the facility operator in consultation of the Resident Engineer. The width and depth of the trench shall conform to Con Edison Gas Operations drawing 309495 rev. 4, Trench Excavation for Gas Mains Up to 350 PSIG, or as directed by the facility operator in consultation of the Resident Engineer. The bottom of the trench shall be graded smooth with a minimum cushion of 3 inches of clean sand and in conformance with applicable specification and be compacted, to minimize initial settlement and to avoid "point" support of new gas facilities. All stones projecting into the trench bottom shall be removed, and the voids backfilled before the new gas facilities are installed. Where streets are not to final grade, the cover shall be measured from the final grade, or the existing grade, whichever provides the deeper trench. Excavation in the vicinity of utilities and other structures shall be performed using hand tools. The contractor shall properly dispose of all materials excavated away from site. Size and location of excavation shall be as directed by the facility operator in consultation with the Resident Engineer. Trenches shall be excavated to a depth and size necessary to facilitate the installation of the new gas facility and in conformance with the applicable specification. All existing facilities that are encountered during trench excavating shall be protected in a manner suitable to the facility operator in consultation with the Resident Engineer. Tight sheeting shall be used, as required, based on field conditions and/or when the depth of excavation is equal to or greater than five feet. Skeleton type sheeting will not be permitted. The sheeting required shall be furnished and installed in full compliance with the State of New York and Federal Safety Code requirements and in compliance with applicable specifications and/or as directed by the facility operator in consultation with the Resident Engineer. Care shall be taken that no existing gas facilities or other structures are broken or damaged. Contractor shall excavate all material encountered necessary to facilitate the installation of the new gas facilities, and as directed by the facility operator. Care should be taken to avoid damage to existing utility facilities and structures, and to pavements and their foundations, and to avoid caving or sliding banks within the excavation.

Maintenance of Trench Excavation - Excavated trenches shall be maintained free of debris and kept dry by the contractor. In order to accomplish this, contractor shall, upon completion of excavation and placement of sheeting (as required and/or if depth is equal to or greater than five feet), furnish and install adequate steel plates, as directed by the facility operator in consultation with the Resident Engineer, and posting over the excavated trenches and shall temporarily remove all equipment debris and workers, and relocate barricades in order to open the full width of street to traffic during non-working hours, as required based on DOT requirements. Con Edison forces will perform all live gas main connections, dead gas main cut-outs, and/or service work associated with disconnecting and reconnecting from old to new gas main The Contractor shall then, at no additional cost, relocate such barricades barrels, cones and other warning devices and remove steel plates, as and when directed by the facility operator in consultation with the Resident Engineer to facilitate the installation of the new gas facilities. When work is being performed and the excavations are not covered with steel plates, the Contractor shall provide complete and safe access to the trench as may be required, and shall provide construction barricades and maintain traffic at all times as shown or as directed by the facility operator in consultation with the Resident Engineer. The contractor has the responsibility to maintain and set to grade all Con Edison hardware during backfill and pavement restoration. Upon completion of installation of the new gas facility, the trench excavation shall be backfilled by the contractor in accordance with Contract requirements and all backfill material shall conform to contract specifications for such purpose.

Pavement and Sidewalk Restoration - After backfilling is completed, the contractor shall install temporary pavement consisting of six inches (6") thick asphaltic concrete mixture in roadway areas or a two inches (2") thick asphaltic concrete mixture in sidewalk areas in order to maintain existing pedestrian and vehicular traffic. This temporary pavement shall be maintained until permanent replacement as specified in contract. Permanent pavement restoration shall be as required by the appropriate contract specifications and as directed by the Resident Engineer.

4. Method of Measurement:

The quantity to be measured for payment shall be the number of cubic yards (C.Y.) of trench actually excavated, including roadway pavement, base and/or sidewalk concrete removed within the limits of the trench as directed by the Resident Engineer in consultation with the facility operator. The volume occupied by existing pipes or other structures will be deducted from the total volume measured as shown on contract drawing(s) Title: EP-7 SECT. 6.09 GAS SPECIALTY CONTRACTOR WORK, or as encountered based on existing field conditions.

5. Price to Cover:

The unit price bid per cubic yard for excavation shall include the cost of all supervision, labor, material, equipment, insurance and incidentals necessary to complete excavation trenches, including backfill, compaction testing and restoration of trenches and tie-ins pits as specified or shown on the contract, plans. The bid price shall also include the cost of coordinating the sewer and water main work to be performed by the contractor with the gas installation work to be performed by others. The price shall also include, associated maintenance of traffic, and traffic plates and openings and closings of plates as may be required in order to provide access to the facility operator during the new gas facility installation, and installing, removing and maintaining tight sheeting that may be required, cut, break and remove various thickness of surface and base pavement, excavate by hand, furnish, place and compact, in compliance with DOT requirements, clean sand backfill following installation of the gas facility. Any required removing, trucking, storing, and disposing of material shall be deemed included in the unit price. The price shall also include the cost of providing temporary pavement restoration. Permanent pavement restoration shall be deemed included in this item, as required and as directed by the Resident Engineer.

GAS COST SHARING STANDARD SPECIFICATIONS SCHEDULE GCS-A

Average rate charged by utility companies to Disconnect and Reconnect Gas Services:

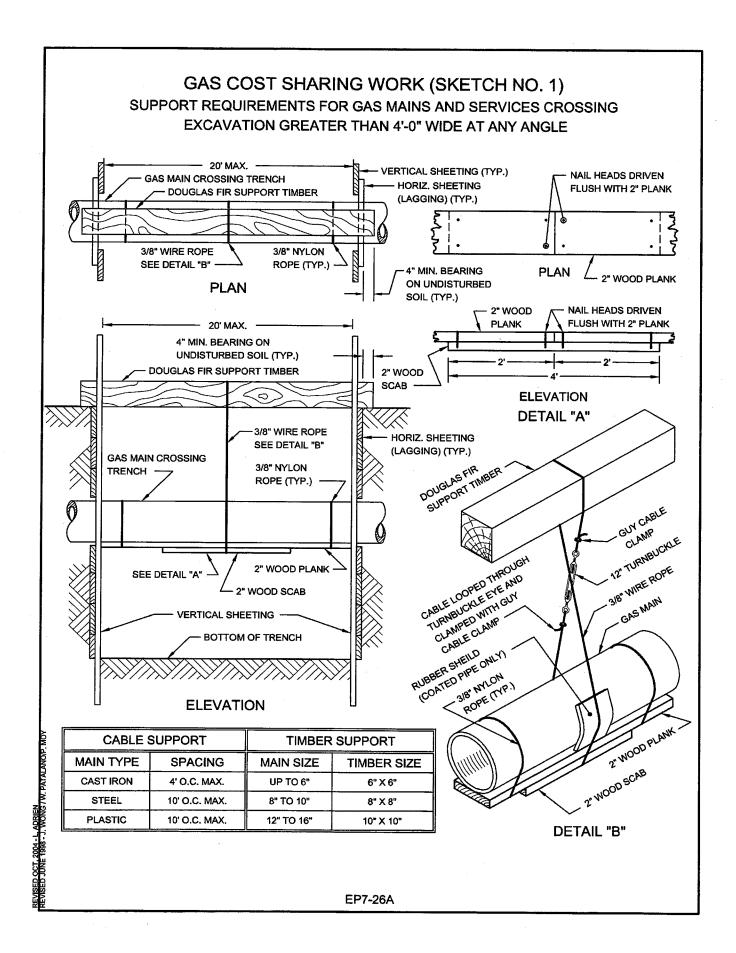
1. National Grid - \$586.90 per Service/and Visit

2. Con Edison - \$524.00 per Service/and Visit

IV - STANDARD SKETCHES; GAS COST SHARING WORK

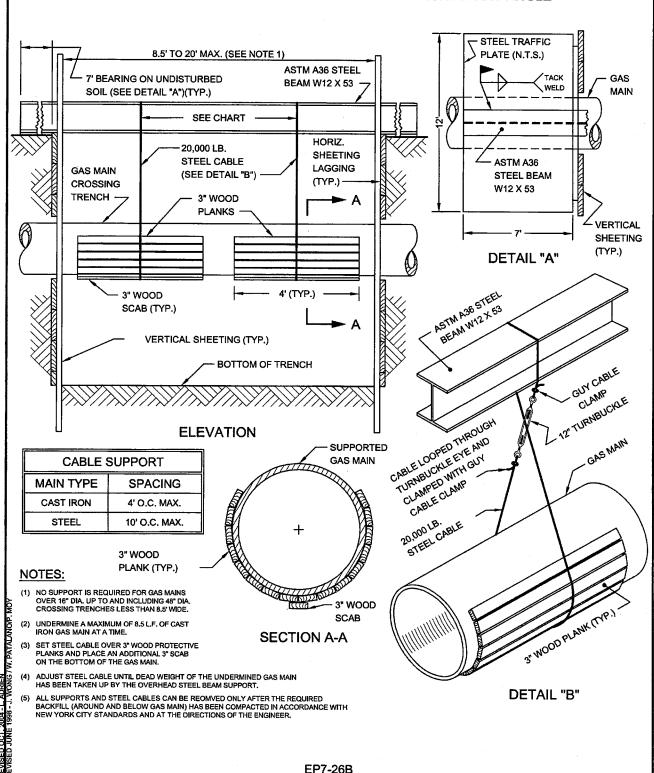
Hereinafter attached are the following Standard Sketches for Gas Cost Sharing Work:

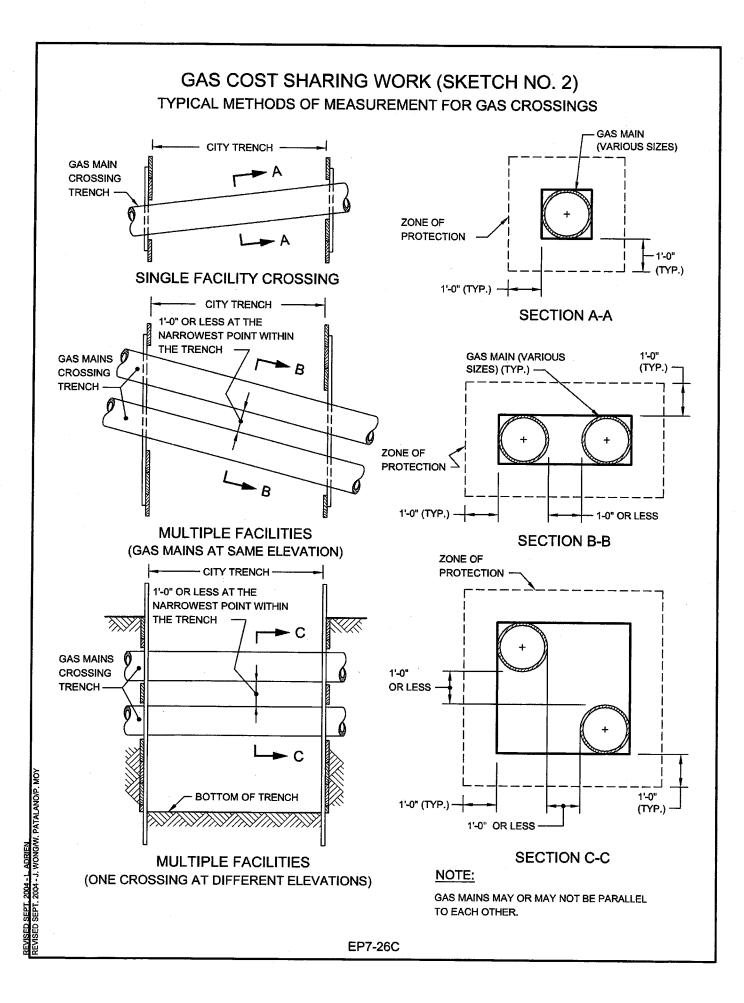
- Sketch No. 1 Support Requirements For Gas Mains And Services Crossing Excavation Greater Than 4' 0" Wide At Any Angle
- Sketch No. 1A Support Requirements For Gas Mains Over 16" Diameter Up To And Including 48" Diameter Crossing Excavation At Any Angle
- Sketch No. 2 Typical Methods Of Measurement For Gas Crossings
- Sketch No. 3 Utility Crossings During Catch Basin Chute Connection Pipe Installation
- Sketch No. 4 Utility Crossings During Catch Basin Chute Connection Pipe Installation (Extra Depth)
- Sketch No. 5 Gas Main Encroachment On And/Or Parallel To Excavation Of Unsheeted Trench



GAS COST SHARING WORK (SKETCH NO. 1A)

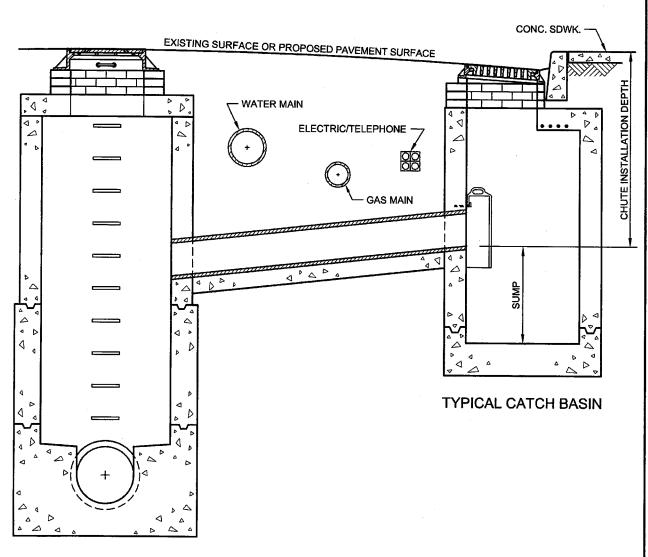
SUPPORT REQUIREMENTS FOR GAS MAINS OVER 16" DIAMETER UP TO AND INCLUDING 48" DIAMETER CROSSING EXCAVATION AT ANY ANGLE





GAS COST SHARING WORK (SKETCH NO. 3)

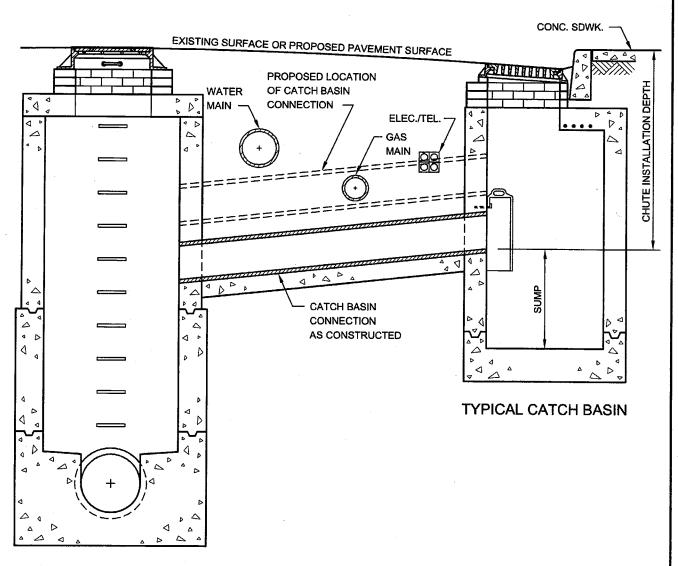
UTILITY CROSSINGS DURING CATCH BASIN CHUTE CONNECTION PIPE INSTALLATION



TYPICAL SEWER MANHOLE

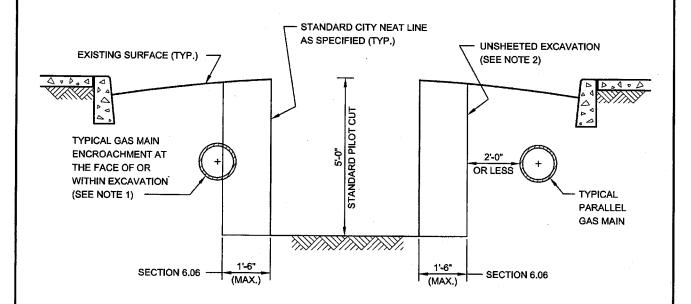
GAS COST SHARING WORK (SKETCH NO. 4)

UTILITY CROSSINGS DURING CATCH BASIN CHUTE CONNECTION PIPE INSTALLATION (EXTRA DEPTH)



TYPICAL SEWER MANHOLE

GAS COST SHARING WORK (SKETCH NO. 5) GAS MAIN ENCROACHMENT ON AND/OR PARALLEL TO EXCAVATION OF UNSHEETED TRENCH



NOTES:

- (1) GAS MAIN LOCATED AS SHOWN MAY HAVE TO BE REMOVED BY THE FACILITY OPERATOR PRIOR TO THE START OF CITY EXCAVATION, OTHERWISE, THE CONTRACTOR WILL BE PAID UNDER SECTION 6.06 FOR THE SAID WORK. IF GAS MAIN IS ABANDONED THEN SECTION 6.03 SHALL APPLY.
- (2) EIGHTEEN (18) INCHES FROM STANDARD NEAT LINE IS THE MAXIMUM ALLOWABLE WIDTH OF AREA THAT MAY BE DISTURBED OR EXCAVATED DURING INSTALLATION OF CERTAIN TYPES OF SHEETING SYSTEMS THAT MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS OF THE DEPARTMENT OF DESIGN AND CONSTRUCTION OF THE CITY OF NEW YORK.

<u>V - PRELIMINARY GAS WORK TO BE PERFORMED BY</u> <u>FACILITY OPERATOR.</u>

APPLICABLE TO ALL GAS DRAWINGS:

- ALL RELOCATION WORK SHOWN IN THIS SECTION IS TO BE PERFORMED BY FACILITY OPERATOR.
- ALL SUPPORT AND PROTECTION WORK TO BE PERFORMED BY CITY CONTRACTOR
- IF ADDITIONAL INFORMATION IS NEEDED REGARDING THE FACILITY OPERATOR'S RELOCATION WORK, THE CONTRACTOR IS ADVISED TO CONTACT THE GAS COMPANY REPRESENTATIVE:

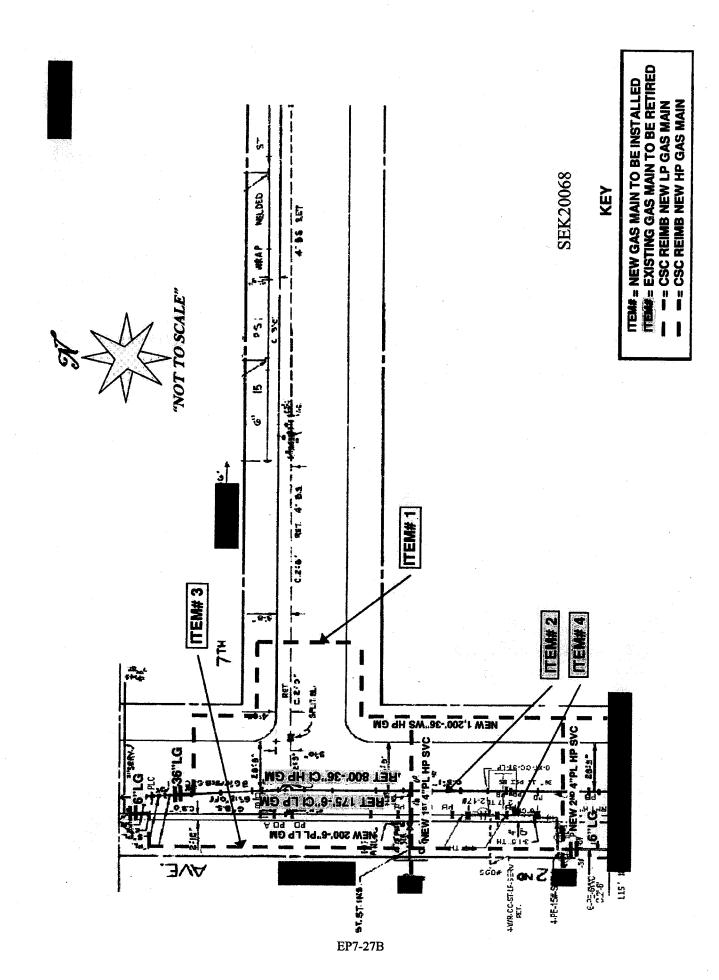
Neville Jacobs Jr.
NationalGrid Energy Delivery
287 Maspeth Avenue
Brooklyn, NY 11211
718-963-5612

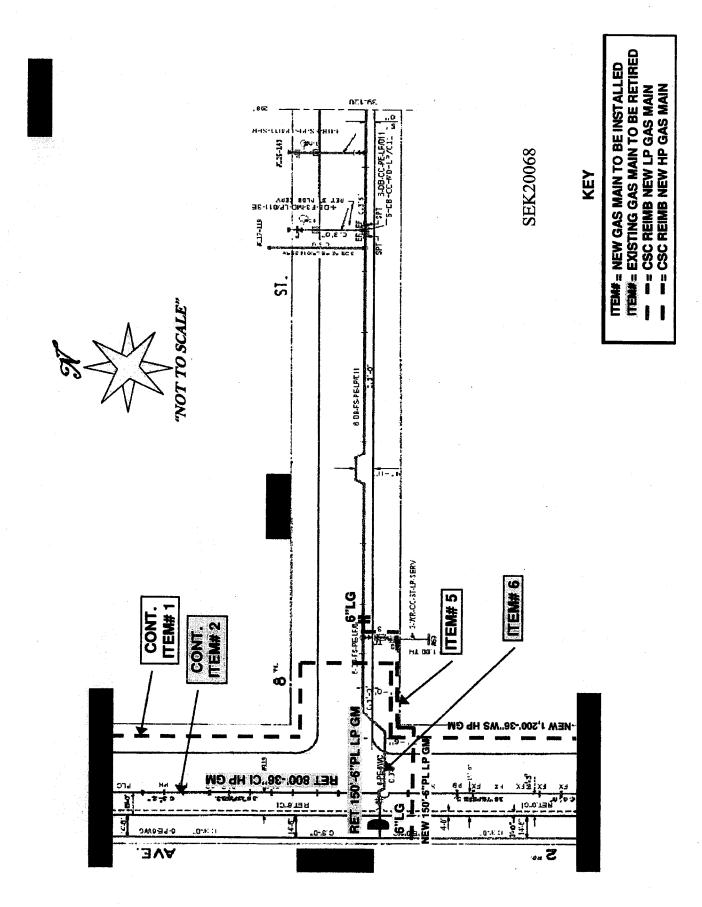
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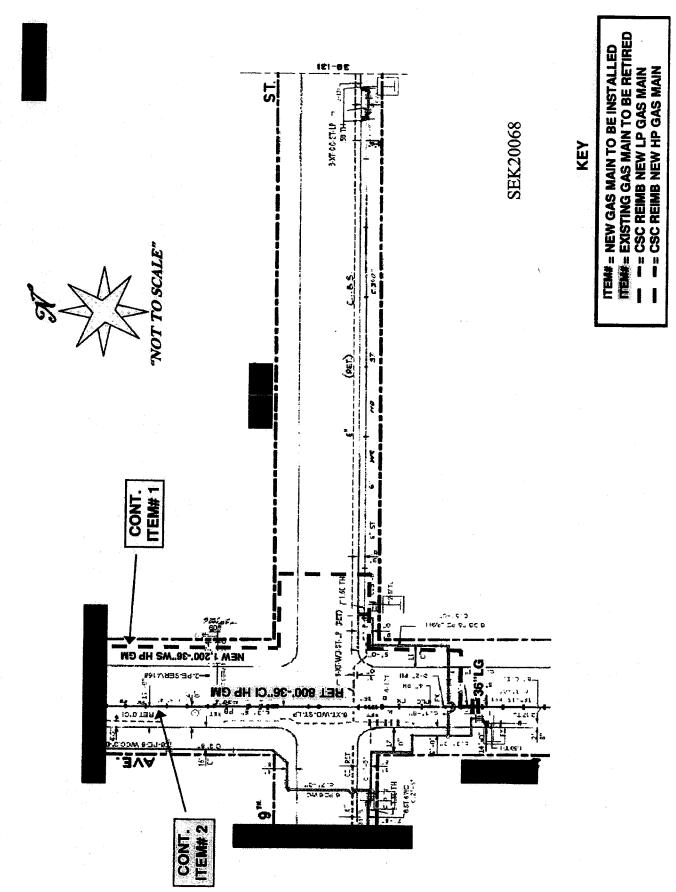
NATIONAL GRID

SEK20068 (West 9 St) Gas Main Work

TEN	On Street:	1st X-Street:	2nd X-Street:	install/Retire: Size: Mari: Footage:	Size:	Marti	Footage:	Pressure.	Reimb:
-	2 Ave	7.St	9.81	Install	36.,	WS	1,200	dН	Yes
2	2 Ave	7.51	9.81	Retire	36"	ວ	800	dН	Yes
က	2 Ave	7 St	8.51	Instail	9	Ы	200	ďT	Yes
4	2 Ave	7 St	8 St	Retire	.,9	ಶ	175	ď٦	Yes
5	8 St	2 Ave	3 Ave	Install	9	P	150	ГÞ	Yes
9	8 St	2 Ave	3 Ave	Retire	9	PL	150	9.	Yes
7	9 ST	2 Ave	Gowanus Canal	Install	9	PL	175	9	Yes
80	9 ST	2 Ave	Gowanus Canal	Retire		SM	175	٩	Yes
o	West 9 ST	Smith St	Gowanus Canal	Install	5	PL	325	유	Yes
10	West 9 ST	Smith St	Gowanus Canal	Retire		Ы	325	윺	Yes
11	West 9 ST	Smith St	Gowanus Canal	Retire	9	PL	145	5	Yes

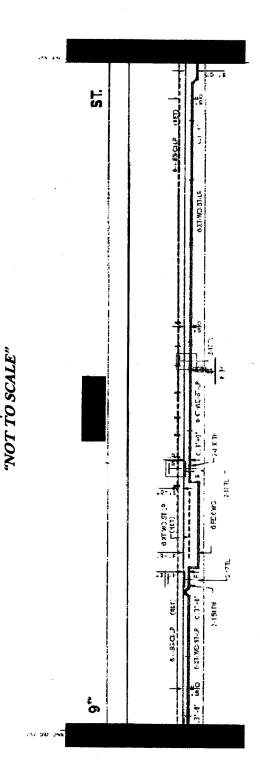




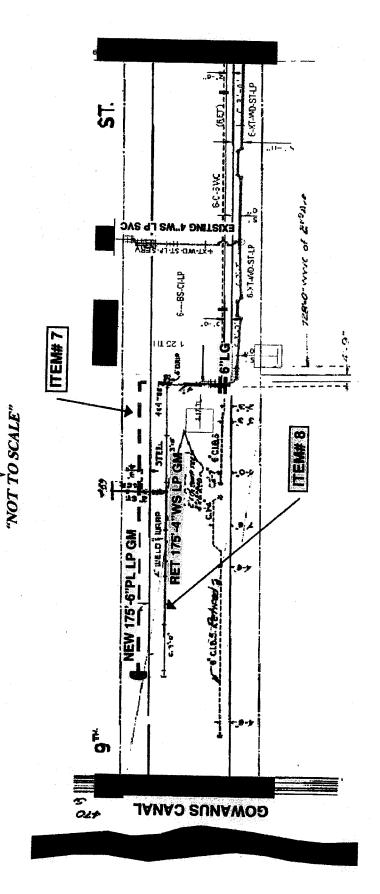


EP7-27D

KEY

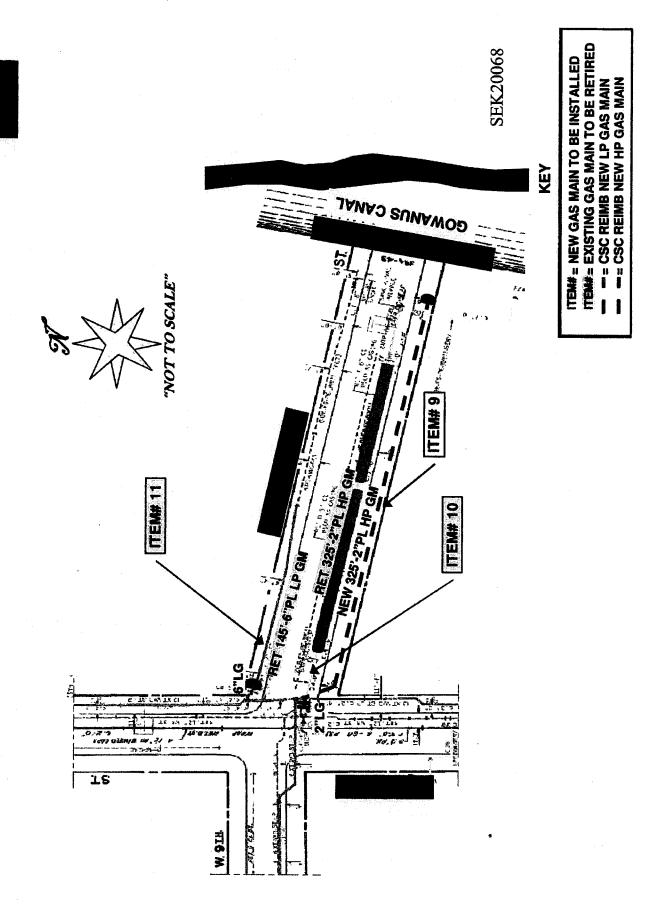


SEK20068



SEK20068

KEY



EP7-27G

VI - LISTING OF APPROXIMATE LOCATIONS OF EP-7 BID ITEMS QUANTITIES.

(NO TEXT IN THIS AREA, TURN PAGE)

SCOPE OF WORK SUPPORT AND PROTECTION FOR CONTRACT NUMBER SEK-20068

The City of New York Department of Design and Construction is planning to install sewers and/or water mains and all appurtenances in various locations in The City of New York along with all work incidental thereto.

6.01.1 - Support & Protect Gas Main Crossing Sewer Up To 24" In Diameter (Ea.)

6 in 9th Street bet Gowanus Canal & 2nd Ave 1 in Intersection of 2nd Ave & 8th St

6.01.2 - Support & Protect Gas Main Crossing Sewer 30" In Diameter (Ea.)

1 in 2nd Ave bet 8th St & 9th St

6.01.4C - Support & Protect Gas Main Crossing Sewer 45"W - 29"H H.E.R.C.P. (Ea.)

1 in 9th Street bet Gowanus Canal & 2nd Ave

6.01.5D - Support & Protect Gas Main Crossing Sewer 53"W – 34"H H.E.R.C.P. (Ea.)

1 in 9th Street bet 2nd Ave & Gowanus Canal

2 in 2nd Ave bet 7th Street & 8th Street

6.01.8 - Support & Protect Gas Services Crossing Trenches and/or Excavations (Ea.)

43 in Various Locations As Required

6.01.9 - Support & Protect Gas Main Crossing Water Main Up To 20" In Diameter (Ea.)

3 in 2nd Ave bet 7th Street & 8th Street

1 in 2nd Ave bet 8th Street & 9th Street

1 in Intersection of 2nd Ave & 8th Street

6.02 - Extra Excavation For the Installation of Catch Basin Sewer Drain Pipes with gas interferences (Ea.)

3 in Various Locations As Required

- Removal Of Abandoned Gas Facilities. All Sizes (L.F.)

1500 in Various Locations As Required

SCOPE OF WORK SUPPORT AND PROTECTION FOR CONTRACT NUMBER SEK-20068

The City of New York Department of Design and Construction is planning to install sewers and/or water mains and all appurtenances in various locations in The City of New York along with all work incidental thereto.

6.03.1 - Removal Of Abandoned Gas facilities with Possible Coal Tar Wrap. All sizes. (L.F.) (For National Grid work Only)

1400 in Various Locations As Required

6.04 - Adjust Hardware to Grade Using Spacer Rings/Adaptors (Street repaying) (Ea.)

10 in Various Locations As Required

6.05 - Adjust Hardware to Grade by Resetting (Road Reconstruction) (Ea.)

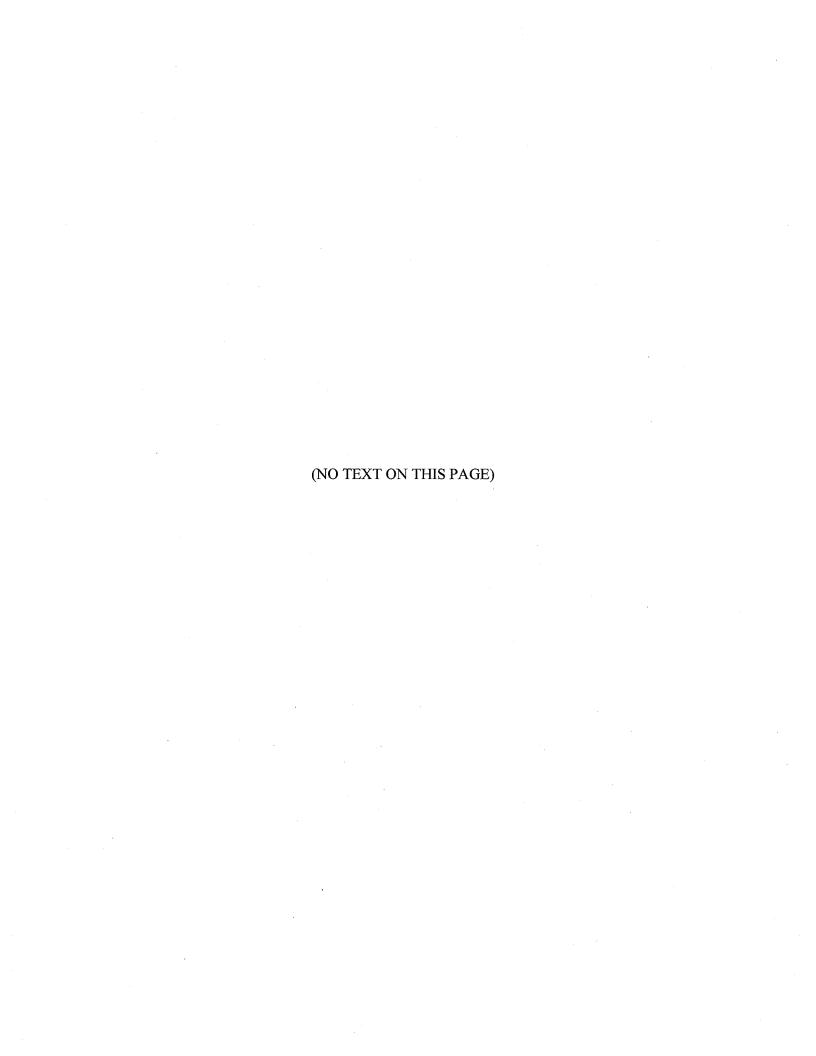
10 in Various Locations As Required

6.06 - Special Care Excavation & Backfilling (C.Y.)

600 in various locations, as required, including but not limited to all gas services crossing unsheeted water main trenches.

6.07 - Test Pits For Gas Facilities (C.Y.)

50 in Various Locations As Required



HAZ - PAGES

SPECIFICATIONS FOR HANDLING, TRANSPORTATION AND DISPOSAL

OF NONHAZARDOUS AND POTENTIALLY HAZARDOUS CONTAMINATED MATERIALS

NOTICE

THE PAGES CONTAINED IN THIS SECTION ARE ISSUED FOR THE PURPOSE OF SPECIFYING THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND HEREBY MADE PART OF SAID CONTRACT DOCUMENTS.

(NO TEXT ON THIS PAGE)

SPECIFICATIONS FOR HANDLING, TRANSPORTATION AND DISPOSAL OF NON-HAZARDOUS AND POTENTIALLY HAZARDOUS CONTAMINATED MATERIALS

NEW STORM AND COMBINED SEWERS AND WATER MAIN IN 9TH STREET, ETC.

Capital Project ID: SEK20068

BOROUGH OF BROOKLYN
CITY OF NEW YORK

Prepared By:



30-30 Thomson Avenue, 3rd Floor Long Island City, New York 11101

April 10, 2018

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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 onsite by the Contractor, meeting all required Federal, State and Local stipulations. Sampling and laboratory analysis must be conducted to determine if the soils are hazardous, unless the alternative procedure as defined under subsection 8.01 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. <u>Material Handling Plan</u>: 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 States 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.
- 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 for ensuring 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:

ITEM NUMBER	ITEM	PAYMENT UNIT
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/	Set
	Potentially Hazardous Soil for Disposal Parameters	

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. <u>Material Handling Plan</u>: 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 H.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, OEGS.

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 H.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:

ITEM NUMBER	ITEM	PAYMENT UNIT
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:

ITEM NUMBERITEMPAYMENT UNIT8.01 SHealth and SafetyLump 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:

ITEM NUMBER	ITEM	PAYMENT UNIT
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. <u>Description</u>

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
 - Field observation
 - d. Sample type
 - e. Analyses
 - f. Date/time of collection
 - g. Collector's name
 - h. Sample procedures and equipment used
 - i. Date sent to laboratory/name of laboratory
- 6. Only dedicated sampling equipment may be used to collect these samples. All equipment involved in field sampling must be decontaminated before being brought to the site, and must be properly disposed of after use.
- 7. Samples shall be submitted to the Contractor's laboratory within the holding times for the parameters analyzed.

- 8. All analyses must be done by a laboratory that has received approval from the DOH's ELAP for the methods to be done. The Contractor must specify the laboratory in the WHP.
- 9. Analytical results for water discharged to the sewer and for off-site disposal must be submitted to the DDC no later than five (5) days after sample collection.
- 10. The City reserves the right to direct the Contractor to conduct alternative sampling in lieu of the parameters described above, if the situation warrants. The substitute sampling parameters shall be of equal or lesser monetary value than those described above, as determined by industry laboratory pricing standards.

8.01 W2.2 METHOD OF MEASUREMENT

Quantities for samples shall be measured as the number of sets of samples that are tested for the DEP Sanitary/Combined and Storm Sewer Effluent Limit concentrations. A set shall be defined as one (1) representative sample analyzed for the full range of DEP parameters as specified in attachment 1.

8.01 W2.3 PRICE TO COVER

The unit price bid per set for Item 8.01 W2 shall include the cost of furnishing all labor, materials, equipment, plan, and insurance for handling, transport, sampling, testing, documentation, permits, other incidentals necessary to complete the work of sampling and testing of contaminated water. Any additional costs incurred by the Contractor for sampling and testing of contaminated water shall be included in the bid price of this Item.

Payment will be made under:

ITEM NUMBER	ITEM	PAYMENT UNIT
8.01 W2	Sampling and Testing of Contaminated Water	Set

ATTACHMENT 1: 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 ¹	Daily Limit	Units	Sample Type	Monthly Limit
Non-polar material ²	50	mg/l	Instantaneous	
pH	5-11	SU's	Instantaneous	
Temperature	< 150	Degree F	Instantaneous	
Flash Point	> 140	Degree F	Instantaneous	
Cadmium	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) ³	1	ppb	Composite	
Total Suspended Solids (TSS)	350 ⁴	mg/l	Instantaneous	
CBOD ⁵		u=	Composite	
Chloride ⁵			Instantaneous	
Total Nitrogen ⁵			Composite	
Total Solids ⁵	 		Instantaneous	

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

- 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.
- Analysis for PCB=s is required if *both* conditions listed below are met:
 - 1) if proposed discharge ≥ 10,000 gpd;
 - 2) if duration of a discharge > 10 days.

Analysis for PCB=s must be done by EPA method 608 with MDL=<65 ppt. PCB's (total) is the sum of PCB-1242 (Arochlor 1242), PCB-1254 (Arochlor 1254), PCB-1221 (Arochlor 1221), PCB-1232 (Arochlor 1232), PCB-1248 (Arochlor 1248), PCB-1260 (Arochlor 1260) and PCB-1016 (Arochlor 1016).

- 4 For discharge ≥ 10,000 gpd, the TSS limit is 350 mg/l. For discharge < 10,000gpd, 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 ≥ 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
- 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"
- NFPA No. 327 "Standard Procedures for Cleaning and Safeguarding Small Tanks and Containers"

- 28. Occupational Safety and Health Act Confined Space Entry Standard 29 CFR 1910.146.87
- 29. Department of Transportation 49 CFR 100 through 179
- 30. Department of Transportation 49 CFR 387 (46 FR 30974, 47073)
- 31. Environmental Protection Agency 40 CFR 136 (41 FR 52779)
- 32. Environmental Protection Agency 40 CFR 262 and 761
- 33. Resource Conservation and Recovery Act (RCRA)
- 34. Any transporter of hazardous or non-hazardous materials shall be licensed in the State of New York and all other states traversed in accordance with all applicable regulations.

ATTACHMENT 3: DEFINITIONS

- Contaminated Groundwater and Decontamination Fluids: Groundwater within the excavation trench or decontamination water that contains regulated compounds above the NYCDEP Discharge to Sanitary/Combined Sewer Effluent limits.
- **Disposal or Treatment Facility:** A facility licensed to accept either non-hazardous regulated waste or hazardous waste for either treatment or disposal.
- **Exclusion Zone:** Work area that will be limited to access by Contractor personnel specifically trained to enter the work area only. The exclusion zone will be set up to secure the area from the public and untrained personnel. The project health and safety program will apply to all construction personnel including persons entering the work area.
- **Hazard Assessment:** An assessment of any physical hazards that may be encountered on a work site.
- **Hazardous Soils:** Soils that exhibit any of the characteristics of a hazardous waste, namely ignitability, corrosivity, reactivity, and toxicity, as defined in 6 NYCRR Part 371, Section 371.3 and 40 CFR Section 261.
- Hazardous Substance Evaluation: An evaluation of the possible or known presence of any hazardous substances that may be encountered on a job site. This evaluation is included in the Health and Safety Plan and will include the identification and description of any hazardous substances expected to be encountered. Material Safety Data Sheets (MSDS) will be included for each substance.
- **Health and Safety Plan:** A plan employed at a work site that describes all the measures that will be taken to assure that all work is conducted in a safe manner, and that the health of the workers and the public will be insured.
- Material Handling Plan: A plan outlining the methods that will be employed to handle, transport and dispose of contaminated materials.
- **Non-Hazardous Contaminated Soils:** Soils which exhibit a distinct chemical or petroleum odor, or exhibit elevated photoionization detector readings but are not classified as hazardous waste under 6 NYCRR Part 371, Section 371.3 and 40 CFR Section 261.
- New York State Health Department's Environmental Laboratory Approval Program: A program by which the state of New York approves and accredits environmental testing laboratories.
- **PCBs:** Polychlorinated biphenyls are a group of toxic compounds commonly used as a coolant in transformers and other electrical components.
- **Photoionization Detector:** A hand held instrument used to measure volatile organic compounds in air. The instrument ionizes the organic molecules through the use of an ultraviolet lamp.
- **RCRA Hazardous Waste Characteristics:** Characteristics of a material which may indicate the material is hazardous. These include: ignitability corrosivity, reactivity, and toxicity.
- **Total Petroleum Hydrocarbons:** An analytical procedure used to determine the total amount of petroleum compounds in a material.

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ATTACHMENT	4: PHASE II	SUBSURFACI	E CORRIDOR IN	ESTIGATION REPORT
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- FINAL -

Phase II Subsurface Corridor Investigation Report For

New Storm and Combined Sewers and Water Main Work 9th Street Between 2nd Avenue and Gowanus Canal Brooklyn, New York

DDC PROJECT NO.: SEK20068
TASK ID: 9213
WORK ORDER LETTER NO.: 9213-Weston-R-8728
CONTRACT REGISTRATION NO. 20131407562
Prepared for:



Bureau of Environmental and Geotechnical Services
30-30 Thomson Avenue, Fifth Floor
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PROJECT NO. 14513.009.213

November 21, 2013



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EXECUTIVE SUMMARY

On behalf of the New York City Department of Design and Construction (NYCDDC), Weston Solutions of New York, Inc. (Weston®) conducted a Phase II Subsurface Corridor Investigation (SCI) for the site located on 9th Street between 2nd Avenue and Gowanus Canal in Brooklyn, New York (hereinafter referred to as the Corridor). The New York City Department of Environmental Protection (NYCDEP) is proposing the installation of a new storm and combined sewers and water main within the Corridor as part of its outfall project under the City Environmental Quality Review (CEQR) The Corridor is comprised of the following street segments in the Gowanus section of Brooklyn, New York:

- 9th Street between Smith Street and 2nd Avenue; and,
- 2nd Avenue between 9th Street and 7th Street.

The Corridor is approximately 0.27 miles (1,426 feet) in length along 9th Street between 2nd Avenue and Gowanus Canal (Smith Street) and approximately 0.1 miles (530 feet) in length along 2nd Avenue between 9th Street and 7th Street. The overall length of the Corridor is approximately 0.37 miles (1,956 feet).

Weston prepared a Phase I Corridor Assessment Report (CAR) dated August 2, 2013. The Phase I CAR presented the results of an investigation to document the current use, a review of fire insurance maps to document historical use, and a review of the state and federal government databases to identify sites on or adjoining the Corridor that constitute a potential environmental concern. Based on Risk Criteria protocol established by the NYCDDC, findings presented in the CAR defined these sites as posing either "High", "Moderate", or "Low" risk for possible contamination to the subsurface environment along the Corridor.

The Phase I CAR identified 10 "High" risk sites and 10 "Moderate" risk sites with respect to potential impact to the project Corridor Areas. The Weston Phase I CAR proposed advancing 30 borings to address the 10 "High" risk sites and 10 "Moderate" risk sites and historic fill material. However, the number of soil borings was reduced to seven (7) soil borings (SB-01 through SB-07) due to the close proximity of the "High" and "Moderate" risk sites. The number of soil borings was reduced by placing borings in representative locations along the Corridor. The Phase II SCI was conducted to determine if the Corridor's environmental condition may potentially impact the proposed construction activities. The Phase II SCI consisted of the following components:

The advancement of six (6) soil borings (SB-02 through SB-07) to the terminal depth of 20 feet below ground surface (ft bgs). All borings were initially pre-cleared, using a vactron and air knife methods to six (6) ft bgs. The six (6) of the seven (7) borings (SB-02 through SB-07) were then advanced using a Geoprobe® direct push drill rig. Soil Samples were collected using a 5-foot long, 2-inch diameter Macro Core stainless steel



samplers equipped with acetate sleeves. SB-01 was inaccessible to the Geoprobe[®] and could not be relocated due to sensitive subsurface utilities and features; therefore, it was terminated at 6 ft bgs.

- Field screening, classification, and identification of soils from surface grade to the terminal depth of the boring. Soil samples were visually classified in the field using the unified soil classification system (USCS). Field screening consisted of photoionization detector (PID) readings and visual and olfactory indicators of contamination (staining, odors).
- The collection of seven (7) composite and seven (7) grab samples from the completed borings. The composite samples were taken from the entire boring column. The grab samples were collected from the 6-inch interval exhibiting the highest evidence of contamination or the 6-inch interval above the terminal depth of each boring if contaminated was not encountered.
- The collection and analysis of 14 soil samples collected from soil borings SB-01 through SB-07 for the following parameters: (1) United States Environmental Protection Agency (EPA) Target Compound List (TCL) Volatile Organic Compounds (VOCs); (2) TCL Semi-volatile Organic Compounds (SVOCs); (3) Target Analyte List (TAL) metals; (3) pesticides; and (4) polychlorinated biphenyls (PCBs).
- The collection of three (3) waste characterization soil samples (WC-01 through WC-03), and analyzed for: (1) the EPA Toxicity Characteristic leaching Procedure (TCLP) parameters; (2) the Resource Conservation and Recovery Act (RCRA) Characteristics (ignitability, reactivity and corrosivity); and (3) Total Petroleum Hydrocarbons Diesel Range Organics/Gasoline Range Organics (TPHC DRO/GRO).
- Groundwater was not encountered during drilling activities; therefore, no groundwater samples were collected.
- Quality assurance/quality control (QA/QC) samples consisting of one (1) blind field duplicate soil sample analyzed for TCL VOCs, TCL SVOCs, TAL metals, pesticides, herbicides and PCBs, and one (1) trip blank sample analyzed for TCL VOCs.
- The preparation of this report, which includes tables summarizing the laboratory analytical results and figures depicting boring locations, significant site features and, if applicable, contamination occurrence and distribution.

In order to evaluate the subsurface soil quality, laboratory analytical results were compared with the regulatory standards identified in (1) New York State Department of Environmental Conservation (NYSDEC) Subpart 375-6: Remedial Program Unrestricted (Track 1 and Track 2) and Restricted Use Soil Cleanup Objectives (SCOs); (2) NYSDEC Commissioner Policy 51 (CP-51)/Soil Cleanup Guidance Supplemental Soil Cleanup Objectives (SSCOs); and (3) the Toxicity

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Characteristic Regulatory Levels for Hazardous Waste published in RCRA and NYSDEC Part 371.

The Corridor was found to be underlain with historic fill at depths ranging from 0.5 feet to 10 feet. The fill material consisted of brown medium to fine sand with some roots and gravel. Below the fill were well-graded sands, silty-sand mixtures and/or organic silts which were encountered at depths ranging from 4.5 feet to 20 feet.

Elevated PID readings were detected above background concentrations in soil boring SB-02. There were no elevated PID readings detected above background concentrations in soil locations SB-01, SB-04 and SB-05 and slightly elevated PID readings in borings SB-03, SB-06 and SB-07. Soil boring location SB-02 had PID concentrations ranging from 1.5 ppm to 1,312 ppm with the highest concentration of 1,312 ppm at 12.0 to 12.5 ft bgs. PID readings in borings SB-03, SB-06 and SB-07 ranged from 1.2 ppm to 16.5 ppm There was no evidence of visual, olfactory, or petroleum contamination observed in soil borings SB-01 and SB-03 through SB-07. There was a petroleum odor observed at soil boring location SB-02, which may potentially be due to the historic spills associated with "High" risk sites 1, 4 and 5. Refer to Table 1 for a summary of environmental boring data.

Volatile Organic Compounds (VOCs) in Soil

VOCs were detected above applicable standards in one (1) of the seven (7) grab soil samples collected. Xylenes and toluene concentrations at SB-02 exceeded the Unrestricted Use SCO, Restricted Use SCO and Supplemental Soil Cleanup Objectives (SSCO). Ethylbenzene and benzene concentrations at SB-02 exceeded the Unrestricted Use SCO. The presence of the VOCs is likely related to historic spills related to "High" Risk sites No. 1, 4 and 5 on the Corridor.

Semi-Volatile Organic Compounds (SVOCs) in Soil

SVOCs were detected above applicable standards in one (1) of the seven (7) composite soil samples collected. Benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene concentrations exceeded the Unrestricted Use SCO and Restricted Use SCO and chrysene, benzo(a)anthracene, benzo(k)fluoranthene, and indeno(1,2,3-cd)pyrene concentrations exceeded the Unrestricted Use SCO at SB-02. The presence of SVOCs is likely related to historic spills related to "High" Risk sites No. 1, 4 and 5 on the Corridor.

Target Analyte List Metals (TAL Metals) in Soil

Metals were detected above applicable standards in all seven (7) composite soil samples (SB-01 through SB-07) collected. Aluminum was detected in concentrations exceeding the SSCO in one (1) soil sample. Mercury was detected at a concentration exceeding the Unrestricted Use SCO in two (2) soil samples. Copper were detected at concentrations exceeding the Unrestricted Use

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SCO in one (1) soil sample. Iron was detected at concentrations exceeding the SSCO in seven (7) soil samples. The presence of these metals is likely from naturally-occurring, non-anthropogenic sources or historic fill material typically encountered in urban areas.

Pesticides in Soil

Pesticides were not detected in any of the seven (7) composite soil samples at concentrations exceeding the applicable standards.

Polychlorinated Biphenyls (PCBs) in Soil

PCBs were not detected in any of the seven (7) composite soil samples at concentrations exceeding the applicable standards.

Waste Classification of Soil

Ignitability (flash point), reactivity (cyanide and sulfide), and corrosivity (pH) were within the acceptable RCRA ranges. Benzene, barium, 3&4-methylphenol, lead, chloroform, tetrachloroethene and trichloroethene were detected but at concentrations below established RCRA hazardous waste levels. Analytical results will need to be compared to levels acceptable by the chosen receiving facility to determine appropriate waste classification prior to off-site disposal.

OA/OC Sample Results

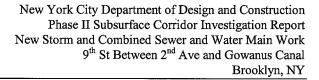
A blind field duplicate soil sample was analyzed for TCL VOCs, TCL SVOCs, TAL metals, pesticides, herbicides and PCBs, and one (1) trip blank sample analyzed for TCL VOCs. VOCs were not detected in either the blind field duplicate sample or the trip blank sample. SVOCs, pesticides, and PCBs were not detected above applicable standards in the blind field duplicate sample. Iron was detected above the SSCO in the blind field duplicate sample. Iron was detected above SSCO in all samples collected along the Corridor.

Conclusions and Recommendations

Based on the evaluation of the field screening data and the laboratory analytical results, and a comparison to applicable regulatory standards, the following conclusions are presented:

Field screening identified evidence of petroleum-impacted soils at soil boring SB-02. There were elevated PID readings at the soil borings SB-02, SB-03, SB06 and SB-07. There were VOC concentrations exceeding applicable standards at SB-02 (xylenes, toluene, ethylbenzene and benzene) likely related to historic spills associated with "High" risk sites 1, 4 and 5 on the Corridor;

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- Subsurface soils contain elevated concentrations of metals and SVOCs which are attributed to historic fill material or naturally-occurring/non-anthropogenic sources typically encountered in urban areas;
- The subsurface soils did not exhibit hazardous waste characteristics; and,
- Groundwater was not collected at any of the soil borings.

Based on the results of the field investigation and laboratory analytical results, Weston recommends the following:

- The Contract documents should identify provisions for managing, handling, transporting and disposing of non-hazardous contaminated (metals, PCBs and pesticides) 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.
- Due to the presence of metals at concentrations exceeding NYSDEC SCOs and/or SSCOs at the investigated sites, dust control procedures are recommended during excavation activities to minimize the creation and dispersion of fugitive airborne dust. The Contractor may implement dust control measures to minimize potential airborne contaminants released as a direct result of construction activities. A Community Air Monitoring Plan (CAMP) shall be developed in accordance with NYSDEC Division of Environmental Regulations (DER)-10 Regulations. The CAMP requires real-time monitoring for VOCs and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is intended to provide a measure of protection for the downwind community from potential airborne contaminant releases as a direct result of investigative and remedial work activities. Specific requirements shall be reviewed for each situation in consultation with New York State Department of Health (NYSDOH) to ensure proper applicability.
- Groundwater was not collected during this Phase II SCI; however, dewatering may be necessary during construction activities in the Corridor. If groundwater is encountered during construction activities and dewatering is determined to be necessary within the Corridor, a groundwater sample should be collected and analyzed for NYCDEP Sanitary and Combined Sewer Discharge Parameters. Based on the results of laboratory analyses for NYCDEP Sewer Discharge Criteria, groundwater may require pretreatment prior to discharge to sanitary or combined sewers. The contractor will be required to obtain a NYCDEP sewer discharge permit and perform sampling and laboratory analysis prior to discharge into sanitary and combined sewers;
- In addition, if discharge into storm sewers is required during dewatering, it may be done under the appropriate NYSDEC State Pollutant Discharge Elimination System (SPDES) permit. Additional sampling and laboratory analysis may be required to satisfy NYSDEC requirements prior to discharge into storm sewers; and



• Before beginning any excavation activity, the contractor shall submit a site-specific health and safety plan (HASP) that will meet the requirements set forth by the Occupational, Safety and Health Administration (OSHA), 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).



1.0 INTRODUCTION

On behalf of the New York City Department of Design and Construction (NYCDDC), Weston Solutions of New York, Inc. (Weston®) conducted a Phase II Subsurface Corridor Investigation (SCI) for the site located on 9th Street between 2nd Avenue and Gowanus Canal in Brooklyn, New York (hereinafter referred to as the Corridor). The New York City Department of Environmental Protection (NYCDEP) is proposing the installation of a new storm and combined sewers and water main within the Corridor as part of its outfall project under the City Environmental Quality Review (CEQR). The Corridor is consists of the following street segments in the Gowanus section of Brooklyn, New York:

- 9th Street between Smith Street and 2nd Avenue; and,
- 2nd Avenue between 9th Street and 7th Street.

The Corridor is approximately 0.27 miles (1,426 feet) in length along 9th Street between 2nd Avenue and Gowanus Canal (Smith Street) and approximately 0.1 miles (530 feet) in length along 2nd Avenue between 9th Street and 7th Street. The overall length of the Corridor is approximately 0.37 miles (1,956 feet).

The Corridor is located at an approximate elevation ranging between 10 feet and 50 feet above mean sea level (msl). The Corridor exhibits a downward slope toward the Gowanus Canal, decreasing to 10 feet above msl. Surface runoff is expected to vary along the Corridor with much of the northwestern portion expected to follow a southern slope flowing towards the Gowanus Canal and much of the eastern portion expected to follow a southwestern slope flowing towards the Gowanus Canal.

The Phase II SCI was conducted to determine if the Corridor's environmental condition may potentially impact the proposed construction activities.

Summary of Previous Environmental Investigations

Weston prepared a Phase I Corridor Assessment Report (CAR) dated August 2, 2013. The Phase I CAR presented the results of an investigation to document the current use, a review of fire insurance maps to document historical use, and a review of the state and federal government databases to identify sites on or adjoining the Corridor that constitute a potential environmental concern. Based on Risk Criteria protocol established by the NYCDDC, findings presented in the CAR defined these sites as posing either "High", "Moderate", or "Low" risk for possible contamination to the subsurface environment along the Corridor.

The Phase I CAR initially identified 10 "High" risk sites and 10 "Moderate" risk sites were identified in the Corridor.



The Weston Phase I CAR proposed advancing 30 borings to address the 10 "High" risk sites and 10 "Moderate" risk sites and historic fill material. The "High" and "Moderate" risk sites are listed below:

HIGH RISK SITES

- 1. Gowanus Canal/9th St/2nd Ave/6th Street/107 6th Street/537 Smith St;
- 2. Universal Fixture Corp, 59 9th Street;
- 3. Kentile Floors Inc/Achim Importing Co., 58 Second Ave;
- 4. In the road at Smith Street and 9th Street;
- 5. Budget Truck Rental, Northville, 519 Smith Street;
- 6. Commercial Building, BU-Metropolitan MGP/K-Metropolitan MGP, 124-136 Second Ave;
- 7. Industrial Building, Citizens Gate Station, 6th Street;
- 8. Cab and Limo Service, 534 Court Street;
- 9. Brooklyn West 06 DOS-DDC/NYCDS Brooklyn 6, 127 2nd Avenue; and
- 10. Brooklyn North 2/ NYC Dept of Sanitation-J Schiavone, 11-15 2nd Ave BK-N-2.

MODERATE RISK SITES

- 1. In the road in front of 90 North 9th Street;
- 2. MTA NYCT Smith & 9th Street Station, Smith & 9th Street;
- 3. In the road, Smith St Between Garnet & 9th Street;
- 4. NYCTA 10th Street Substation, 125 10th Street:
- 5. Vacant Commercial Building, 147-149 7th Street;
- 6. Excavation in the road at 2nd Avenue & 6th Street;
- 7. Industrial Park, Warehouse District, 42 2nd Avenue;
- 8. In the road, 9th Street between 2nd Avenue and 3rd Avenue;
- 9. Warehouse, 107 8th Street; and
- 10. Sunset Park Manufacturing & Design Center LLC, 168 7th Street.

Based on the review of the Weston Phase I CAR, site reconnaissance and discussion with the NYCDDC Project Manager, Weston proposed the number of soil borings be modified to seven (7) soil borings (SB-01 through SB-07) to investigate the 10 "High" risk sites and ten "Moderate" risk sites in the Corridor and to evaluate soil quality and historic fill material.

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 Aquifer Drilling and Testing (ADT) of Mineola, New York. Oversight of drilling activities was



performed by Weston. Laboratory analyses were provided by Hampton-Clarke Veritech (HCV) of Fairfield, New Jersey, a New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP)-approved laboratory (No. 11408). Field derived Quality Assurance/Quality Control (QA/QC) samples (i.e., field blanks, trip blanks, and duplicates) were collected for this project. The field investigation was conducted on October 23, 2013 through October 25, 2013 and consisted of the following components:

- The advancement of six (6) soil borings (SB-02 through SB-07) to the terminal depth of 20 feet below ground surface (ft bgs). All borings were initially pre-cleared, using a vactron and air knife methods to six (6) ft bgs. The six (6) of the seven (7) borings (SB-02 through SB-07) were then advanced using a Geoprobe[®] direct push drill rig. Soil Samples were collected using a 5-foot long, 2-inch diameter Macro Core stainless steel samplers equipped with acetate sleeves. SB-01 was inaccessible to the Geoprobe[®] and could not be relocated due to sensitive subsurface utilities and features; therefore it was terminated at 6 ft bgs.
- Field screening, classification, and identification of soils from surface grade to the terminal depth of the boring. Soil samples were visually classified in the field using the unified soil classification system (USCS). Field screening consisted of photoionization detector (PID) readings and visual and olfactory indicators of contamination (staining, odors).
- The collection of seven (7) composite and seven (7) grab samples from the completed borings. The composite samples were taken from the entire boring column. The grab samples were collected from the 6-inch interval exhibiting the highest evidence of contamination or the 6-inch interval above the terminal depth of each boring if contaminated was not encountered.
- The collection and analysis of seven (7) grab soil samples collected from soil borings SB-01 through SB-07 which were analyzed for United States Environmental Protection Agency (EPA) Target Compound List (TCL) Volatile Organic Compounds (VOCs).
- The collection and analysis of seven (7) composite soil samples collected from soil borings SB-01 through SB-07 which were analyzed for the following parameters: (1) TCL Semi-volatile Organic Compounds (SVOCs); (2) Target Analyte List (TAL) metals; (3) pesticides; and (4) polychlorinated biphenyls (PCBs).
- The collection of three (3) waste characterization soil samples (WC-01 through WC-03), which were analyzed for: (1) the EPA Toxicity Characteristic leaching Procedure (TCLP) parameters; (2) the Resource Conservation and Recovery Act (RCRA) Characteristics (ignitability, reactivity and corrosivity); and (3) Total Petroleum Hydrocarbons Diesel Range Organics/Gasoline Range Organics (TPHC DRO/GRO).
- Groundwater was not encountered during drilling activities; therefore no groundwater samples were collected.



- Quality assurance/quality control (QA/QC) samples consisting of one (1) blind field duplicate soil sample analyzed for TCL VOCs, TCL SVOCs, TAL metals, pesticides, herbicides and PCBs, and one (1) trip blank sample analyzed for TCL VOCs.
- 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 project Corridor is located in Gowanus section of Brooklyn, New York. The Corridor is approximately 0.27 miles (1,426 feet) in length along 9th Street between 2nd Avenue and Gowanus Canal (Smith Street) and approximately 0.1 miles (530 feet) in length along 2nd Avenue between 9th Street and 7th Street. The overall length of the Corridor is approximately 0.37 miles (1,956 feet).

Property usage in the Corridor consists of commercial and industrial properties with a small amount of multifamily residences. A segment of the Gowanus Canal is also located along the Corridor. Commercial properties include Budget Truck Rental and Hamilton Car Care Center located at 519 Smith Street, Kentile Floors located at 58 2nd Avenue, Universal Fixture Corp. located at 59 9th Street and construction warehouses located along 9th Street which are considered "High" risk sites. The Corridor passes over the Gowanus Canal and under railroad tracks which are also considered "High" risk sites. The Metropolitan Transportation Authority (MTA) New York City Transit (NYCT) Smith & 9th Street Station is located on the Corridor at Smith Street and 9th Street, which is a "Moderate" risk site. Also located on the Corridor is an industrial park at 42 2nd Avenue, which is a "Moderate" risk site.

Natural gas is present along the project Corridor segment listed above, and the presence of petroleum storage tanks has been confirmed. A review of the Environmental Data Resources, Inc. (EDR) of Milford, Connecticut database identified several properties with in-service aboveground and underground storage tanks. In addition to natural gas, other buried utilities such as electric, water, and sewer are present along the project Corridor.

2.2 **Description of Surrounding Properties**

The Corridor is primarily surrounded by commercial and industrial properties, as well as multifamily residential apartments. Commercial properties include a commercial building (BU-Metropolitan MGP) at 124-136 2nd Avenue, an industrial building (Citizens Gate Station) at 6th Street, a cab and limo service at 534 Court Street, and industrial buildings at 127 2nd Avenue, which are considered "High" risk sites. Additionally, there is a vacant commercial building at 147-149 7th Street, a warehouse at 107 8th Street, and Sunset Park Manufacturing & Design Center LLC at 168 7th Street, which are considered "Moderate risk sites. The Corridor area is bound to the northwest by Smith Street, to the north by 3rd Street, to the southeast by the 2nd Avenue, to the southwest by the Gowanus Expressway and to the south by 10th Street.

Corridor and Regional Topographic Setting 2.3

Weston reviewed the United States Geologic Survey (USGS) 7.5-minute Topographic Quadrangle Maps for Brooklyn (1995) to determine topography throughout the Corridor. The



Corridor is located at an approximate elevation ranging between 10 feet and 50 feet above msl. The Corridor exhibits a downward slope toward the Gowanus Canal, decreasing to 10 feet above msl. Surface runoff is expected to vary along the Corridor with much of the northwestern portion expected to follow a southern slope flowing towards the Gowanus Canal and much of the eastern portion expected to follow a southwestern slope flowing towards the Gowanus Canal.

2.4 Corridor and Regional Geology

Based on the New York State Department of Environmental Conservation (NYSDEC) Water Power and Control Commission report titled *Ground Water in Bronx, New York, and Richmond Counties, with Summary Data on Kings and Queens Counties, New York City, New York,* the Corridor's geology is expected to consist of Pleistocene to recent age glacial and glacialfluvial sediments (outwash) and fluvial deposits that are composed of sands and gravels, derived from melt-water of the retreating glaciers. The upper portions of the glacial and fluvial deposits have been disturbed by a long history of development activities that resulted in a layer of fill material, which is classified as Urban Land. Urban Land refers to soils that have been altered by urban development such as buildings and streets, where at least 85 percent of the surface is covered with asphalt, concrete, or other impervious barriers. Typically, these soils have been mixed with other materials, such as brick and concrete. Below the soil cover is bedrock that is at a depth of between approximately 300 to 350 ft bgs and consists of a crystalline metamorphic rock unit composed of schist and gneiss. This bedrock is mapped as the Hartland Formation.

2.5 Corridor and Regional Hydrogeology

The nearest body of water is the Gowanus Canal which flows through a 150 foot segment of the Corridor. The Gowanus Canal flows and discharges into Gowanus Bay. Based on review of topographic mapping, groundwater is anticipated to be present at depths of between 10 and 30 ft bgs. Groundwater flow direction from Smith Street is anticipated to be towards the southeast and from 2nd Avenue towards the southwest, flowing towards the Gowanus Canal. Groundwater direction in the southern portion of the Corridor is anticipated to be towards the southeast, flowing towards the Gowanus Bay. Groundwater flow direction may also vary due to seasonal fluctuations in precipitation, local usage demands, geology, underground structures, or dewatering operations. According to the Federal Emergency Management Agency (FEMA) flood hazard map, the Corridor is not located within the 100 or 500 year flood zone and no wetlands exist within the Corridor boundaries.



3.0 CORRIDOR EVALUATION

Proposed construction activities at this site include soil excavation, requiring soils at the site be characterized to identify material handling requirements (i.e., use of protective equipment) and for material reuse, handling and/or waste disposal requirements. Weston provided oversight for the advancement of seven (7) soil borings (SB-01 through SB-07) during the field investigation. 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

Seven (7) locations (SB-01 through SB-07) were cleared using a Vactron to a depth of six (6) ft bgs. Six (6) soil borings (SB-02 through SB-07) were advanced to a terminal depth 20 ft bgs and soil samples were collected using a Geoprobe® direct push drill rig. Soil location SB-01 was inaccessible by the Geoprobe® and therefore was only advanced to a depth of six (6) feet using a Vactron. Soil boring locations are shown on Figure 2. The designations and sampling intervals for the samples 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:

- **SB-01** Advanced in the vicinity of "High" risk site No. 1, 4 and 5 as well as "Moderate" risk site No. 2 and 3, 37 feet southeast of the intersection of Smith Street and 9th Street and two (2) feet south of the curb line on the south side of 9th Street in sidewalk.
- SB-02 Advanced along the Corridor to assess "High" risk site No. 1, 4 and 5 as well as "Moderate" risk site No. 2 and 3, 112 feet southeast of the intersection of Smith Street and 9th Street and six (6) feet south of the curb line on the south side of 9th Street in sidewalk.
- **SB-03** Advanced along the Corridor to assess "Moderate" risk site No. 1, 750 feet northwest of the intersection of 9th Street and 2nd Avenue and one (1) foot southwest of the curb line on the south side of 9th Street in the sidewalk.
- **SB-04** Advanced along the corridor to assess "Moderate" risk site No. 4 and 8, 160 feet northwest of the intersection of 9th Street and 2nd Avenue and one (1) foot northeast of the curb line on the north side of 9th Street in the sidewalk.
- **SB-05** Advanced along the corridor to assess "High" risk site No. 6 and 9, 60 feet northeast of the intersection of 2nd Avenue and 9th Street and twelve (12) feet northwest of the curb line on the west side of 2nd Street in the sidewalk.
- **SB-06** Advanced along the corridor to assess "High" risk site No. 3 and "Moderate" risk site No. 7, twelve (12) feet northeast of the intersection of 2nd Avenue and 8th Street and twelve (12) feet east of the curb line on the east side of 2nd Avenue in the sidewalk.



• **SB-07** – Advanced along the corridor to assess "High" risk site No. 10 and 7 as well as "Moderate" risk site No. 5 and 6, 18 feet east of the intersection of 2nd Avenue and 7th Street and three (3) feet south of the curb line on the south side of 7th Street in the sidewalk.

Soil from each boring was classified according to the Unified Soil Classification System (USCS) and examined for visual evidence (i.e., staining, discoloration) and any olfactory indications (i.e., odors) of contamination. Soil samples were collected from SB-01 through SB-07 from the 6-inch interval above the terminal depth of the boring (see Table 1). In addition, a PID was used to screen the soil for VOC vapors.

In order to identify representative conditions relative to the presence of SVOCs, metals, pesticides, and PCBs over the entire soil column in each boring, composite soil samples were collected by mixing the soil from surface to the terminal depth. Boring composite samples were collected from seven (7) soil borings (SB-01 through SB-07).

In order to identify representative conditions relative to the presence of VOCs, grab soil samples were collected from the 6-inch interval where the highest PID reading was recorded or from the 0-6 inches above the bottom 6-inch interval of the boring.

In order to identify representative conditions for disposal purposes, three (3) waste classification samples (WC-01 through WC-03) were composited of soil aliquots from borings;

- SB-01 and SB-03 for WC-01;
- SB-04 for WC-02; and
- SB-05 through SB-07 for WC-03;

QA/QC samples consisting of one (1) blind field duplicate soil sample analyzed for TCL VOCs, TCL SVOCs, TAL metals, pesticides, herbicides and PCBs, and one (1) trip blank sample analyzed for TCL VOCs.

Soil classification information, including stratigraphy, is documented on the boring logs included in Appendix B. All boring equipment was cleaned by being rinsed with tap water, scrubbed with Alconox, then rinsed with deionized water again between each sample interval. Following the completion of each boring, the boreholes were back-filled with drill cuttings then sealed with cement grout.

3.2 Groundwater Quality Investigation

In the Phase II SCI Workplan dated August 29, 2013, Weston proposed the installation of three (3) groundwater sample temporary wells (GW-01 through GW-03 from soil boring locations SB-01, SB-03 and SB-06). GW-01 and GW-03 were proposed to be analyzed for NYCDEP Sanitary or Combined Sewer Discharge Parameters. The proposed location for GW-02 was located at SB-



03 which is in close proximity to the wetlands area and the proposed analysis was for TCL VOCs by EPA Method 8260B, TCL SVOCs by EPA Method 8270C, TAL metals by EPA Method 6010B and 7471A, pesticides by EPA Method 8081, herbicides by EPA Method 8151A, and PCBs by EPA Method 8082. Field QA/QC samples were also proposed consisting of one (1) field blank to be analyzed for TCL VOCs, TCL SVOCs, TAL metals, pesticides, herbicides, and PCBs and one (1) trip blank to be analyzed for TCL VOCs. However, groundwater was not encountered at any soil boring location.

3.3 **Laboratory Analyses**

The soil samples were submitted to HCV, of Fairfield, New Jersey, a NYSDOH-approved laboratory (No. 11408). Field derived QA/QC samples (i.e., field blank, trip blank, duplicate) were collected for this project. Laboratory analytical reports are included in Appendix C.

The grab soil samples were analyzed for EPA TCL VOCs by Method 8260. The boring composite soil samples were analyzed for: (1) TCL BN/A extractable SVOCs by EPA Method 8270; (2) TAL metals by EPA Method 6010B; (3) TCL pesticides by EPA Method 8081A; and (4) TCL PCBs by EPA Method 8082.

The waste characterization soil samples were analyzed for: (1) the EPA TCLP parameters; (2) the RCRA Characteristics (ignitability, reactivity and corrosivity); and (3) TPHC DRO/GRO.

3.4 **Data Evaluation**

In order to evaluate the subsurface soil quality, the laboratory analytical results of the grab and composite soil samples were compared with the regulatory standards identified in: (1) NYSDEC Subpart 375-6: Remedial Program Unrestricted (Track 1 and Track 2) and Restricted Use Soil Cleanup Objectives (SCOs); (2) NYSDEC Commissioner Policy 51 (CP-51)/Soil Cleanup Guidance Supplemental Soil Cleanup Objectives (SSCOs); and (3) the Toxicity Characteristic Regulatory Levels for Hazardous Waste published in RCRA and NYSDEC Part 371.



4.0 FINDINGS

This section discusses the analytical data and findings for the activities discussed in Section 3.0. Boring logs can be found in Appendix B. Complete analytical data reports are included in Appendix C.

4.1 Field Screening

There were no elevated PID readings detected above background concentrations in soil boring SB-01, SB-04 and SB-05. However, there were elevated PID readings detected above background concentrations in soil borings SB-02, SB-03, SB-06 and SB-07. Soil boring location SB-02 had PID readings ranging from 1.5 ppm to 1,312 ppm with the highest concentration of 1,312 ppm at 12.0 to 12.5 ft bgs. Soil boring location SB-03 had PID concentrations ranging from 1.2 ppm to 4.2 ppm with the highest concentration of 4.2 ppm at 2.5 to 3.0 ft bgs. Soil boring location SB-06 had PID concentrations ranging from 0.3 ppm to 16.5 ppm with the highest concentration of 16.5 ppm at 7.0 to 7.5 ft bgs. Soil boring location SB-07 had PID concentrations ranging from 0.1 ppm to 12.3 ppm with the highest concentration of 12.3 ppm at 12.0 to 12.5 ft bgs. There was no evidence of visual, olfactory, or petroleum contamination observed at soil boring location SB-02 likely due to the historic spills associated with "High" risk sites 1, 4 and 5. Refer to Table 1 for a summary of environmental boring data.

4.2 Soil Laboratory Analytical Results

4.2.1 Volatile Organic Compounds (VOCs) in Soil

VOCs were detected above applicable standards in one (1) of the seven (7) grab soil samples collected. Xylenes and toluene concentrations at SB-02 exceeded the Unrestricted Use SCO and Restricted Use SCO. Ethylbenzene and benzene concentrations at SB-02 exceeded the Unrestricted Use SCO. The presence of the VOCs is likely related to historic spills related to "High" Risk sites No. 1, 4 and 5 on the Corridor.

Refer to Table 2 for a summary of TCL VOC results.

4.2.2 Semi-Volatile Organic Compounds (SVOCs) in Soil

SVOCs were detected above applicable standards in one (1) of the seven (7) composite soil samples collected. Benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene concentrations exceeded the Unrestricted Use SCO and Restricted Use SCO and chrysene, benzo(a)anthracene, benzo(k)fluoranthene, and indeno(1,2,3-cd)pyrene concentrations exceeded the Unrestricted Use SCO at SB-02. The presence of SVOCs is likely related to historic spills related to "High" Risk sites No. 1, 4 and 5 on the Corridor.



Refer to Table 3 for a summary of TCL SVOC results.

Target Analyte List Metals (TAL Metals) in Soil

Metals were detected above applicable standards in all seven (7) composite soil samples (SB-01 through SB-07) collected. Aluminum was detected in concentrations exceeding the SSCO in one (1) soil sample. Mercury was detected at a concentration exceeding the Unrestricted Use SCO in two (2) soil samples. Copper were detected at concentrations exceeding the Unrestricted Use SCO in one (1) soil sample. Iron was detected at concentrations exceeding the SSCO in seven (7) soil samples. The presence of these metals is likely from naturally-occurring, nonanthropogenic sources or historic fill material typically encountered in urban areas.

Refer to Table 4 for a summary of TAL Metals detections.

4.2.4 Pesticides in Soil

Pesticides were not detected in any of the seven (7) composite soil samples at concentrations exceeding the applicable standards.

Refer to Table 5 for a summary of pesticide results.

4.2.5 Polychlorinated Biphenyls (PCBs) in Soil

PCBs were not detected in any of the seven (7) composite soil samples at concentrations exceeding the applicable standards.

Refer to Table 6 for a summary of PCB results.

4.2.6 Waste Classification of Soil

Ignitability (flash point), reactivity (cyanide and sulfide), and corrosivity (pH) were within the acceptable RCRA ranges. Benzene, barium, 3&4-methylphenol, lead, tetrachloroethene and trichloroethene were detected but at concentrations below established RCRA hazardous waste levels. Analytical results will need to be compared to levels acceptable by the chosen receiving facility to determine appropriate waste classification prior to off-site disposal.

Refer to Table 7 for a summary of TCLP parameters, RCRA characteristics and TPHC DRO/GRO results.



4.2.7 QA/QC Sample Results

A blind field duplicate soil sample was analyzed for TCL VOCs, TCL SVOCs, TAL metals, pesticides, herbicides and PCBs, and one (1) trip blank sample analyzed for TCL VOCs. VOCs were not detected in either the blind field duplicate sample or the trip blank sample. SVOCs, pesticides, and PCBs were not detected above applicable standards in the blind field duplicate sample. Iron was detected above the SSCO in the blind field duplicate sample. Iron was detected above SSCO in all samples collected along the Corridor.



5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the evaluation of the field screening data and the laboratory analytical results, and a comparison to applicable regulatory standards, the following conclusions are presented:

- Field screening identified evidence of petroleum-impacted soils at soil boring SB-02. There were elevated PID readings at the soil borings SB-02, SB-03, SB06 and SB-07. There were VOC concentrations exceeding applicable standards at SB-02 (xylenes, toluene, ethylbenzene and benzene) The presence of VOCs is likely related to historic spills associated with "High" risk sites 1, 4 and 5 on the Corridor;
- Subsurface soils contain elevated concentrations of metals and SVOCs which are attributed to historic fill material, or naturally-occurring/non-anthropogenic sources typically encountered in urban areas;
- The subsurface soils did not exhibit hazardous waste characteristics; and,
- Groundwater was not collected at any of the soil borings.

Based on the results of the field investigation and laboratory analytical results, Weston recommends the following:

- The Contract documents should identify provisions for managing, handling, transporting
 and disposing of non-hazardous contaminated (metals, PCBs and pesticides) 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.
- Due to the presence of metals at concentrations exceeding NYSDEC SCOs and/or SSCOs at the investigated sites, dust control procedures are recommended during excavation activities to minimize the creation and dispersion of fugitive airborne dust. The Contractor may implement dust control measures to minimize potential airborne contaminants released as a direct result of construction activities. A Community Air Monitoring Plan (CAMP) shall be developed in accordance with NYSDEC Division of Environmental Regulations (DER)-10 Regulations. The CAMP requires real-time monitoring for VOCs and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is intended to provide a measure of protection for the downwind community from potential airborne contaminant releases as a direct result of investigative and remedial work activities. Specific requirements shall be reviewed for each situation in consultation with NYSDOH to ensure proper applicability.
- Groundwater was not collected during this Phase II SCI; however, dewatering may be
 necessary during construction activities in the Corridor. If groundwater is encountered
 during construction activities and dewatering is determined to be necessary within the



Corridor, a groundwater sample should be collected and analyzed for NYCDEP Sanitary and Combined Sewer Discharge Parameters. Based on the results of laboratory analyses for NYCDEP Sewer Discharge Criteria, groundwater may require pretreatment prior to discharge to sanitary or combined sewers. The contractor will be required to obtain a NYCDEP sewer discharge permit and perform sampling and laboratory analysis prior to discharge into sanitary and combined sewers;

- In addition, if discharge into storm sewers is required during dewatering, it may be done under the appropriate NYSDEC State Pollutant Discharge Elimination System (SPDES) permit. Additional sampling and laboratory analysis may be required to satisfy NYSDEC requirements prior to discharge into storm sewers; and
- Before beginning any excavation activity, the contractor shall submit a site-specific health and safety plan (HASP) that will meet the requirements set forth by the Occupational, Safety and Health Administration (OSHA), 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).



6.0 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.

Weston Solutions of New York, Inc. (Weston®) 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, Weston 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, Weston 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 Weston 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.



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TABLES

TABLE 1 – SUMMARY OF ENVIRONMENTAL BORING DATA

TABLE 2 – SUMMARY OF TCL VOCs DETECTED IN SOIL

TABLE 3 – SUMMARY OF TCL SVOCs DETECTED IN SOIL

TABLE 4 – SUMMARY OF TAL METALS DETECTED IN SOIL

TABLE 5 – SUMMARY OF PESTICIDES DETECTED IN SOIL

TABLE 6 – SUMMARY OF PCBs DETECTED IN SOIL

TABLE 7 – SUMMARY OF WASTE CLASSIFICATION PARAMETERS IN SOIL



Table 1. Summary of Environmental Boring Data Phase II Subsurface Corridor Investigation New Storm and Combined Sewers and Water Main Work 9th Street Between 2nd Avenue and Gowanus Canal Brooklyn, New York

Boring No.	PID concentration (ppm) range	Sample Interval (ftbg)	Total VOCs (mg/kg)	Total SVOCs (mg/kg)	Metals Exceed (Yes/No) ¹	Depth to Water (ftbgs)	Total Depth (ftbgs)	Other Comments
SB-01	0	5.5-6.0 0.5-6.0	0.0113	ND	Yes	NE	6.0	Fill encountered from the surface to 6.0 ftbgs.
SB-02	1.5ppm - 1312ppm	12.5-13.0 0.5-20.0	2645	66.013	Yes	NE	20.0	Fill encountered from the surface to 20.0 ftbgs.
SB-03	1.2ppm - 4.2ppm	9.5-10.0 0.5-20.0	ND	0.057	Yes	10.0	20.0	Fill encountered from the surface to 4.5 ftbgs. Native sands encountered from 4.5 ftbgs to 20 ftbgs.
SB-04	0	9.5-10.0 0.5-20.0	ND	0.589	Yes	10.0	20.0	Fill encountered from the surface to 10.0 ftbgs. Native sands encountered from 10.0 ftbgs to 20 ftbgs.
SB-05	0	18.5-19.0 0.25-20.0	0.002	ND	Yes	19.5	20.0	Fill encountered from the surface to 10.5 ftbgs. Native sands encountered from 10.5 ftbgs to 20 ftbgs.
SB-06	0.3-16.5	19.5-20.0 0.25-20.0	ND	1.025	Yes	NE	20.0	Fill encountered from the surface to 15.0 ftbgs. Native sands encountered from 15.0 ftbgs to 20 ftbgs.
SB-07	0.1-12.3	19.5-20.0 0.5-20.0	0.0012	0.051	Yes	NE	20.0	Fill encountered from the surface to 17.0 ftbgs. Native sands encountered from 17.0 ftbgs to 20 ftbgs.

Notes:

1. Metal(s) exceeds TAGM 4046 or Eastern USA Soil (EUS) Background guidance values.

All soil samples were analyzed for Target Compound List (TCL) Volatile Organic Compounds, Semi-Volatile Organic Compounds (SVOCs) Pesticides, PCBs and Target Analyte List (TAL) Metals.

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

ftbgs = feet below ground surface ppm = parts per Million or mg/kg

NE = not encountered



Table 2. Summary of Target Compound List Volatile Organic Compounds Detected in Soil New Storm and Combined Sewers and Water Main Work 9th Street Between 2nd Avenue and Gowanus Canal Phase II Subsurface Corridor Investigation **Brooklyn, New York**

				Sample ID, Date				
	Unrestricted Use		Supplemental Soil	Collected and				
JON 13T	(Track 1)	(Track 2) Soil	Cleanup	Depth	Depth	Depth	Depth	Depth
201	Soil Cleanup	Cleanup	Objectives	9213-SB-01-6	9213-SB-02-19.5	9213-SB-03	9213-SB-04-9.5	9213-SB-05-19
	Objectives (SCOs) Objectives	Objectives (SCOs)	(SSCOs)	10/25/2013	10/25/2013	10/25/2013	10/25/2013	10/25/2013
				0.0-6.0	12-12.5	9.5-10.0	9.5-10.0	18.5-19.0
Benzene	0.06	44	SN	QN	37	QN	QN	QN
Cyclohexane	NS	NS	100	ON	17	Q	QN	QN
Ethylbenzene	1	390	SN	QN	190	QN	QN	ON
Isopropylbenzene	NS	NS	100	ND	24	QN	Q	QV
m&p-Xylenes	NS	NS	100	0.0031	640	QN	Q	Q
Methylcyclohexane	NS	NS	100	ON	47	2	QV	Ð
o-Xylene	NS	SN	100	0.0018	260	QN	QV	QN.
Toluene	0.7	200	NS	0.0015	530	QN	QN	0.002
Xylenes(Total)	0.26	500	NS	0.0049	006	QN	ND	QN

All concentrations are reported in parts per million (ppm or mg/kg)

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

NS = No Standard

SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006)

SSCOs = Supplemental Soil Cleanup Objectives as per NYSDEC Commissioner Policy, CP-51/Soil Cleanup Guidance (October 21, 2010)
Shading = Concentration exceeds Unestricted Use (Track 2) Soil Cleanup Objectives

BOLD = Concentration exceeds Restricted Use (Track 2) Soil Cleanup Objectives

<u>Underline</u> = Concentration exceeds Supplemental Soil Cleanup Objectives

Table 2. Summary of Target Compound List Volatile Organic Compounds Detected in Soil New Storm and Combined Sewers and Water Main Work 9th Street Between 2nd Avenue and Gowanus Canal Phase II Subsurface Corridor Investigation Brooklyn, New York

				Sample ID, Date	Sample ID, Date	Sample ID, Date	Sample ID, Date
	Unrestricted Use	Restricted Use	Supplemental Soil	Collected and	Collected and	Collected and	Collected and
	(Track 1)	(Track 2) Soil	Cleanup	Depth	Depth	Depth	Depth
ICL VOC	Soil Cleanup	Cleanup	Objectives	9213-SB-06-19.5	9213-SB-07	9213-TB-02	9213-DUP-01-19
	Objectives (SCOs)	Objectives (SCOs)	(SSCOs)	10/25/2013	10/25/2013	10/25/2013	10/25/2013
				19.5-20.0	19.5-20.0	***	18.5-19.0
Benzene	90.0	44	SN	QN	QN	GN	QN
Cyclohexane	NS	NS	100	QN	QN	ND	QN
Ethylbenzene		390	SN	Q	QN	ND	QN
Isopropylbenzene	NS	NS	100	QN	QN	ND	QN
m&p-Xylenes	NS	SN	100	ON	QN	ND	ON
Methylcyclohexane	NS	SN	100	QN	GN	ND	ON
o-Xylene	NS	SN	100	QN	QN	ND	ON
Toluene	0.7	200	SN	ON	0.0012	ND	ON
Xylenes(Total)	0.26	200	NS	ND	QN	ND	ND
							ı

Notes:

All concentrations are reported in parts per million (ppm or mg/kg)

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

NS = No Standard

SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006) SSCOs = Supplemental Soil Cleanup Objectives as per NYSDEC Commissioner Policy, CP-51/Soil Cleanup Guidance (October 21, 2010) Shading = Concentration exceeds Unrestricted Use (Track 1) Soil Cleanup Objectives

BOLD = Concentration exceeds Restricted Use (Track 2) Soil Cleanup Objectives

Underline = Concentration exceeds Supplemental Soil Cleanup Objectives



Table 3. Summary of Target Compound List Semi-Volatile Organic Compounds Detected in Soil Phase II Subsurface Corridor Investigation New Storm and Combined Sewers and Water Main work 9th Street Between 2nd Avenue and Gowanus Canal Brooklyn, New York

	Unrestricted Use	Restricted Use	Supplemental Soil	Sample ID, Date Collected and				
TCL SVOC		Cleanup	Cleanup Objectives	9213-SB-01	9213-SB-02	9213-SB-03	9213-SB-04	9213-SB-05
	Objectives (SCOs)	Objectives (SCOs)	(sonce)	10/25/2013	10/25/2013	10/25/2013	10/25/2013	10/25/2013
				0.0-6.0	0.0-20.0	0.0-20.0	0.0-20.0	0.0-20.0
2-Methylnaphthalene	SN	SN	100	QN	9.9	ΠN	QN	QN
4-Nitrophenol	NS	NS	100	QN	QN	QN	QΝ	QN
Acenaphthene	20	200	NS	QN	0.61	QN	QN	QN
Anthracene	100	200	NS	QN	2	QN	QN	Q
Benzo(a)anthracene	1	5.6	NS	QN	2:2	QΝ	QN	Q
Benzo(a)pyrene	1	1	NS	QN	3.9.	QN	QN	ND
Benzo(b)fluoranthene	1	5.6	NS	QN	2.8	QN	0.049	QN
Benzo(g,h,i) perylene	100	200	NS	QN	1.8	QN	Q	Q
Benzo[k]fluoranthene	0.8	99	NS	QN	1.8	QN	2	Q
bis (2-Ethylhexyl) phthalate	NS	NS	50	QN	QN	QN	0.049	Q
Butylbenzylphthalate	NS	NS	100	QN	QN	ND	QN	QN
Caprolactum	SN	SN	100	QN	QN	QN	Q	Q
Carbazole	NS	NS	100	QN	96'0	QN	Q	QN
Chrysene	1	56	NS	QN	5,1	QN	QN	QN
Dibenzo[a,h]anthracene	0.33	0.56	NS	QN	92'0	QN	QN	Q
Dibenzofuran	NS	NS	100	QN	0.64	QN	QN	QN
Di-n-butylphthalate	NS	NS	100	QN	QN	ND	QN	QN
Di-n-octylphthalate	NS	NS	100	QN	QN	QN	QN	ND
Fluoranthene	100	200	NS	QN	8.5	QN	QN	QN
Fluorene	30	500	NS	ND	0.96	QN	QN	QN
Indeno (1,2,3-cd) pyrene	0.5	5.6	NS	ND	2.1	QN	QN	QN
Isophorone	NS	NS	100	QN	QN	QN	QV	QV
Naphthalene	- 12	200	NS	QN	8.3	QN	QN	QN
Phenanthrene	100	500	NS	DN	9.4	QN	QN	QN
Phenol	0.33	200	NS	QN	ON	QN	QΝ	Q
Pyrene	100	200	NS	QN	9.5	0.057	0.05	ON

Notes:

All concentrations are reported in parts per million (ppm or mg/kg)

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

NS = No Standard

SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006) SSCOs = Supplemental Soil Cleanup Objectives as per NYSDEC Commissioner Policy, CP-51/Soil Cleanup Guidance (October 21, 2010) Shading = Concentration exceeds Unrestricted Use (Track b) Soil Cleanup Objectives

BOLD = Concentration exceeds Restricted Use (Track 2) Soil Cleanup Objectives

Weston Solutions of New York, Inc. DDC Project Number: SEK20068



Table 3. Summary of Target Compound List Semi-Volatile Organic Compounds Detected in Soil Phase II Subsurface Corridor Investigation New Storm and Combined Sewers and Water Main Work 9th Street Between 2nd Avenue and Gowanus Canal Brooklyn, New York

				Sample ID Date	Sample ID Date	Sample ID Date
	Ilproctrictod Hea	Doctrictod Hea		Collected and	Collected and	Collected and
0010	(Track 1)	(Track 2) Soil	Supplemental Soil	Depth	Depth	Depth
ICL SVOC	Soil Cleanup	Cleanup	Cecos	9213-SB-06	9213-SB-07	9213-DUP-01
	Objectives (SCOs)	Objectives (SCOs) Objectives (SCOs)	(sones)	10/25/2013	10/25/2013	10/25/2013
				0.0-20.0	0.0-20.0	0.0-20.0
2-Methylnaphthalene	NS	SN	100	QN	QN	QN
4-Nitrophenol	NS	NS	100	QN	QN	ND
Acenaphthene	20	200	NS	QN	QN	ND
Anthracene	100	200	SN	ND	QN	ND
Benzo(a)anthracene	1	5.6	SN	0.066	QN	ND
Benzo(a)pyrene	1	1	SN	0.053	QN	ND
Benzo(b)fluoranthene		5.6	SN	0.086	QN	ND
Benzo(g,h,i) perylene	100	200	NS	0.042	QN	ND
Benzo[k]fluoranthene	0.8	99	NS	QN	QN	ND
bis (2-Ethylhexyl) phthalate	NS	SN	90	0.049	QN	ND
Butylbenzylphthalate	NS	NS	100	0.25	QN	ND
Caprolactum	NS	NS	100	ND	QN	ND
Carbazole	NS	SN	100	QN	QN	ND
Chrysene	1	99	SN	0.07	QN	ND
Dibenzo[a,h]anthracene	0.33	0.56	SN	ND	QN	ND
Dibenzofuran	SN	NS	100	ND	QN	ND
Di-n-butylphthalate	NS	SN	100	0.029	QN	0.064
Di-n-octylphthalate	NS	SN	100	QN	ON	ON
Fluoranthene	100	200	SN	0.12	QN .	ND
Fluorene	30	200	SN	QN	ON	ND
Indeno (1,2,3-cd) pyrene	0.5	5.6	SN	ND	Q	QN
Isophorone	SN	NS	100	ND	QN	ND
Naphthalene	12	200	SN	ND	QN.	ND
Phenanthrene	100	200	SN	0.1	QN	QN
Phenol	0.33	200	SN	QN	QN	ND
Pyrene	100	200	NS	0.16	0.051	ND

Notes:

All concentrations are reported in parts per million (ppm or mg/kg)

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

NS = No Standard

SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006) SSCOs = Supplemental Soil Cleanup Objectives as per NYSDEC Commissioner Policy, CP-51/Soil Cleanup Guidance (October 21, 2010) Shading = Concentration exceeds Unrestricted Use (Track 1) Soil Cleanup Objectives

BOLD = Concentration exceeds Restricted Use (Track 2) Soil Cleanup Objectives

Weston Solutions of New York, Inc. DDC Project Number: SEK20068

Table 4. Summary of Target Analyte List Metals Detected in Soil Phase II Subsurface Corridor Investigation
New Storm and Combined Sewers and Water Main Work
9th Street Between 2nd Avenue and Gowanus Canal
Brooklyn, New York

				Sample ID Date					
	Unrestricted	Restricted Use	Supplemental			Collected and	Collected and	Collected and	Collected and
arget Analyte	Soil Cleanup	_	Soil Cleanup	Depth	Depth	Depth	Depth	Depth	Depth
List Metal	Objectives	v.	Objectives	9213-SB-01	9213-SB-02	9213-SB-03	9213-SB-04	9213-SB-05	9213-SB-06
	(SCOs)		(socos)	10/25/2013	10/25/2013	10/25/2013	10/25/2013	10/25/2013	10/25/2013
	(222)	(2222)		0.0-6.0	0.0-20.0	0.0-20.0	0.0-20.0	0.0-20.0	0.0-20.0
ercury	0.18	2.8	NS	QN	0.18	QN	Q	QN	0.13
uminum	NS	NS	10000	2200	7300	12000	2900	2600	7700
arium	350	400	NS	37	44	47	58	35	40
əryllium	7.2	590	SN	QN	0.25	0.49	0.34	0.28	0.32
alcium	SN	NS	10000	2000	3000	4700	3200	1300	2400
hromium	30	180	SN	12	12	22	16	13	15
obalt	NS	NS	10000	5.8	6.3	6	12	6.4	6.9
opper	20	SN	NS	14	18	21	20	15	29
U.	NS	SN	2000	13000	15000	24000	17000	14000	14000
ad	63	1000	NS	22	39	27	22	19	47
agnesium	SN	SN	10000	3000	3000	2000	3000	2900	2900
anganese	1600	10000	NS	260	240	380	580	310	200
ckel	30	310	NS	22	16	23	25	16	18
otassium	NS	NS	. 10000	1100	1000	2400	1300	026	1000
odium	NS	NS	10000	QN	QN	008	099	QN	ON
anadium	SN	NS	100	18	16	31	25	20	23
ոշ	109	10000	NS	38	41	62	87	43	52

Notes:

All concentrations are reported in parts per million (ppm or mg/kg)

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

NS = No Standard

SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006)

SSCOs = Supplemental Soil Cleanup Objectives as per NYSDEC Commissioner Policy, CP-51/Soil Cleanup Guidance (October 21, 2010) Shading = Concentration exceeds Unrestricted Use (Track 1) Soil Cleanup Objectives (Procentration exceeds Supplemental Soil Cleanup Objectives)

Weston Solutions of New York, Inc. DDC Project Number: SEK20068



Table 4. Summary of Target Analyte List Metals Detected in Soil New Storm and Combined Sewers and Water Main Work 9th Street Between 2nd Avenue and Gowanus Canal Brooklyn, New York Phase II Subsurface Corridor Investigation

Target Analyte	Unrestricted Use (Track 1) Soil Cleanun	Restricted Use (Track 2) Soil Cleanup	Supplemental Soil Cleanup	Sample ID, Date Collected and Depth	Sample ID, Date Collected and Depth
List Metal	Objectives	Objectives	Objectives (SSCOs)	9213-SB-07 10/25/2013	9213-DUP-01 10/25/2013
	(sone)	(sone)		0.0-20.0	0.0-20.0
Mercury	0.18	2.8	SN	0.24	QN
Aluminum	SN	SN	10000	8000	9200
Barium	350	400	NS	42	40
Beryllium	7.2	290	NS	0.32	0.36
Calcium	SN	SN	10000	9300	1500
Chromium	30	180	NS	15	15
Cobalt	SN	SN	10000	5.8	6.7
Copper	20	SN	NS	77.	16
Iron	SN	NS	2000	13000	15000
Lead	63	1000	SN	47	17
Magnesium	SN	SN	10000	6300	3200
Manganese	1600	10000	NS	160	290
Nickel	30	310	SN	. 17	17
Potassium	SN	SN	10000	860	1100
Sodium	SN	NS	10000	ON	QN
Vanadium	SN	SN	100	21	22
Zinc	109	10000	NS	83	45

Notes:

All concentrations are reported in parts per million (ppm or mg/kg)

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

NS = No Standard

SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006) SSCOs = Supplemental Soil Cleanup Objectives as per NYSDEC Commissioner Policy, CP-51/Soil Cleanup Guidance (October 21, 2010) Shading = Concentration exceeds Unrestricted (User(Track1)) Soil Gleanup Objectives

Underline = Concentration exceeds Supplemental Soil Cleanup Objectives



Phase II Subsurface Corridor Investigation
New Storm and Combined Sewers and Water Main Work
9th Street Between 2nd Avenue and Gowanus Canal
Brooklyn, New York Table 5. Summary of Pesticides Detected in Soil

				Sample ID, Date				
	Unrestricted Use Restricted Use	Restricted Use	Supplemental	Collected and				
Doctividos	(Track 1)	(Track 2) Soil	Soil Cleanup	Depth	Depth	Depth	Depth	Depth
Leancines	Soil Cleanup	Cleanup	Objectives	9213-SB-01	9213-SB-02	9213-SB-02	9213-SB-03	9213-SB-04
	Objectives (SCOs)	bjectives (SCOs) Objectives (SCOs)	(SSCOS)	10/25/2013	10/25/2013	10/25/2013	10/25/2013	10/25/2013
				0.0-6.0	0.0-20.0	0.0-20.0	0.0-20.0	0.0-20.0
Pesticides	SN	SN	SN	QN	QN	QN	QN	QN

Notes:

All concentrations are reported in parts per million (ppm or mg/kg)

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

NS = No Standard

SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006)

SSCOs = Supplemental Soil Cleanup Objectives as per NYSDEC Commissioner Policy, CP-51/Soil Cleanup Guidance (October 21, 2010)

Phase II Subsurface Corridor Investigation
New Storm and Combined Sewers and Water Main Work
9th Street Between 2nd Avenue and Gowanus Canal
Brooklyn, New York Table 5. Summary of Pesticides Detected in Soil

				Sample ID, Date	Sample ID, Date	Sample ID, Date	Sample ID, Date
	Unrestricted Use	Restricted Use	Supplemental	Collected and	Collected and	Collected and	Collected and
	(Track 1)	(Track 2) Soil	Soil Cleanup	Depth	Depth	Depth	Depth
Pesticides	Soil Cleanup	Cleanup	Objectives	9213-SB-05	9213-SB-06	9213-SB-07	9213-DUP-01
	Objectives (SCOs)	Objectives (SCOs)	(SSCOs)	10/25/2013	10/25/2013	10/25/2013	10/25/2013
			•	0.0-20.0	0.0-20.0	0.0-20.0	0.0-20.0
Pesticides	SN	SN	SN	QN	QN	GN	QN

Notes:

All concentrations are reported in parts per million (ppm or mg/kg)

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

NS = No Standard

SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006)

SSCOs = Supplemental Soil Cleanup Objectives as per NYSDEC Commissioner Policy, CP-51/Soil Cleanup Guidance (October 21, 2010)



Table 6. Summary of Polychlorinated Biphenyls Detected in Soil Phase II Subsurface Corridor Investigation
New Storm and Combined Sewers and Water Main Work
9th Street Between 2nd Avenue and Gowanus Canal
Brooklyn, New York

				Sample ID, Date				
	Unrestricted Use	Unrestricted Use Restricted Use	Cumplemental Coil	Collected and				
PCBs	(Track 1)	(Track 2) Soil	Cleanin Objectives	Depth	Depth	Depth	Depth	Depth
	Soil Cleanup	Cleanup Objectives	(SSCOs)	9213-SB-01	9213-SB-02	9213-SB-03	9213-SB-04	9213-SB-05
	Objectives (SCOs)	(SCOS)	(22.22)	10/25/2013	10/25/2013	10/25/2013	10/25/2013	10/25/2013
				0.0-6.0	0.0-20.0	0.0-20.0	0.0-20.0	0.0-20.0
PCBs	0.1	ļ	1.0 (Surface)	QN	QN	QN	ND	QN
			io (Subsuriace)					

Notes:

All concentrations are reported in parts per million (ppm or mg/kg)

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006)

SSCOs = Supplemental Soil Cleanup Objectives as per NYSDEC Commissioner Policy, CP-51/Soil Cleanup Guidance (October 21, 2010)



Table 6. Summary of Polychlorinated Biphenyls Detected in Soil Phase II Subsurface Corridor Investigation
New Storm and Combined Sewers and Water Main Work
9th Street Between 2nd Avenue and Gowanus Canal
Brooklyn, New York

	Inrestricted Ise	Restricted Use		Sample ID, Date Collected and	Sample ID, Date Collected and	Sample ID, Date Collected and
900	(Track 1)	(Track 2) Soil	Supplemental Soil	Depth	Depth	Depth
8001	Soil Cleanup	Cleanup Objectives	(SSCOs)	9213-SB-06	9213-SB-07	9213-DUP-01
	Objectives (SCOs)	(scos)	(22222)	10/25/2013	10/25/2013	10/25/2013
				0.0-20.0	0.0-20.0	0.0-20.0
DCB,	0.1	,	1.0 (Surface)	CN	QN	CN
rcbs	0.1		10 (Subsurface)	2	a l	2

Notes:

All concentrations are reported in parts per million (ppm or mg/kg)

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

SCOs = Soil Cleanup Objectives as per the NYSDEC Regulations 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives (December 14, 2006)

SSCOs = Supplemental Soil Cleanup Objectives as per NYSDEC Commissioner Policy, CP-51/Soil Cleanup Guidance (October 21, 2010)



Table 7. Summary of Waste Classification Parameters in Soil
Phase II Subsurface Corridor Investigation
New Storm and Combined Sewers and Water Main Work
9th Street Between 2nd Avenue and Gowanus Canal
Brooklyn, New York

				e ID, Date	Sampl	e ID, Date	Sample	e ID, Date
Parameter	TCLP RCRA Ha	azardous	Collected	i and Depth	Collected	d and Depth	Collected	and Depth
i arameter	Waste Lev	vels		-WC-01		-WC-02		-WC-03
			10/2	5/2013	10/2	5/2013	10/2	5/2013
Total Petroleum Hydrocarbons	NS	mg/L	86	mg/Kg	ND	mg/Kg	ND	mg/Kg
Cyanide (Reactive)	250	mg/K	ND	mg/Kg	ND	mg/Kg	ND	mg/Kg
Ignitability	140	۴	NEG	N/A	NEG	N/A	NEG	N/A
pH	>2.5 and <12.5	Units	9.9	N/A	9.0	N/A	8.1	N/A
Sulfide (Reactive)	500	mg/Kg	ND	mg/Kg	ND	mg/Kg	ND	mg/Kg
1,1-Dichloroethene	0.7	mg/L	ND	mg/L	ND	mg/L	ND	mg/L
1,2-Dichloroethane	0.5	mg/L	ND	mg/L	ND	mg/L	ND	mg/L
1,4-Dichlorobenzene	7.5	mg/L	ND	mg/L	ND	mg/L	ND	mg/L
2-Butanone	200	mg/L	ND	mg/L	ND	mg/L	ND	mg/L
Benzene	0.5	mg/L	0.0049	mg/L	ND .	mg/L	0.00063	mg/L
Carbon tetrachloride	0.5	mg/L	ND	mg/L	ND	mg/L	ND	mg/L
Chlorobenzene	100	mg/L	ND	. mg/L	ND	mg/L	ND	mg/L
Chloroform	6	mg/L	ND	mg/L	0.001	mg/L	0.0014	mg/L
Tetrachloroethene	0.7	mg/L	ND	mg/L	ND	mg/L	0.0063	mg/L
Trichloroethene	0.5	mg/L	ND	mg/L	ND	mg/L	0.0012	mg/L
Vinyl chloride	0.2	mg/L	ND	mg/L	ND	mg/L	ND	mg/L
2,4,5-Trichlorophenol	400	mg/L	ND	mg/L	ND	mg/L	ND	mg/L
2,4,6-Trichlorophenol	2	mg/L	ND	mg/L	ND	mg/L	ND	mg/L
2,4-Dinitrotoluene	0.13	mg/L	ND	mg/L	ND	mg/L	ND	mg/L
2-Methylphenol	200	mg/L	ND	mg/L	ND	mg/L	ND	mg/L
3&4-Methylphenol	200	mg/L	0.002	mg/L	ND	mg/L	ND	mg/L
Hexachlorobenzene	0.13	mg/L	ND	mg/L	ND	mg/L	ND	mg/L
Hexachlorobutadiene	0.5	mg/L	ND	mg/L	ND	mg/L	ND	mg/L
Hexachloroethane	3	mg/L	ND	mg/L	ND	mg/L	ND	mg/L
Nitrobenzene	2	mg/L	ND	mg/L	ND	mg/L	ND ·	mg/L
Pentachlorophenol	100	mg/L	ND	mg/L	ND	mg/L	ND	mg/L
Pyridine	5	mg/L	ND	mg/L	ND	mg/L	ND	mg/L
Mercury	0.2	mg/L	ND	mg/L	ND	mg/L	ND	mg/L
Arsenic	5	mg/L	ND	mg/L	ND	mg/L	ND	mg/L
Barium	100	mg/L	0.48	mg/L	ND	mg/L	ND	mg/L
Cadmium	1 5	mg/L	ND	mg/L	ND	mg/L	ND	mg/L
Chromium	5	mg/L	ND 0.3	mg/L	ND 0.00	mg/L	ND	mg/L
Lead Nickel	NS	mg/L	0.3 ND	mg/L	0.36	mg/L	ND	mg/L
		mg/L		mg/L	ND	mg/L	ND	mg/L
Selenium Silver	<u>1</u> 5	mg/L	ND ND	mg/L	ND ND	mg/L	ND	mg/L
Chlordane	0.03	mg/L	ND ND	mg/L		mg/L	ND	mg/L
Chlordane Endrin	0.03	mg/L	ND ND	mg/L	ND ND	mg/L	ND ND	mg/L
gamma-BHC	0.02	mg/L	ND ND	mg/L	ND ND	mg/L	ND ND	mg/L
Heptachlor	0.008	mg/L mg/L	ND	mg/L mg/L	ND ND	mg/L mg/L	ND ND	mg/L
Heptachlor Epoxide	0.008	mg/L	ND ND	mg/L	ND ND	mg/L mg/L	ND ND	mg/L
Methoxychlor	10	mg/L mg/L	ND ND	mg/L mg/L	ND	mg/L mg/L	ND ND	mg/L
Toxaphene	0.5	mg/L	ND ND	mg/L mg/L	ND ND	mg/L mg/L	ND ND	mg/L mg/L
2.4-D	10	mg/L	ND ND		ND ND	_	ND ND	
Silvex	10	mg/L mg/L	ND ND	mg/L mg/L	ND ND	mg/L mg/L	ND ND	mg/L
OUARY		IIIg/L	עווו	my/L	ND	my/L	ואט	mg/L

Notes:

All concentrations are reported in parts per million (ppm or mg/L) or parts per billion (ppb or ug/L)

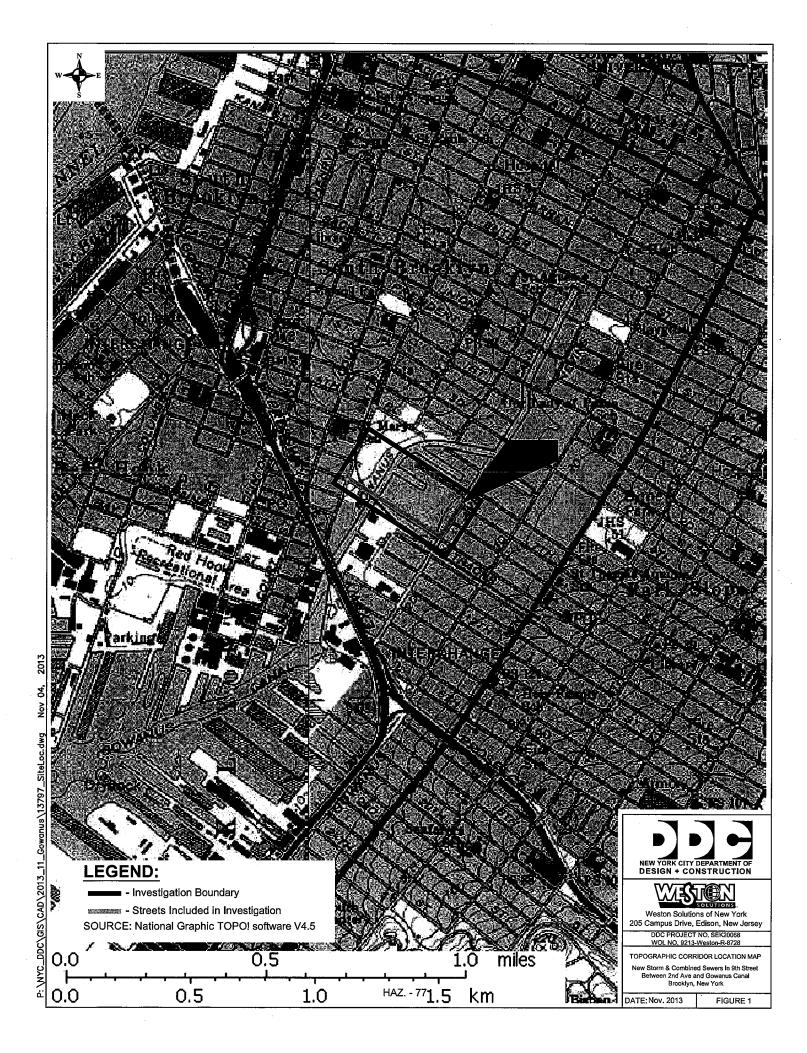
N/A = Compound or sample characteristic not analyzed

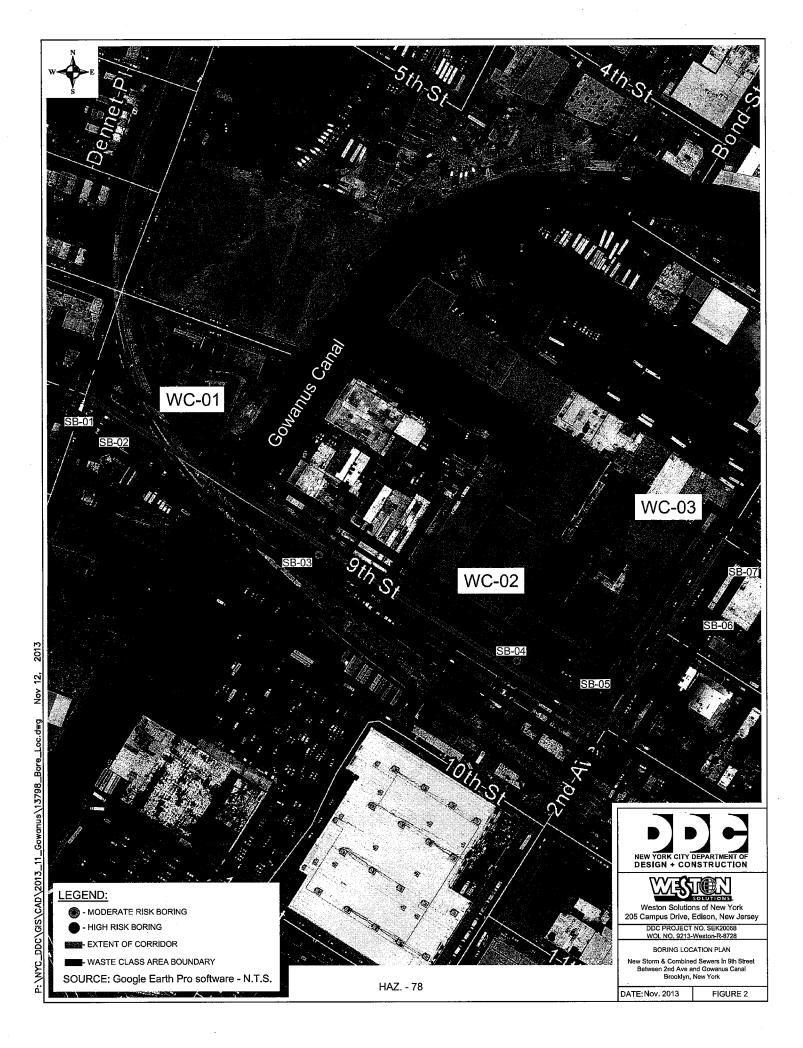
NS = No Standard

ND = Compound not detected above method detection limit (see attached lab report for mdl's)



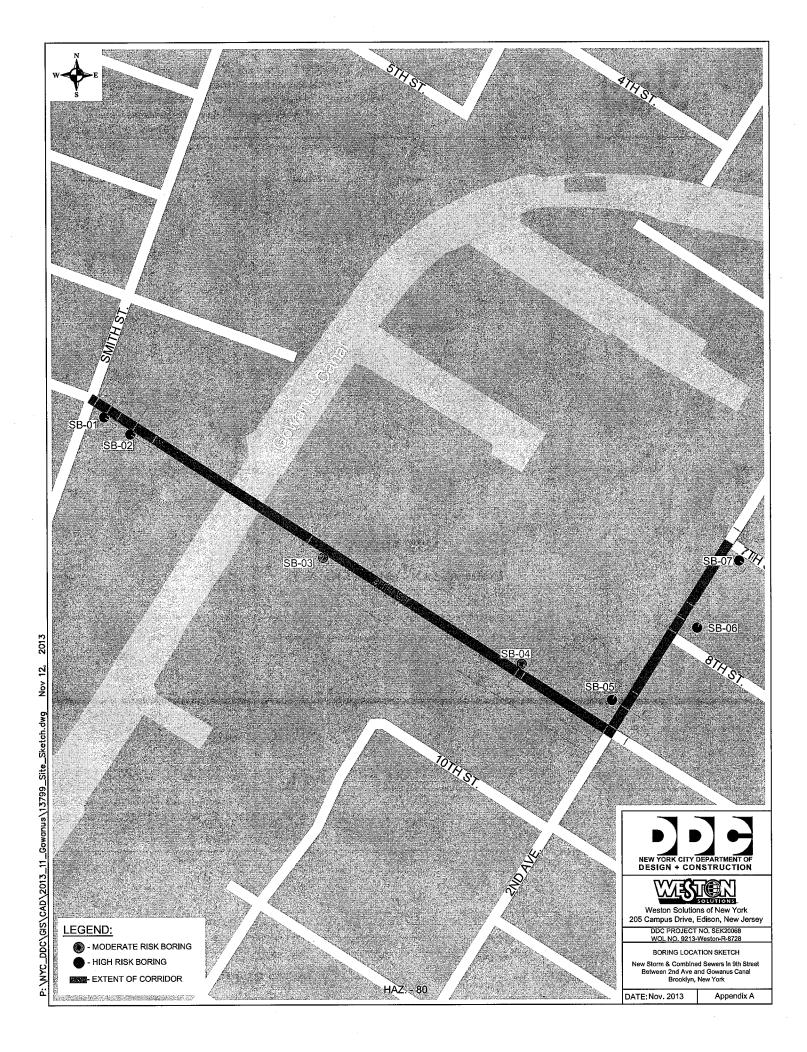
FIGURES FIGURE 1 – TOPOGRAPHIC CORRIDOR LOCATION MAP FIGURE 2 – BORING LOCATION PLAN







APPENDIX A BORING LOCATION SKETCH





APPENDIX B

GEOLOGIC BORING LOGS



Page 1 of 1

BORING ID: SB-01

N/A

LOCATION:

WELL ID:

PROJECT No:

Brooklyn, New York SEK20068

CLIENT: New York City Department of Design and Construction

PROJECT: New Storm and Combined Sewers and Water Main Work - 9th Street Between 2nd Avenue and Gowanus Canal

Brooklyn, New York

Depth to Rock (ft):

PW335ES13 FMS ID #:

SURFACE ELEVATION: N/A

WOL #: 9213-Weston-R-8728

DRILLING CONTRACTOR: Aquifer Drilling and Testing, Inc.

DRILLING METHOD: Ge	eoprobe			DATE STARTED:	10/24/2013	
BOREHOLE DATA	A	WELL DATA	•	DATE FINISHED:	10/24/2013	
Diameter (in):	2	Well Diameter:	N/A	DRILLER:	A. Lakrin	
Total Depth:	6	Total Depth (ft):	N/A	WESTON INSPECTOR:	J. Lynes	
Depth to Refusal (ft):	6	Screen Length (ft):	N/A	NORTHING:	N/A	
Depth to Water (ft):	N/A	Depth to Water (ft):	N/A	EASTING:	N/A	

N/A

NOTES: VOC grab sample 9213-SB-01-6 collected from 5.5-6 ftbgs.

N/A Slot Size:

Composite sample 9213-SB-01 collected from 0.5-6 ftbgs.

Soil classified in accordance with USCS Classification system

Well	Depth Interval (ft)	USCS Classification	Sample Interval	Sample Recovery (in)	Blows / 6 in	PID (std units)	Lithologic Description	Remarks	
	0.5					0	Concrete		
	1.0					0			
	1.5					0			
	2.0					0			
	2.5			NA NA	N/A	N/A	0		
	3.0	FILL					N/A	0	Brown sand (medium) with cobble and slate, dry, loose (Fill)
	3.5	''			14//	0	Location inaccessible with Geoprobe. Boring stopped at 6 feet	cleared to 6.0 ftbgs	
	4.0					. 0			
	4.5					0			
	5.0					. 0			
	5.5					0			
	6.0					0			

END OF BORING AT 6.0 FEET



Page 1 of 2

BORING ID: SB-02 WELL ID: N/A

PROJECT No:

LOCATION: Brooklyn, New York

SEK20068

CLIENT: New York City Department of Design and Construction

PROJECT: New Storm and Combined Sewers and Water Main Work - 9th Street Between 2nd Avenue and Gowanus Canal Brooklyn, New

FMS ID #: PW335ES13

DRILLING CONTRACTOR: Aquifer Drilling and Testing, Inc.

WOL #: 9213-Weston-R-8728

DRILLING METHOD: Ged	probe			DATE STARTED:	10/24/2013
BOREHOLE DATA	١	WELL DATA		DATE FINISHED:	10/25/2013
Diameter (in):	2	Well Diameter:	N/A	DRILLER:	A. Lakrin
Total Depth:	20	Total Depth (ft):	N/A	WESTON INSPECTOR:	J. Lynes
Depth to Refusal (ft):	N/A	Screen Length (ft):	N/A	NORTHING:	N/A
Depth to Water (ft):	N/A	Depth to Water (ft):	N/A	EASTING:	N/A
Depth to Rock (ft):	N/A	Slot Size:	N/A	SURFACE ELEVATION:	N/A

NOTES: VOC grab sample 9213-SB-02-12.5 collected from 12.5-13 ftbgs.

Composite sample 9213-SB-02 collected from 0.5-20 ftbgs.

Soil classified in accordance with USCS Classification system.

Well Construction	Depth Interval (ft)	USCS Classification	Sample Interval	Sample Recovery (in)	Blows / 6 in	PID (std units)	Lithologic Description	Remarks
•	0.5	-				0	Concrete	
	1.0					1.8	Brown sand (medium) and black ash, dry, loose (Fill) Slight Petroleum	
	1.5					6.8	odor	
	2.0					27.2		
	2.5					NR		
	3.0	Fill		NA	N/A	48.7		Boring hand
	3.5			,,,,		NR		cleared to 6.0 ftbgs
	4.0					43.5	Brown sand (medium), dry, loose (FILL). Petroleum odor	
+	4.5					NR		
	5.0					38.3		
	5.5					NR		
	6.0					41.2		
	6.5					1.5		
[7.0					32.7		
	7.5					27.6	·	
	8.0	Fill		48	NA	33.6	Brown sand (medium to fine), little silt, gravel, and brick fragments, dry.	
	8.5	- ***				22.3	Petroleum odor and black discoloration	
	9.0				1	14.7		
	9.5					132		
	10.0					134		



Page 2 of 2

BORING ID: SB-02

WELL ID: N/A

LOCATION:

PROJECT No:

Brooklyn, New York

SEK20068

CLIENT: New York City Department of Design and Construction

PROJECT: New Storm and Combined Sewers and Water Main Work - 9th Street Between 2nd Avenue and Gowanus Canal Brooklyn, New

FMS ID #: PW335ES13

DRILLING CONTRACTOR: Aquifer Drilling and Testing, Inc.

WOL #: 9213-Weston-R-8728

DATE STARTED: 10/24/2013

DRILLING METHOD: Geoprobe

DRILLING METHOD. Ge	opione			DAIL GIAKTED.	10/24/2010
BOREHOLE DATA	4	WELL DATA		DATE FINISHED:	10/25/2013
Diameter (in):	2	Well Diameter:	N/A	DRILLER:	A. Lakrin
Total Depth:	20	Total Depth (ft):	N/A	WESTON INSPECTOR:	J. Lynes
Depth to Refusal (ft):	N/A	Screen Length (ft):	N/A	NORTHING:	N/A
Depth to Water (ft):	N/A	Depth to Water (ft):	N/A	EASTING:	N/A
Depth to Rock (ft):	N/A	Slot Size:	N/A	SURFACE ELEVATION:	N/A

NOTES: VOC grab sample 9213-SB-02-12.5 collected from 12.5-13 ftbgs.

Composite sample 9213-SB-02 collected from 0-20 ftbgs.

Soil classified in accordance with USCS Classification system.

Well Construction	Depth Interval (ft)	USCS Classification	Sample Interval	Sample Recover, (in)	Blows / 6 in	PID (std units)	Lithologic Description	Remarks
	10.5					50.9		
	11.0		l			63.7		
1	11.5				-	167		
	12.0					981	Brown sand (fine to medium), moist, loose (Fill). Strong petroleum odor.	
į.	12.5			60		1312		
	13.0			00		143		
	13.5					50.8	·	
	14.0					49.7		
	14.5					52.6	Brown sand (fine to medium), wet, loose (Fill). Strong petroleum odor.	·
	15.0	FILL	ļ		N/A	45.4		
	15.5	''				63.7	Brown sand (fine to medium), moist, loose (Fill). Strong petroleum odor.	
	16.0					47.8		
	16.5				,	77.6		
	17.0			•		480	Brown sand (fine to medium), wet, loose (Fill). Strong petroleum odor.	
	17.5			60		35.3		
	18.0					42.9		
	18.5					20.7		
1	19.0					7.8	Brown sand (fine to medium), moist, loose (Fill). Strong petroleum odor.	
	19.5			-		2.6		
	20.0					3.4		

END OF BORING AT 20.0 FEET



Page 1 of 2

 BORING ID:
 SB-03

 WELL ID:
 N/A

PROJECT No: SEK20068

LOCATION:

WOL#:

N/A

CLIENT: New York City Department of Design and Construction

PROJECT: New Storm and Combined Sewers and Water Main Work
- 9th Street Between 2nd Avenue and Gowanus Canal Brooklyn, New

FMS ID #: PW335ES13

DRILLING CONTRACTOR: Aquifer Drilling and Testing, Inc.

.

9213-Weston-R-8728

Brooklyn, New York

DRILLING METHOD: Geoprobe

Depth to Rock (ft):

WELL DATA BOREHOLE DATA Well Diameter: Diameter (in): N/A Total Depth (ft): Total Depth: 20 N/A Screen Length (ft): Depth to Refusal (ft): N/A N/A Depth to Water (ft): 10 Depth to Water (ft): N/A

 DATE STARTED:
 10/24/2013

 DATE FINISHED:
 10/25/2013

 DRILLER:
 A. Lakrin

 WESTON INSPECTOR:
 J. Lynes

 NORTHING:
 N/A

EASTING: N/A
SURFACE ELEVATION: N/A

NOTES: VOC grab sample 9213-SB-03-9.5 collected from 9.5-10 ftbgs.

Slot Size:

Composite sample 9213-SB-03 collected from 0.5-20 ftbgs.

N/A

Soil classified in accordance with USCS Classification system.

Well	Depth Interval (ft)	USCS Classification	Sample Interval	Sample Recovery (in)	Blows / 6 in	PID (std units)	Lithologic Description	Remarks
	0.5					0	Concrete	
	1.0					0		
	1.5					0	Dark brown sand (medium) with gravel, loose, dry (Fill)	
	2.0					0		
	2.5	FILL				4.2		
	3.0			NA	N/A	2.2	Brown sand (medium) with some silt, little grave, loose, dry (Fill)	Boring hand
	3.5					2.1		cleared to 6.0 ftbgs
	4.0					1.9	Brown sand (medium) with some silt, little grave, loose, moist (Fill) Brown sand (medium) with some silt, little grave, loose, wet (Fill)	
	4.5					2.5		
	5.0					1.8		
	5.5	SM				1.7	Dark brown /black silt, some sand (medium) and gravel, wet	
	6.0					1.6		
	6.5					NR		
	7.0					NR		
	7.5					1.2		
	8.0	SM		12	NA	NR	Dark brown /black silt, some sand (medium) and gravel, dry	
	8.5					1.8	, , , ,	
	9.0					NR	·	
	9.5					NR		
	10.0					2.3		



Page 2 of 2

BORING ID: SB-03 WELL ID: N/A

CLIENT: New York City Department of Design and Construction

PROJECT No:

LOCATION:

SEK20068

Brooklyn, New York

PROJECT: New Storm and Combined Sewers and Water Main Work - 9th Street Between 2nd Avenue and Gowanus Canal Brooklyn, New

FMS ID #: PW335ES13

9213-Weston-R-8728 DRILLING CONTRACTOR: Aquifer Drilling and Testing, Inc. WOL#: DRILLING METHOD: Geoprobe DATE STARTED: 10/24/2013

DIVILLING METITOD. CCC	probo			DATE OTARTED.	10/2 1/2010
BOREHOLE DATA		WELL DATA		DATE FINISHED:	10/25/2013
Diameter (in):	2	Well Diameter:	N/A	DRILLER:	A. Lakrin
Total Depth:	20	Total Depth (ft):	N/A	WESTON INSPECTOR:	J. Lynes
Depth to Refusal (ft):	N/A	Screen Length (ft):	N/A	NORTHING:	N/A
Depth to Water (ft):	10	Depth to Water (ft):	N/A	EASTING:	N/A
Depth to Rock (ft):	N/A	Slot Size:	N/A	SURFACE ELEVATION:	N/A

NOTES: VOC grab sample 9213-SB-03-9.5 collected from 9.5-10 ftbgs.

Composite sample 9213-SB-03 collected from 0-20 ftbgs.

Soil classified in accordance with USCS Classification system.

Well	Depth Interval (ft	USCS	Sample Interval	Sample Recover (in)	Blows / 6 in	PID (std units)	Lithologic Description	Remarks							
	10.5				,	NR									
	11.0					0									
	11.5					NR									
	12.0					NR									
	12.5			12		NR									
	13.0			'-	:	0									
	13.5					NR									
	14.0				- N/A	NR									
	14.5					N/A	N/A		NR						
	15.0	SM						0	Grayish brown sand (fine to medium), loose, saturated						
	15.5					0									
	16.0							0							
	16.5												0		
	17.0										0				
	17.5			48			0								
	18.0		ļ					0							
	18.5					0		:							
	19.0					0									
	19.5				0										
	20.0					0									

END OF BORING AT 20.0 FEET



Page 1 of 2

BORING ID: SB-04

WELL ID: N/A

LOCATION:

DRILLER:

PROJECT No:

Brooklyn, New York

SEK20068

CLIENT: New York City Department of Design and Construction

PROJECT: New Storm and Combined Sewers and Water Main Work - 9th Street Between 2nd Avenue and Gowanus Canal Brooklyn, New York

FMS ID #: PW335ES13

DRILLING CONTRACTOR: Aquifer Drilling and Testing, Inc.

WOL #: 9213-Weston-R-8728 DATE STARTED: 10/23/2013

DRILLING METHOD: Geoprobe

WELL DATA BOREHOLE DATA Well Diameter: Diameter (in): N/A Total Depth (ft): 20 Total Depth: N/A Screen Length (ft): Depth to Refusal (ft): N/A N/A

DATE FINISHED: 10/25/2013 A. Lakrin WESTON INSPECTOR: J. Lynes N/A

NORTHING: Depth to Water (ft): Depth to Water (ft): 10 N/A **EASTING:** Depth to Rock (ft): Slot Size: N/A N/A

N/A SURFACE ELEVATION: N/A

NOTES: VOC grab sample 9213-SB-04-9.5 collected from 9.5-10 ftbgs.

Composite sample 9213-SB-04 collected from 0.5-20 ftbgs.

Soil classified in accordance with USCS Classification system.

Well	Depth Interval (ff)	USCS	Sample Interval	Sample Recovery (in)	Blows / 6 in	PID (std units)	Lithologic Description	Remarks
	0.5					0	Concrete	
	1.0					0		
	1.5				•	0	Dark brown sand (medium) with cobble and black ash, dry, loose (Fill)	
	2.0					0	, , , , , , , , , , , , , , , , , , , ,	
	2.5					0		
	3.0	FILL		NA	N/A	0		Boring hand
	3.5					0	Brown sand (medium) little silt and cobble, moist, loose (Fill)	cleared to 6.0 ftbgs
	4.0					0		
	4.5					0		
	5.0					0		
	5.5					0	Brown sand (medium) little silt and cobble, wet, loose (Fill)	
	6.0					0		
	6.5					0.7		
	7.0					1.2		
	7.5					0.8		
	8.0	FILL		36	NA	1.5	Black sand (medium) with gravel and asphalt, loose, moist (Fill)	
	8.5					2.3		
:	9.0					1.6		
	9.5					1.2		
	10.0					1.7		



Page 2 of 2

BORING ID:

N/A

LOCATION: PROJECT No:

WELL ID:

Brooklyn, New York

CLIENT: New York City Department of Design and Construction PROJECT: New Storm and Combined Sewers and Water Main Work

- 9th Street Between 2nd Avenue and Gowanus Canal Brooklyn, New

FMS ID #:

DATE STARTED:

PW335ES13

SEK20068

SB-04

DRILLING CONTRACTOR: Aquifer Drilling and Testing, Inc.

WOL#:

DRILLER:

9213-Weston-R-8728

DRILLING METHOD: Geoprobe

WELL DATA DATE FINISHED:

N/A

N/A

10/23/2013 10/25/2013

BOREHOLE DATA Diameter (in): 2

Well Diameter: Total Depth (ft): 20 Screen Length (ft): N/A

WESTON INSPECTOR: NORTHING:

J. Lynes N/A

A. Lakrin

Depth to Refusal (ft): Depth to Water (ft): Depth to Rock (ft):

Total Depth:

N/A Depth to Water (ft): N/A Slot Size: N/A

EASTING: SURFACE ELEVATION: N/A

N/A

NOTES: VOC grab sample 9213-SB-04-9.5 collected from 9.5-10 ftbgs.

Composite sample 9213-SB-04 collected from 0-20 ftbgs.

10

N/A

Soil classified in accordance with USCS Classification system.

Well	Depth Interval (ft)	USCS Classification	Sample Interval	Sample Recovery (in)	Blows / 6 in	PID (std units)	Lithologic Description	Remarks						
	10.5					0								
	11.0					0								
	11.5			-		0		,						
	12.0	SM				0								
	12.5			60		0	Brown sand (fine) and some silt, saturated, loose							
	13.0					0								
	13.5					0								
	14.0					0								
	14.5				0									
	15.0				- N/A	N/A	N/A	0						
	15.5							0						
	16.0	SM				0	Brown sand (fine) some silt and gravel, moist, loose							
	16.5		<u> </u>								0	0		
	17.0										0			
	17.5	OL		48		0	Brown organic (root mass) silt, dry, medium							
	18.0	OL				0								
	18.5				0		ļ							
	19.0				0									
	19.5	sw				0	Brownish gray sand (fine), wet, medium							
***	20.0					0								

END OF BORING AT 20.0 FEET



Page 1 of 2

 BORING ID:
 SB-05

 WELL ID:
 N/A

PROJECT No:

LOCATION: Brooklyn, New York

SEK20068

CLIENT: New York City Department of Design and Construction

PROJECT: New Storm and Combined Sewers and Water Main Work - 9th Street Between 2nd Avenue and Gowanus Canal Brooklyn, New

FMS ID #: PW335ES13

DRILLING CONTRACTOR: Aquifer Drilling and Testing, Inc.

WOL #: 9213-Weston-R-8728

DATE STARTED: 10/23/2013

DRILLING METHOD: Geoprobe

BOREHOLE DAT	Α	WELL DATA		DATE FINISHED:	10/25/2013	
Diameter (in):	2	Well Diameter:	N/A	DRILLER:	A. Lakrin	
Total Depth:	20	Total Depth (ft):	N/A	WESTON INSPECTOR:	J. Lynes	
Depth to Refusal (ft):	N/A	Screen Length (ft):	N/A	NORTHING:	N/A	
Depth to Water (ft):	19.5	Depth to Water (ft):	N/A	EASTING:	N/A	
Depth to Rock (ft):	N/A	Slot Size:	N/A	SURFACE ELEVATION:	N/A	

NOTES: VOC grab sample 9213-SB-05-9.5 collected from 18.5-19 ftbgs. Duplicate Collected.

Composite sample 9213-SB-05 collected from 0.5-20 ftbgs. Duplicate Collected.

Soil classified in accordance with USCS Classification system.

Well	Depth Interval (ft)	USCS Classification	Sample Interval	Sample Recovery (in)	Blows / 6 in	PID (std units)	Lithologic Descriptioπ	Remarks		
	0.5					0	Concrete (0.25)			
	1.0					0				
	1.5							0		
	2.0					0	Dark brown sand (medium) with cobble and black ash, dry, loose (fill)			
	2.5					0	("",			
	3.0	FILL		NA	N/A	0		Boring hand		
	3.5					0		cleared to 6.0 ftbgs		
'	4.0					0	·			
	4.5					0				
	5.0					0	Dark brown sand (medium) with cobble and black ash, wet, loose (fill)			
	5.5	*	*			0	. ·			
	6.0					0				
	6.5					0	,			
	7.0					0				
	7.5					0				
	8.0	FILL		36	NA	0	Dark brown sand (medium) with cobble and black ash, dry,firm (fill)			
	8.5					0				
	9.0					0				
	9.5					0				
	10.0				÷	0				



Page 2 of 2

BORING ID: SB-05 WELL ID: N/A

LOCATION: Brooklyn, New York

CLIENT: New York City Department of Design and Construction

PROJECT: New Storm and Combined Sewers and Water Main Work -9th Street Between 2nd Avenue and Gowanus Canal Brooklyn, New

FMS ID #: PW335ES13

DRILLING CONTRACTOR: Aquifer Drilling and Testing, Inc.

WOL #: 9213-Weston-R-8728 DATE STARTED:

10/23/2013

SEK20068

DRILLING METHOD: Geoprobe

Depth to Rock (ft):

BOREHOLE DAT	Α	WELL DATA				
Diameter (in):	2	Well Diameter:	N/A	D		
Total Depth:	20	Total Depth (ft):	N/A	W		
Depth to Refusal (ft):	N/A	Screen Length (ft):	N/A	N		
Depth to Water (ft):	19.5	Depth to Water (ft):	N/A	E		

DATE FINISHED: 10/25/2013 RILLER: A. Lakrin WESTON INSPECTOR: J. Lynes NORTHING: N/A EASTING: N/A

N/A

PROJECT No:

SURFACE ELEVATION: N/A

NOTES: VOC grab sample 9213-SB-05-9.5 collected from 18.5-19 ftbgs. Duplicate Collected.

Composite sample 9213-SB-05 collected from 0-20 ftbgs. Duplicate Collected.

Slot Size:

Soil classified in accordance with USCS Classification system.

N/A

Well	Depth Interval (ft)	USCS	Sample Interval	Sample Recovery (in)	Blows / 6 in	PID (std units)	Lithologic Description								
	10.5	FILL				0	Dark brown sand (medium) with cobble and black ash, dry,firm (fill)								
	11.0	,				0	·								
	11.5		·			0									
	12.0					0									
	12.5	sw		54		0	Brown sand (fine to coarse), saturated, loose (perched water table)								
	13.0					0									
	13.5				N/A	0									
	14.0					0									
}	14.5	OL				0.8	Brown organic (root mass) silt, moist, firm								
	15.0					N/A	N/A	N/A	N/A	N/A	N/A	N/A	0		
	15.5						- 0								
	16.0					0									
	16.5					0									
	17.0	_				0									
	17.5	SM		48		0	Brownish gray sand (fine) little silt, moist, medium								
	18.0					0									
	18.5					0									
	19.0	-				0									
	19.5									0		-			
	20.0	Ľ.				0	Brownish gray sand (fine) little silt, moist, saturated								

END OF BORING AT 20.0 FEET



Page 1 of 2

BORING ID: SB-06 WELL ID: N/A

PROJECT No:

LOCATION: Brooklyn, New York

SEK20068

CLIENT: New York City Department of Design and Construction

PROJECT: New Storm and Combined Sewers and Water Main Work 9th Street Between 2nd Avenue and Gowanus Canal Brooklyn, New

FMS ID #: PW335ES13

DRILLING CONTRACTOR: Aquifer Drilling and Testing, Inc. WOL #: 9213-Weston-R-8728

DRILLING METHOD: Geo	probe	•	_	DATE STARTED:	10/23/2013
BOREHOLE DATA		WELL DATA		DATE FINISHED:	10/25/2013
Diameter (in):	2	Well Diameter:	N/A	DRILLER:	A. Lakrin
Total Depth:	20	Total Depth (ft):	N/A	WESTON INSPECTOR:	J. Lynes
Depth to Refusal (ft):	N/A	Screen Length (ft):	N/A	NORTHING:	N/A
Depth to Water (ft):	N/A	Depth to Water (ft):	N/A	EASTING:	N/A
Depth to Rock (ft):	N/A	Slot Size:	N/A	SURFACE ELEVATION:	N/A

NOTES: VOC grab sample 9213-SB-06-19.5 collected from19.5-20 ftbgs.

Composite sample 9213-SB-02 collected from 0-20 ftbgs.

Soil classified in accordance with USCS Classification system.

Well	Depth Interval (ft)	USCS	Sample Interval	Sample Recovery (in)	Blows / 6 in	PID (std units)	Lithologic Description	Remarks
	0.5					0	Concrete (0.25)	
	1.0					0	Dark brown sand (medium) with cobble and black ash, dry, loose (Fill) (0.5)	
	1.5		·			0		
	2.0					0		
	2.5					0		
	3.0	FILL		NA	N/A	0		Boring hand
	3,5				•	0	Brown sand (medium) some silt little cobble, moist, loose (fill)	cleared to 6.0 ftbgs
	4.0					0		
	4.5					0		
	5.0	,				0		
	5.5					0		
	6.0					0		
	6.5					5	·	
	7.0			,		1.2		
	7.5					16.5		
	8.0	FILL		24	NA	1.4	Brown sand (fine to medium) some silt little cobble, moist, loose (fill)	
	8.5					. 0.9		
	9.0	,				0.7		
	9,5					0.3		
	10.0					1		



ogo 2 of 2

BORING ID: SB-06

N/A

Page 2 of 2

LOCATION: PROJECT No:

WELL ID:

Brooklyn, New York

SEK20068

CLIENT: New York City Department of Design and Construction

PROJECT: New Storm and Combined Sewers and Water Main Work - 9th Street Between 2nd Avenue and Gowanus Canal Brooklyn, New

York

FMS ID #: PW335ES13

DRILLING CONTRACTOR: Aquifer Drilling and Testing, Inc.

WOL #: DATE STARTED:

DATE FINISHED:

N/A

N/A

N/A

N/A

N/A

9213-Weston-R-8728

DRILLING METHOD: Geoprobe

Depth to Water (ft):

Depth to Rock (ft):

BOREHOLE DATA

Diameter (in):

2 Well Diameter:

Total Depth:

20 Total Depth (ft):

Depth to Refusal (ft):

N/A Screen Length (ft):

20

N/A

10/25/2013 A. Lakrin

10/23/2013

OR: J. Lynes

NORTHING:

SURFACE ELEVATION: N/A

N/A N/A

NOTES: VOC grab sample 9213-SB-06-19.5 collected from19.5-20 ftbgs

Slot Size:

Depth to Water (ft):

Composite sample 9213-SB-02 collected from 0-20 ftbgs.

Soil classified in accordance with USCS Classification system

Well Construction	Depth Interval (ft)	USCS Classification	Sample Interval	Sample Recovery (in)	Blows / 6 in	PID (std units)	Lithologic Description	Remarks												
	10.5					0														
	11.0					0														
	11.5					Ö														
	12.0					0	Brown sand (fine to medium) some silt little cobble, moist, loose (fill)													
	12.5	FILL		24		0	Source Carlo Company Company Company													
	13.0	''		_,		0														
	13.5			-		0														
	14.0				N/A	0	•													
	14.5					0	Brown sand (fine to medium) some cobble, moist, firm (fill)													
	15.0					N/A	N/A	0	,											
	15.5					0														
	16.0	sw				0	Brownish gray sand (fine) little silt, moist, firm													
	16.5																	0		
	17.0					0														
	17.5	OL		56		0	Brown organic (root mass) silt, moist, very firm													
	18.0					0														
	18.5					0														
	19.0					0	Brownish gray sand (fine to coarse) little cobble, moist, firm (very bottom saturated)													
	19.5	sw				0														
	20.0					0														

END OF BORING AT 20.0 FEET



Page 1 of 2

BORING ID: SB-07 WELL ID: N/A

LOCATION: Brooklyn, New York PROJECT No:

SEK20068

PROJECT: New Storm and Combined Sewers and Water Main Work 9th Street Between 2nd Avenue and Gowanus Canal Brooklyn, New

CLIENT: New York City Department of Design and Construction

York

FMS ID #: PW335ES13

DRILLING CONTRACTOR: Aquifer Drilling and Testing, Inc.

WOL #: DATE STARTED: 10/23/2013

9213-Weston-R-8728

DRILLING METHOD: Geoprobe

Depth to Rock (ft):

WELL DATA BOREHOLE DATA Well Diameter: Diameter (in): N/A Total Depth (ft): Total Depth: 20 N/A Screen Length (ft): Depth to Refusal (ft): N/A N/A Depth to Water (ft): N/A Depth to Water (ft): N/A

DATE FINISHED: 10/25/2013 DRILLER: A. Lakrin WESTON INSPECTOR:

J. Lynes

NORTHING: **EASTING:**

N/A N/A

N/A

SURFACE ELEVATION: N/A

NOTES: VOC grab sample 9213-SB-07-19.5 collected from19.5-20 ftbgs.

Slot Size:

Composite sample 9213-SB-07 collected from 0.5-20 ftbgs.

N/A

Soil classified in accordance with USCS Classification system.

Well	Depth Interval (ft)	USCS Classification	Sample Interval	Sample Recovery (in)	Blows / 6 in	PID (std units)	Lithologic Description					
	0.5					0	Concrete					
	1.0					0						
	1.5					0	Dark brown sand (medium) with cobble and black ash, dry, loose (fill)					
	2.0					0						
	2.5					0						
	3.0	FILL		NA	N/A	0 .		Boring hand				
	3.5					0	Consumer and American Lawrence the and only of the United States and the Lawrence	cleared to 6.0 ftbgs				
	4.0					0	Brown sand (medium) some silt and mica flakes little cobble, dry, loose (fill)					
	4.5	4				0						
	5.0					0	·					
	5.5					0						
	6.0					0	Brown sand (medium) some silt and mica flakes little cobble, moist, loose (fill)					
	6.5					0	·					
	7.0					0						
	7.5					0	Brown sand (medium) some silt and mica flakes little cobble, moist, loose (fill)					
	8.0	FILL		24	NA	0		,				
	8.5					0						
	9.0					0						
	9.5					0	Black sand (coarse) with gravel, loose, moist (Fill)					
	10.0					0						



Page 2 of 2

 BORING ID:
 SB-07

 WELL ID:
 N/A

LOCATION:

PROJECT No:

Brooklyn, New York

SEK20068

CLIENT: New York City Department of Design and Construction

PROJECT: New Storm and Combined Sewers and Water Main Work - 9th Street Between 2nd Avenue and Gowanus Canal Brooklyn, New

FMS ID #: PW335ES13

DRILLING CONTRACTOR: Aquifer Drilling and Testing, Inc

WOL #: 9213-Weston-R-8728

DATE STARTED: 10/23/2013

DRILLING METHOD: Geoprobe

BOREHOLE DATA		WELL DATA		DATE FINISHED:	10/25/2013					
Diameter (in):	2	Well Diameter:	N/A	DRILLER:	A. Lakrin					
Total Depth:	20	Total Depth (ft):	N/A	WESTON INSPECTOR:	J. Lynes					
Depth to Refusal (ft):	N/A	Screen Length (ft):	N/A	NORTHING:	N/A					
Depth to Water (ft):	N/A	Depth to Water (ft):	N/A	EASTING:	N/A					
Depth to Rock (ft):	N/A	Slot Size:	N/A	SURFACE ELEVATION:	N/A					

NOTES: VOC grab sample 9213-SB-07-19.5 collected from19.5-20 ftbgs.

Composite sample 9213-SB-07 collected from 0-20 ftbgs.

Soil classified in accordance with USCS Classification system.

Well	Depth Interval (ft)	USCS Classification	Sample Interval	Sample Recovery (in)	Blows / 6 in	PID (std units)	Lithologic Description	Remarks					
	10.5					4.7							
	11.0					1.2	Black sand (coarse) with gravel, loose, moist (Fill)						
	11.5					3.4	Jack Care (Cares), mar graves, reses, motel (,						
	12.0					5.8							
	12.5			24		12.3							
	13.0					2.1							
	13.5	Fill			- N/A	0.7							
	14.0					1.3							
	14.5		٠			N/A	2.5 Brown sand (fine to medium) little silt, m	Brown sand (fine to medium) little silt, moist, soft (fill)					
	15.0						N/A	N/A	N/A	N/A	0.1		
,	15.5						0						
	16.0					0							
	16.5					0	. ·						
	17.0			:		0							
	17.5	OL		56	·	0	Brown organic (root mass) silt, moist, very firm						
	18.0		-			0							
	18.5					0							
	19.0	sw				0	Brownish gray sand (fine to medium) little silt, moist, firm						
	19.5	}				0	_						
	20.0					0							

END OF BORING AT 20.0 FEET



APPENDIX C

LABORATORY ANALYTICAL RESULTS



175 ROUTE 46 WEST, UNIT D · FAIRFIELD, NJ 07004 2 MADISON ROAD, FAIRFIELD, NJ 07004 800-426-9992 973-244-9770 FAX: 973-244-9787

WWW.HCVLAB.COM

Project: 9213 Gowanus

Client PO: 0084240

Report To: Weston Solutions Inc.

205 Campus Drive Edison, NJ 08837

Attn: Dyna Krumich-Ogonowski

Received Date: 10/25/2013

Report Date: 11/22/2013

Deliverables: NYDOH-CatA

Lab ID: AC75387

Lab Project No: 3102538

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 Veritech to all parties shall not exceed Veritech's total fee for analytical services rendered.

Robin Cousineau - Quality Assurance Director

OR

Stanley Gilewicz - Laboratory Director

NJ (07071)

NY (ELAP11408)

CT (PH-0671)

PA (68-00463)

KY (90124)

HAZ. - 96





THIS CATEGORY "A" REPORT IS NUMBERED FROM 1 to 53

HCV Case Narrative

Client:

Weston Solutions Inc.

HCV Project: 3102538

Project: 9213 Gowanus

Hampton-Clarke/Veritech (HC·V) received the following samples on October 25, 2013:

Client ID	HCV Sample ID	<u>Matrix</u>	<u>Analysis</u>
9213-WC-01	AC75387-001	Soil	GRO/DRO (8015D), Reactive Cyanide/Sulfide (SW846 7.3), Ignitability (1030),
			pH (9045D), TCLP VO (8260C), TCLP BNA (8270D), TCLP Pesticides
•			(8081B), TCLP Herbicides (8151A), TCLP Metals (6010C/7470A)
9213-WC-03	AC75387-002		GRO/DRO (8015D), Reactive Cyanide/Sulfide (SW846 7.3), Ignitability (1030),
		•	pH (9045D), TCLP VO (8260C), TCLP BNA (8270D), TCLP Pesticides
			(8081B), TCLP Herbicides (8151A), TCLP Metals (6010C/7470A)

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.

Gasoline Range Organics Analysis:

Data conforms to method requirements.

Diesel Range Organics Analysis:

There is no surrogate recovery data for samples AC75339-002 and 002 MS/MSD due to high sample dilution.

The Matrix Spike and Matrix Spike Duplicate for batch 29083 had recoveries outside QC limits. However, since the associated Laboratory Control Samples (MBS/MBSD) were within control, no corrective action was necessary.

Wet Chemistry Analysis:

Samples AC75387-001 and 002 were analyzed for Reactivity using SW-846 7.3. SW-846 7.3 is not a NELAP accredited parameter.

TCLP Volatile Organic Analysis:

Chloroform was recovered in sample AC75387-002 suggesting laboratory contamination.

The Matrix Spike and Matrix Spike Duplicate for batch 31263 had recoveries outside QC limits. However, since the associated Method Blank and Laboratory Control Sample were within control, no corrective action was necessary.

TCLP Base Neutral/Acid Extractable Analysis:

Sample WMB29092 has a surrogate recovery outside QC limits, but the recovery is greater than 10%, therefore, no corrective action was necessary.

TCLP Pesticide Analysis:

Data conforms to method requirements.

TCLP Herbicide Analysis:

Data conforms to method requirements.

TCLP Metals Analysis:

Data conforms to method requirements.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Robin Cousineau Or Stanley Gilewicz Date

Quality Assurance Director Laboratory Director

Action 1997	Control of the A		10)Relinquished by:	ê		4-002 9213-WC-03	- 1213-WC-02	-00 9213-WC-01	Lab Sample # 4)Customer Sample ID	\$7		FOR I AR	1d) Send Report to: 5:52 above		Edison NJ auph: ph 752 417	Ola) Customer: Dyna Krumich - Chanow Address: 205 Cumpus Drive	Customer	Service Center: 137-D Gaither Drive Ph (Service Center): 856-78	(**) Hampton Clarke-Verteen Laboratories (**) 175 Roule 46 West and 2 Madison Road, Fairfield, New Jersey 07004 (**) Ph; 800-426-9992 973-244-9770 Fax: 973-244-9787 973-439-1458
	Anto system the second		Described by:			7 0h71 M C	1	> dis 5 5 X	5) 6)Sample Some Company Compa	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)	Check If Contingent ===				7 Ear 732 4175801	sk; (Westen)	NELAC/NJ #07071 PA #68-00463 NY #11408 CT #PH-0671 KY #00124	nt Laurel, New Jersey 08054 7 Fax: 856-780-6056	Cn Laboratories Fairfield, New Jersey 07004 73-244-9787 973-439-1458
	desalblad an	e 19/25 1750	6			* * * * * * * * * * * * * * * * * * *	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		Grab (G	₹.ā	Ÿ	7)Analysis Request	e):	1	2b) Project Mgr: Dyns Krunich - Osonauski 2c) Project Location (City/State): Stacklyn, N	2a) Project: ODC 9th St Brankly, NY SEKZECK 8	CT #PH-0671 KY #90124 Project Information	A Women-Owned, Disadvantaged, Small Business Enterprise	HC-Y CHAIN OF
Please note NUMBERED items. A fee of \$5/sample will be assess	High Confaminant Concentrations NJ LSRP Project 11\Sampler (with pure)	Note:	Comments. Notes. Special Requirements. HAZARDS Note: Check if low-level groundwater methods required to meet current standards in NJ or PA:				٥		 			Request	- Can		10 Days (10%)	L	24 Hours (100%) 48 Hours (75%)	Turnarou	CHAIN OF CUSTODY 2/c RECORD 3)
If not completed your anal	tions	. Be & Ag)	Comments, Notes, Special Requirements, HAZARDS vel groundwater methods required to meet current standards in processor.				3,47		MeOH En Core NaOH HCI H2SO4 HNO3 Other:	# of Bottles	<=== Check If Contingent		Expedited TAT Not Always Available. Please Ch	Other:	Full / Category B Category A	Red - NJ / NY / PA	Data Summary F Waste E	Report Type	102538 Page Page
ork may be delayed.	Cooler Temperature		IDS rds in NJ or PA:	A. TEARNOON ROOM SERVICE AND THE SERVICE AND T				HA7	9)Comments				Please Check with Lab.	PDF	Excel - NY Regulatory Excel - PA Regulatory	EQuIS EPA Region 2 or 5 Excel - NJ Regulatory	Hazsite/CSV EQuIS 4-File / EZ / NYS	Electronic Deliv.	of

PROJECT MODIFICATIONS

Client: WESTON-NJ
Project: 9213 Gowanus

HCV Project #: 3102538

sherree192.168.1.52 10/29/2013 5:22:47 PM

Per Dyna Krumich-Ogonowski, the project name is 9213 Gowanus. SB 10/29/13

CONDITION UPON RECEIPT

Batch Number AC75387

Entered By: Ricardo

	 Date Entered	10/25/2013 6:25:00 PM

1	;	Yes	Is there a corresponding COC included with the samples?
2	2	Yes	Are the samples in a container such as a cooler or Ice chest?
3	3	NO	Are the COC seals intact?
4	4	Yes	Please specify the Temperature inside the container (in degC) 2.3
	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
į	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	0	Yes	Is there enough sample sent for the analyses listed on the COC? If no, specify:
1.	1	NA	Are samples preserved correctly?
12	2	Yes	Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
1:	3	NA	Other commentsSpecify
14	4	NA	Corrective actions (Specify item number and corrective action taken).

Internal Chain of Custody

	l	Loc		1			T	Loc	T	T	r		
		or	Bot	Δ/			· '	or	Bot	Δ/			
Lab#:	DateTime:	User		м		Lab#:	DateTime:	User			Analysis		
AC75387-001	10/25/13 17:50	RICAR	~	М	Received	EGD#.	- Dato inito:	10361	1144	1101	, a ranyono		
AC75387-001	10/25/13 18:25	RICAR	1 .	м	Login		•				•		
AC75387-001	10/25/13 21:47	PA	1	A	mixing								
AC75387-001	10/25/13 21:48	R12	1	A	NONE								
AC75387-001	10/28/13 08:23	BCT	1	A	% SOLIDS							٠	
AC75387-001	10/28/13 09:01	SDL	1	A	ph								
AC75387-001	10/28/13 12:14	HS	1	Α	rcn/rs								
AC75387-001	10/28/13 15:02	SDL	1	Α	IGNIT-1030								·
AC75387-001	10/28/13 16:34	R12	1	Α	NONE								
AC75387-001	10/30/13 10:04	LYND	1	Α	TPH								
AC75387-001	10/30/13 10:05	R12	1	Α	NONE								
AC75387-001	10/29/13 10:18	sw	2	Α	ZHE								
AC75387-001	10/29/13 10:18	R12	2	Α	NONE								
AC75387-001	10/29/13 16:32	RAMO	2	Α	TCLP								
AC75387-001	10/29/13 16:33	RAMO	2	Α	R12								
AC75387-001	10/28/13 15:00	R30	4	Α	NONE								
AC75387-001	10/29/13 10:40	WP	4	Α	voa								
AC75387-001	10/29/13 10:57	R30	4	Α	NONE								
AC75387-001	10/31/13 09:38	SG	4	Α	GRO								
AC75387-001	10/31/13 09:43	R30	4	Α	NONE								
AC75387-001	10/29/13 10:57	R30	5	Α	NONE								
AC75387-001	10/29/13 13:26	WP	5	Α	VOA						•		
AC75387-001	10/29/13 13:37	R31	5	Α	NONE								
AC75387-001	10/31/13 09:43	R31	6	Α	NONE								
AC75387-002	10/25/13 17:50	RICAR	d o	М	Received								
AC75387-002	10/25/13 18:25	RICAF	0	М	Login		• *						
AC75387-002	10/25/13 21:47	PA	1	Α	mixing								
AC75387-002	10/25/13 21:48	R12	1	Α	NONE						•		
AC75387-002	10/28/13 08:23	BCT	1	Α	% SOLIDS								
AC75387-002	10/28/13 09:01	SDL	1	Α	iph								
AC75387-002	10/28/13 12:14	HS	1	A	rcn/rs								
AC75387-002	10/28/13 15:02	SDL	1	Α	IGNIT-1030								
AC75387-002	10/28/13 16:34	R12	1	Α	NONE								
AC75387-002	10/30/13 10:04	LYND	1	Α	TPH								
AC75387-002	10/30/13 10:05	R12	1	A	NONE								
AC75387-002	10/29/13 10:18	SW	2	Α	ZHE								
AC75387-002	10/29/13 10:18	R12	2	Α	NONE								
AC75387-002	10/29/13 16:32	RAMO	1	Α	TCLP								
AC75387-002	10/29/13 16:33	RAMO	,	Α	R12								
AC75387-002	10/28/13 15:00	R30	4	A	NONE								
AC75387-002	10/29/13 10:40	WP	4	Α	voa								
AC75387-002	10/29/13 10:57	R30	4	Α	NONE .								
AC75387-002	10/31/13 09:38	SG	4	Α	GRO					•			
AC75387-002	10/31/13 09:43	R30	4	Α	NONE								
AC75387-002	10/31/13 09:43	R31	6	A	NONE						-		

Laboratory Chronicle

Client: Weston Solutions Inc.

Project: 9213 Gowanus

HCV Project #: 3102538

Lab#: AC75387-001

Sample ID: 9213-WC-01

•	Prep	Prep		Analytical	Analysis	
Test Code	Method	Date	Ву	Method	Date	Ву
% Solids SM2540G				SM 2540G	10/28/13 00:00	hossain
Diesel Range Organics 8015B	Mod. Shaker	10/30/13	lynda	EPA 8015D	10/31/13 19:57	RAK/KD/AHD
Gasoline range organics 8015B	EPA5030/5035			EPA 8015D	10/31/13 10:59	SG
Ignitability (EPA 1030)		. 10/28/13	SDL	EPA 1030	10/28/13 00:00	SDL
Mercury (TCLP) 7470A	EPA 7470A	10/31/13	Julijana	EPA 7470A	10/31/13 16:14	OA .
pH 9040C/9045D	•			9040C/9045D	10/28/13 12:45	sdl
Reactive Cyanide	SW846 7.3.3	. 10/28/13	hossain	SW846 7.3.3	10/29/13 12:09	af
Reactive Sulfide	SW846 7.3.4	. 10/28/13	hs	SW846 7.3.4	10/29/13 00:00	hs
TCLP Herbicides 8151	EPA 8151A	10/31/13	marie	EPA 8151A	11/1/13 14:00	MAS
TCLP Metals 6010	3005&10/3050	10/31/13	Julijana	EPA 6010C	10/31/13 12:38	SRB
TCLP Metals Extraction 1311	EPA 1311	10/29/13	Ramos		10/30/13 00:00	Ramos
TCLP Organics Extraction 1311	EPA 1311	° 10/29/13	Ramos	•	10/30/13 00:00	Ramos
TCLP Pesticides 8081	EPA 3510	10/31/13	lynda	EPA 8081B	11/1/13 18:25	MAS
TCLP Semivolatiles 8270	EPA 3510	10/31/13	dyr	EPA 8270D	10/31/13 18:14	AHD/JB
TCLP Volatiles 8260	EPA 5030C			EPA 8260C	10/31/13 11:09	SG
TCLP Zero Headspace Extraction	EPA 1311	10/29/13	SW			

Lab#: AC75387-002

Sample ID: 9213-WC-03

Test Code	Prep Method	Prep Date	Ву	Analytical Method	Analysis Date	Ву
% Solids SM2540G				SM 2540G	10/28/13 00:00	hossain
Diesel Range Organics 8015B	Mod. Shaker	10/30/13	lynda	EPA 8015D	10/31/13 20:23	RAK/KD/AHD
Gasoline range organics 8015B	EPA5030/5035			EPA 8015D	10/31/13 10:43	S G
Ignitability (EPA 1030)		10/28/13	SDL	EPA 1030	10/28/13 00:00	SDL
Mercury (TCLP) 7470A	EPA 7470A	10/31/13	Julijana	EPA 7470A	10/31/13 16:15	OA
pH 9040C/9045D				9040C/9045D	10/28/13 12:45	s d 1
Reactive Cyanide	SW846 7.3.3	10/28/13	hossain	SW846 7.3.3	10/29/13 12:11	af
Reactive Sulfide	SW846 7.3.4	10/28/13	hs	SW846 7.3.4	10/29/13 00:00	hs
TCLP Herbicides 8151	EPA 8151A	10/31/13	marie	EPA 8151A	11/1/13 14:20	MAS
TCLP Metals 6010	3005&10/3050	10/31/13	Julijana	EPA 6010C	10/31/13 12:42	SRB
TCLP Metals Extraction 1311	EPA 1311	10/29/13	Ramos		10/30/13 00:00	Ramos
TCLP Organics Extraction 1311	EPA 1311	10/29/13	Ramos		10/30/13 00:00	Ramos
TCLP Pesticides 8081	EPA 3510	10/31/13	lynda	EPA 8081B	11/1/13 18:42	MAS
TCLP Semivolatiles 8270	EPA 3510	10/31/13	dyr	EPA 8270D	10/31/13 18:40	AHD/JB
TCLP Volatiles 8260	EPA 5030C			EPA 8260C	10/31/13 11:44	SG
TCLP Zero Headspace Extraction	EPA 1311	10/29/13	sw			

HCV 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

DATA QUALIFIERS

- **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.

^{*}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.

HCV Report Of Analysis

Client: Weston Solutions Inc.

HCV Project #: 3102538

Project: 9213 Gowanus

Sample ID: 9213-WC-01

Lab#: AC75387-001

Matrix: Soil

Collection Date: 10/25/2013

Receipt Date: 10/25/2013

Analyte	DF	Units	RL	Result
% Solids	1	percent		84
Diesel Range Organics 8015B				
Analyte	DF	Units	RL	Result
Diesel Range Organics	1	mg/kg	71	86
Sasoline range organics 8015B				
Analyte	DF	Units	RL	Result
Gasoline Range Organics	92.4	mg/kg	55	ND
gnitability (EPA 1030)				
Analyte	DF	Units	RL	Result
Burning Rate (mm/sec)	1			NA
Flame Propagation (POS/NEG)	1	•		NA NA
Ignitability Screen (POS/NEG)	1			NEG
Mercury (TCLP) 7470A			* * ***********************************	
Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00070	, ND
pH 9040C/9045D				
Analyte	DF	Units	RL	Result
рн	1	ph		9.9
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
CLP Herbicides 8151				
Analyte	DF	Units	RL	Result
2,4•D	1	mg/i	0.0050	ND
Silvex	. 1	mg/l	0.0050	ND
CLP Metals 6010				
Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barlum	1	mg/l	0.25	0.48
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	0.30
Nickel	1	mg/l	0.10	ND
Selenium	1	mg/l	0.10	ND
Silver	1	mg/l	0.050	ND
CLP Pesticides 8081			·	
Analyte	DF	Units	RL	Result

	9213-WC-01 AC75387-001 Soil			Collection Date: Receipt Date:	
	Chlordane	1	mg/l	0.0010	ND
	Endrin	. 1	mg/l	0.00010	ND
	gamma-BHC	1	mg/l	0.00010	ND
	Heptachlor	1	mg/l	0.00010	ND
	Heptachlor Epoxide	· 1	mg/l	0.00010	ND
	Methoxychlor	. 1	mg/l	0.00010	ND
	Toxaphene	1	mg/l	0.0025	ND ·
-	CLP Semivolatiles 8270		1,420.1		
_	Analyte	DF	Units	RL	Result
	2,4,5-Trichlorophenol	1	mg/l	0.0080	ND
	2,4,6-Trichlorophenoi	1	mg/l	0.0080	ND
	2,4-Dinitrotoluene	1	mg/l	0.0080	ND
	2-Methylphenol	1	mg/l	0.0020	ND
	3&4-Methylphenol	1	mg/l	0.0020	0.0020
	Hexachlorobenzene	1	mg/l	0.0080	ND
	Hexachlorobutadiene	. 1	mg/l	0.0080	ND .
	Hexachloroethane	1	mg/l	0.0080	ND .
	Nitrobenzene	1	mg/l	0.0080	ND
	Pentachlorophenol	1	mg/l	0.040	ND
	Pyridine	1	mg/l	0.040	ND ·
7	CLP Volatiles 8260				
-	Analyte	DF	Units	RL	Result
	1,1-Dichloroethene	1	mg/l	0.0010	ND .
	1,2-Dichloroethane	1	mg/l	0.00050	ND
	1,4-Dichlorobenzene	, 1	mg/l	0.0010	ND .
	2-Butanone	1	mg/l	0.0010	ND
	Benzene	1	mg/i	0.00050	0.0049
	Carbon tetrachloride	1	mg/l	0.0010	ND
	Chlorobenzene	1 '	mg/l	0.0010	ND
	Chloroform	1	mg/l	0.0010	ND
	Tetrachloroethene	1	mg/i	0.0010	ND
	Trichloroethene	1	mg/l	0.0010	ND

Vinyl chloride

0.0010

ND

Sample ID: 9213-WC-03

Lab#: AC75387-002

Collection Date: 10/25/2013 Receipt Date: 10/25/2013

Matrix: Soil % Solids SM2540G **Analyte** DF Units RL Result 80 % Solids 1 percent Diesel Range Organics 8015B DF Units RL Result Analyte 75 ND Diesel Range Organics 1 mg/kg Gasoline range organics 8015B Analyte DF Units RL Result Gasoline Range Organics 91.4 mg/kg 57 ND Ignitability (EPA 1030) DF Units RL Result Analyte Burning Rate (mm/sec) NA Flame Propagation (POS/NEG) 1 NA Ignitability Screen (POS/NEG) NEG Mercury (TCLP) 7470A Analyte DF Units RL Result Mercury 0.00070 1 mg/l pH 9040C/9045D DF RL Units Result **Analyte** 1 8.1 ph **Reactive Cyanide** Result Analyte DF Units RL ND 1 0.50 Cyanide (Reactive) mg/kg **Reactive Sulfide** DF Analyte Units RL Result Sulfide (Reactive) mg/kg 100 ND **TCLP Herbicides 8151** DF Units RL Result **Analyte** 2,4-D 1 0.0050 ND mg/l 0.0050 ND 1 mg/l Silvex TCLP Metals 6010 DF Analyte Units RL Result Arsenic mg/l 0.10 ND Barium mg/l 0.25 ND 0.050 ND Cadmium 1 mg/l Chromium 0.10 ND mg/l Lead 0.050 ND ma/l ND 0.10 Nickel mg/l 0.10 ND Selenium mg/l ND 0.050 Silver mg/l 1

TCI P	Pesticides	8081
IULF	L 62/1/1/1/62	900 I

Analyte	DF	Units	RL	Result
Chlordane	1	mg/l	0.0010	ND
Endrin	1	mg/l	0.00010	ND
gamma-BHC	1	mg/l	0.00010	ND ·
Heptachlor	1	mg/l	0.00010	ND
Heptachlor Epoxide	1	mg/l	0.00010	ND
Methoxychlor	1	mg/l	0.00010	ND
Toxaphene	HAZ.1- 108	mg/l	0.0025	ND

Sample ID: 9213-WC-03

Lab#: AC75387-002

Matrix: Soil

Collection Date: 10/25/2013

Receipt Date: 10/25/2013

TCLP Semivolatiles 8270

Analyte	DF	Units	RL	Result
2,4,5-Trichlorophenol	1	mg/l	0.0080	ND
2,4,6-Trichlorophenol	1	mg/I	0.0080	ND
2,4-Dinitrotoluene	1	mg/l	0.0080	ND
2-Methylphenol .	1	mg/l	0.0020	ND
3&4-Methylphenol	1	mg/I	0.0020	ND
Hexachlorobenzene	1	mg/i	0.0080	ND
Hexachlorobutadiene	1	mg/l	0.0080	ND
Hexachloroethane	. 1	mg/l	0.0080	ND
Nitrobenzene	1	mg/l	0.0080	ND
Pentachiorophenol	1	mg/l	0.040	ND
Pyridine	. 1	mg/l	0.040	ND .

TCLP Volatiles 8260

Analyte		DF	Units	RL	Result
1,1-Dichloroethene		1	mg/l	0.0010	ND
1,2-Dichloroethane	•	1	mg/i	0.00050	ND
1,4-Dichlorobenzene	ř	1	mg/l	0.0010	ND
2-Butanone		1	mg/l	0.0010	ND .
Benzene		1	mg/l	0.00050	0.00063
Carbon tetrachloride		1	mg/l	0.0010	ND
Chlorobenzene	2	1	mg/l	0.0010	ND
Chloroform		1	mg/l	0.0010	0.0014
Tetrachloroethene		1	mg/l	0.0010	0.0063
Trichloroethene	- 12	1	mg/l	0.0010	0.0012
Vinyl chloride		1	mg/l	0.0010	ND

Form1 ORGANICS REPORT

Sample Number: AC75387-001

Client Id: 9213-WC-01 Data File: 8M82589.D

Analysis Date: 10/31/13 10:59 Date Rec/Extracted: 10/25/13-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8015D Matrix: Methanol

Initial Vol: 5.41g:10ml

Final Vol: NA Dilution: 92.4

Solids: 84

Units: mg/Kg

Cas # Compound	RL	Conc	Cas # Compound	RL Conc						
phog Gasoline Range Organics	55	U								

Worksheet #: 282444

Total Target Concentration

(

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 usea

Form1 **ORGANICS REPORT**

Sample Number: AC75387-002

Client Id: 9213-WC-03

Data File: 8M82588.D Analysis Date: 10/31/13 10:43

Date Rec/Extracted: 10/25/13-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8015D Matrix: Methanol Initial Vol: 5.47g:10ml

> Final Vol: NA Dilution: 91.4

> > Solids: 80

Units: ma/Ka

			· a· · · a	•			
Cas # Compound	RL	Conc	Cas #	Compound	RL	Conc	
phog Gasoline Range Organics	57	U					_

Worksheet #: 282444

Total Target Concentration

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 usea

Form1 **ORGANICS REPORT**

Sample Number: DAILY BLANK

Client Id:

Data File: 8M82583.D Analysis Date: 10/31/13 09:25

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

Units: mg/Kg

Cas # Compound Cas# Compound Conc phog Gasoline Range Organics 50

Worksheet #: 282444

Total Target Concentration

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 usea

Form₁

ORGANICS PETROLEUM HYDROCARBON REPORT

Sample Number: AC75387-001

Method: EPA 8015D

Client Id: 9213-WC-01

Matrix: Soil

Data File: 7G32696.D

Initial Vol:5g

Analysis Date: 10/31/13 19:57

Final Vol: 1ml

Date Rec/Extracted: 10/25/13-10/30/13

Dilution: 1

Column:DB-5MS 30M 0.250mm ID 0.25um film

Solids: 84

Units: ma/Ka

			99		
Cas # Compound	RL	Conc	Cas # Compound	RL	Conc
PHCHPD2 Diesel Range Organics	71	86			

Worksheet #: 282432

Total Target Concentration

ColumnID: (^) Indicates results from 2nd column

86

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.

ORGANICS PETROLEUM HYDROCARBON REPORT

Sample Number: AC75387-002

Method: EPA 8015D

Client Id: 9213-WC-03

Matrix: Soil

Data File: 7G32697.D

Initial Vol:5g

Analysis Date: 10/31/13 20:23

Final Vol:1ml

Date Rec/Extracted: 10/25/13-10/30/13

Dilution: 1

Column: DB-5MS 30M 0.250mm ID 0.25um film

Solids: 80

onus: nig/kg											
Cas # Compound	RL	Conc	Cas #	Compound	RL	Conc					
PHCHPD2 Diesel Range Organics	75	U									

Worksheet #: 282432

the instrument.

Total Target Concentration

ColumnID: (^) Indicates results from 2nd column

R - Retention Time Out

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

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.

ORGANICS PETROLEUM HYDROCARBON REPORT

Sample Number: SMB29083

Method: EPA 8015D

Client Id:

Matrix: Soil

Data File: 7G32675.D

Initial Vol: 5g

Analysis Date: 10/31/13 10:48

Final Vol: 1ml

Date Rec/Extracted: NA-10/30/13

Dilution: 1

Column: DB-5MS 30M 0.250mm ID 0.25um film

Solids: 100

Units: mg/Kg

Cas # Compound Conc Cas# Compound Conc PHCHPD2 Diesel Range Organics 60

Worksheet #: 282432

Total Target Concentration

ColumnID: (^) Indicates results from 2nd column

 $[\]emph{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.

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
7G32675.D	SMB29083	Soil	10/31/13 10:48	1		45	72	•			
7G32696.D	AC75387-001	Soil	10/31/13 19:57	1		45	95				
7G32697.D	AC75387-002	Soil	10/31/13 20:23	1		46	98				
7G32674.D	SMB29083(M	Soil	10/31/13 10:21	1		44	102				
7G32689.D	AC75339-0020	Soil	10/31/13 16:53	20	SD	0*	0*	•			
7G32694.D	AC75339-002	Soil	10/31/13 19:05	20	SD	0*	0*	*,			
7G32695.D	AC75339-002	Soil	10/31/13 19:31	20	SD	0*	0,*	•			

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8015D

Soil Limits

	Spike	
Compound	Amt	Limits
S1=Chlorobenzene	20	20-117
S2=O-Terphenyl	20	30-146

FORM 3

Spike Recovery

3102538 0020

Batch Number: SMB29083

Mbs Name: SMB29083(MS)

Ns Name: AC75339-002(20X) Ms Name: AC75339-002(20X)

Msd Name: AC75339-002(20X)

Mbs File: 7G32674.D

Non Spk'd File: 7G32689.D

Spike File: 7G32694.D

Spike Dup File: 7G32695.D

Matrix: Soil

Method: EPA 8015D

Mbs Date: 10/31/13 10:21

Non Spk'd Date: 10/31/13 16:53

Spike Date: 10/31/13 19:05

Spike Dup Date: 10/31/13 19:31

											Spike				<u> </u>
Compound	C#	Со	Mr	Conc Exp	Lo Lim	Hi Lim	Rpd Lim	Mbs Conc	Sample Conc	Spike Conc	Dup Conc	Mbs Rec	MS Rec	Msd Rec	Rod
Diesel Range Organ	ic 23	1	0	3000	26	153	42	2101.32	79591.59	97660.20	98341.20	70	602 Mo	625 Mo	0.69

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AC75387-001 Matrix Soil Client SampleID: 9213-WC-01 Project Number: 3102538 Received Date: 10/25/2013 Collect Date: 10/25/2013

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide (Reactive)	CN-REACTIVE	. 1	ND	mg/Kg	0.50	10/28/13	10/29/13
Ignitability Screen (POS/NEG)	IGNIT-1030	1	NEG			10/28/13	10/28/13
Burning Rate (mm/sec)	IGNIT-1030	1	NA			10/28/13	10/28/13
Flame Propagation (POS/NEG)	IGNIT-1030	1	NA			10/28/13	10/28/13
Н	PH-SOIL	1	9.9	pН			10/28/13
Sulfide (Reactive)	S-REACTIVE	1	ND	mg/kg	100	10/28/13	10/29/13

Lab#: AC75387-002 Matrix Soil Client SampleID: 9213-WC-03 Project Number: 3102538 Received Date: 10/25/2013 Collect Date: 10/25/2013

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date
Cyanide (Reactive)	CN-REACTIVE	1	ND	mg/Kg	0.50	10/28/13	10/29/13
Ignitability Screen (POS/NEG)	IGNIT-1030	. 1	NEG			10/28/13	10/28/13
Burning Rate (mm/sec)	IGNIT-1030	1	NA			10/28/13	10/28/13
Flame Propagation (POS/NEG)	IGNIT-1030	1	NA			10/28/13	10/28/13
pH	PH-SOIL	1	8.1	рH			10/28/13
Sulfide (Reactive)	S-REACTIVE	1	ND	mg/kg	100	10/28/13	10/29/13

MS/MSD/DUP Recovery

3102538 0022

Prep Batch: S-616

Sample ID: AC75329-001

Method: SW846 7.3.3

Matrix: Soil

	-												
Qc Type:	Qc Type: MS		s MS Sample				MS/MSD/DUP			Non Spike			
Analyte	Amt	Recov	Dil	Conc	Conc	% Rec	Flag	Batch	RuniD	Analysis Date	Batch	RunID	Analysis Date
Cyanide (Reactive)		75-125	1	0.3312	0	83		20131029113	13	10/29/13 11:56	20131029113		10/29/13 12:01

Qc Type: I	MSD	Lim	its		MSD	Sample				M	S/MSD/	DUP		Non Spi	ke
Analyte	Amt	Recov	Rpd	Dil	Conc	Conc	% Rec	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide (Reactive)	0.4	75-125	20	1	0.335	0	84	1.1		20131029113	- 14	10/29/13 11:58	20131029113	15	10/29/13 12:01

LCS Recoveries

•	BatchRunID/RunID:					
	QcBatchID:>					1
	Date/Time:>	1				
	Analytical Method:		Soil	Soil	Soil	Soil
	Matrix:>	3011	3011	3011	3011	3011
Analyte	SW846 7.3. Amt Limits Amt Limits	% Rec Flags				
	0.4 75-125	81		11	- 11	

Calibration Summary:

Instrument: DA1

Analysis Meth: SW846 7.3.3

Analyte	Batch ID	Run#	Qc Typ	e Recov	Amt	Limit
Cyanide (Reactive)	20131029113	9	ICV	94	0.4	90-110
Cyanide (Reactive)	20131029113	21	CCV	95	0.4	90-110
Cyanide (Reactive)	20131029113	33	CCV	95	0.4	90-110
Cyanide (Reactive)	20131029113	39	CCV	97	0.4	90-110

Blank Summary

Instrument: DA1

Qc Type: Metho	od Blank Summary	Prep I	Date: 1	0/28/13		
Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20131029113	10/29/13 11:52	MBS-616	11	Cyanide (ND	0.50
Qc Type: ICB S	Summary	Prep	Date: N	IA		
Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20131029113	10/29/13 11:50	ССВ	10	Cyanide (ND	0.020
Qc Type: CCB	Summary	Prep	Date: N	IA		
Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20131029113	10/29/13 12:15	CCB	22	Cyanide (ND	0.020
20131029113	10/29/13 12:40	ССВ	34	Cyanide (ND	0.020
20131029113	10/29/13 12:51	CCB	40	Cyanide (ND	0.020

Analysis Type: PH-S

Batch Number: PH-S-963 Units: pH

Calibration Curve Information

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
DUP	AC75339-001	0	NA	20	5.88	NA	1.4	
€ LCS	LCS	4.4	75-125	NA.	4.44	101	NA	
į								

Qc Summary Results

Analytical Method(s)

9040C/9045D

					Tava	ktitis girtingeller (extent	· 在中心,我们也没有一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个	Total value with A Secret	his other windship.		er statement and it in statement
				Per	Ful	I PH	· ·	Prep	Prep	Anal	Anal
Sam #	Type	MB	Result RL	Sol	Resu	lt	ቀነ መመምና አመጀሚዊ ያለ እንያነው እና ማፅተመሚያ መቅናል ነ ተቀው የአንቶች የተማስቀገበት ያለው ነው ነው ያለመረው እና ነው ነው -	Date	Ву	Date	By
LCS	LCS		4.4	100	4.44	4.44	Colores () () () () () () () () () (10/28/13	
AC75339-001	DUP		5.9	100	5,88	5.88				10/28/13	sdl
AC75339-001	Sample		6	100	5.96	5.96				10/28/13	sdl
AC75329-001	Sample		7.7	001	7.7	7.70				10/28/13	sdl
AC75331-002	Sample		8,2	100	8.19	8.19				10/28/13	sdl
AC75387-001	Sample		9.9	100	9.87	9.87				10/28/13	sdl
AC75387-002	Sample		8.1	100	8.14	8.14				10/28/13	sdl
AC75338-001	Sample		12	100	11.64	11.64				10/28/13	
AC75269-019	Sample		7.4	100	7.35	7.35				10/28/13	
AC75269-020	Sample		2	100	7.01	7.01	The provided was a final constraint of the constraint of the constraint of the constraint of the constraint of			10/28/13	
AC75269-021	Sample		6.6	100	6.65	6.65				10/28/13	
AC75269-022	Sample		7.5	100	7.54	7.54				10/28/13	
AC75269-023	Sample		7.5	100	7.51	7.51				10/28/13	
AC75269-024	Sample		7.2	100	7.25	7.25				10/28/13	
AC75359-001	Sample			100	11,36	11,36	and the second section of the second section s			10/28/13	
AC75350-001	Sample		7.4	100	7.37	7.37	v - 0 v			10/28/13	sdl

Batch Number: RS-616

Units: mg/kg

Calibration Curve Information

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
CAL-01	CAL-01-10/29/13	16	90-110	NA	15.2285	95	NA	
LCS	LCS	400	75-125	NA	440.825	110	NA	
MS	AC75329-001	400	75-125	NA	430,80625	108	NA	
MSD	AC75329-001	400	75-125	20	420.7875	105	2.4	

Analytical Method(s) SW846 7.3.4

Sam #	Туре	MB	Result	RL	Per Sol	Full Resul	Titr Vol t	lod Vol	DF	Sam Wt (g)	Scrb Vol (ml)	Prep Date	Prep By	Anal Date	Anal By
CAL-01-10/29/13	CAL-01	to graffying all common metrics and gireless	15	ng is extisted as	100	15.228	6.2	10	17	250	250	en mangametra per 17 destable haron 17 g m	t aut is kansioni	10/29/13	hs
MB-1-10/28/13	MB	MB-1-10/28/13	ND	100	100	0	10.0	10	1	. 10	250	10/28/13	hs	10/29/13	hs
LCS	LCS	MB-1-10/28/13	440	100	100	440.82	5.6	10	1	10	250	10/28/13	hs	10/29/13	hs
AC75329-001	MS	MB-1-10/28/13	430	100	91	430.81	5.7	10	1	10	250	10/28/13	hs	10/29/13	hs
AC75329-001	MSD	MB-1-10/28/13	420	100	91	420.79	5.8	10		10	250	10/28/13	hs	10/29/13	hs
AC75329-001	Sample	MB-1-10/28/13	ND	100	91	40,075	9.6	10	1	10	250	10/28/13	hs	10/29/13	hs
C75331-001	Sample	MB-1-10/28/13	ND	100	100	30.056	9.7	10	1	10	250	10/28/13	hs	10/29/13	hs
C75331-002	Sample	MB-1-10/28/13	ND	100	100	50,094	9.5	10	1	10	250	. 10/28/13	hs	10/29/13	hs
C75339-001	Sample	MB-1-10/28/13	ND	100	87	40.075	9.6	10	1	10	250	10/28/13	hs	10/29/13	hs
C75387-001	Sample	MB-1-10/28/13	ND	100	84	30,056	9.7	10	1	10	250	10/28/13	hs	10/29/13	hs
C75387-002	Sample	MB-1-10/28/13	МD	100	80	40.075	9.6	10	1	10	250	10/28/13	hs	10/29/13	hs
C75338-001	Sample	MB-1-10/28/13	ND	100	84	50.094	9.5	10	1	10	250	10/28/13	hs	10/29/13	hs
C75359-001	Sample	MB-1-10/28/13	ND	100	83	50,094	9.5	10	1	10	250	10/28/13	hs	10/29/13	hs
C75317-002	Sample	MB-1-10/28/13	ND	100	96	30.056	9.7	10	1	10	250	10/28/13	hs	10/29/13	hs
C75317-004	Sample	MB-1-10/28/13	ND.	100	97	50,094	9.5	10	1	10	250	10/28/13	hs	10/29/13	hs
C75317-006	Sample	MB-1-10/28/13	ND	100	89	40,075	9,6	10	i	10	250	10/28/13	hs	10/29/13	hs
C75317-007	Sample	MB-1-10/28/13	ND	100	92	50.094	9.5	10	1	10	250	10/28/13	hs	10/29/13	hs
C75317-010	Sample	MB-1-10/28/13	ND	100	93	20.038	9.8	10	1	10	250	10/28/13	hs	10/29/13	hs
C75317-012	Sample	MB-1-10/28/13	ND	100	90	30,056	9.7	10	1	10	250	10/28/13	hs	10/29/13	hs
C75317-013	Sample	MB-1-10/28/13	ND	100	88	40,075	9.6	10		. 10	250	10/28/13	hs	10/29/13	hs
C75317-016	Sample	MB-1-10/28/13	ND	100	96	40.075	9.6	10	1	10	250	10/28/13	hs	10/29/13	hs
C75344-002	Sample	MB-1-10/28/13	ND ·	100	97 -	30.056	9.7	10	1	10	250	10/28/13	hs	10/29/13	hs
C75344-004	Sample	MB-1-10/28/13	ND	100	94	30.056	9.7	10	l	10	250	10/28/13	hs	10/29/13	hs
C75344-006	Sample	MB-1-10/28/13	ND	100	90	20,038	9.8	10	1	10	250	10/28/13	hs	10/29/13	hs
C75344-008	Sample	MB-1-10/28/13	ND	100	93	10.019	9.9	10	1	10	250	10/28/13	hs	10/29/13	hs

H5 10/30/13

M 20/13

% Solids Report

Analysis Type: SOLIDS-SS BatchID: SOLIDS-SS-2414

QcType	SampleID:	Rounded Result	Raw Result	Units	Tare Weight	Wet Weight	Dry Weight	Analysis Date	Analyzed By	QC RPD	Rpd Limit
DUP	AC75378-001	84	83.56164	Percent	1.08	12.76	10.84	10/28/13	hossain	0.017	5
Sample	AC75355-056	91	90.67797	Percent	1.08	11.70	10.71	10/28/13	hossain		
Sample	AC75355-057	88	88.01724	Percent	1.09	12.69	11.30	10/28/13	hossain		
Sample	AC75356-001	93	92.50441	Percent 5	1.10	12.44	11.60	10/28/13	hossain		
Sample	AC75356-002	88	87.90909	Percent	1.09	12.09	10.76	10/28/13	hossain		
Sample	AC75356-003	96	95.61404	Percent	1.09	11.35	10.90	10/28/13	hossain		
Sample	AC75356-004	85	85.23622	Percent	1.10	11.26	9.76	10/28/13	hossain		
Sample	AC75356-005	84	84.01639	Percent	1.10	13.30	11.35	10/28/13	hossain		
Sample	AC75356-006	83	82.69231	Percent	1.10	13.06	10.99	10/28/13	hossain		
Sample	AC75356-007	96	95.76763	Percent	1.10	13.15	12.63	10/28/13	hossain		
Sample	AC75378-001	84	83.54756	Percent	1.09	12.76	10.84	10/28/13	hossain		
Sample	AC75378-002	80	79.89179	Percent	1.10	12.19	9.96	10/28/13	hossain		
Sample	AC75378-003	87	87.37420	Percent	1.10	12.03	10.65	10/28/13	hossain		
Sample	AC75387-001	84	83.97651	Percent	1.10	13.02	11.11	10/28/13	hossain		
Sample	AC75387-002	80	80.48387	Percent	1.11	13.51	11.09	10/28/13	hossain		
Sample	AC75388-001	87	87.28814	Percent	1.10	12.90	11.40	10/28/13	hossain		
Sample	AC75388-002	62	61.89459	Percent	1.10	15.14	9.79	10/28/13	hossain		
Sample	AC75388-003	79	78.82736	Percent	1.09	13.37	10.77	10/28/13	hossain		
Sample	AC75388-004	80	79.68750	Percent	1.09	12.61	10.27	10/28/13	hossain		
Sample	AC75388-005	82	82.31534	Percent	1.10	15.18	12.69	10/28/13	hossain		
Sample	AC75388-006	71	71.25658	Percent	1.09	14.38	10.56	10/28/13	hossain		

^{* -} Indicates Failed Rpd Criteria

ORGANICS VOLATILE REPORT

Sample Number: AC75387-001(T) Client Id: 9213-WC-01

Data File: 1M09012.D Analysis Date: 10/31/13 11:09

Date Rec/Extracted: 10/25/13-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol:5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: mg/L

Cas#	Compound	RL	Conc	Cas#	Compound	RL	Conc
75-35-4	1,1-Dichloroethene	0.0010	U	108-90-7	Chlorobenzene	0.0010	U
107-06-2	1,2-Dichloroethane	0.00050	U	67-66-3	Chloroform	0.0010	U
106-46-7	1,4-Dichlorobenzene	0.0010	U	127-18-4	Tetrachloroethene	0.0010	U
78-93-3	2-Butanone	0.0010	U	79-01-6	Trichloroethene	0.0010	U
71-43-2	Benzene	0.00050	0.0049	75-01-4	Vinyl Chloride	0.0010	U
56-23-5	Carbon Tetrachloride	0.0010	U				

Worksheet #: 282442

Total Target Concentration

0.0049

R - Retention Time Out

ColumnID: (^) Indicates results from 2nd column

J - Indicates an estimated value when a compound is detected at less than the

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

B - Indicates the analyte was journal in the brain as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

specified detection limit. d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

ORGANICS VOLATILE REPORT

Sample Number: AC75387-002(T)

Client Id: 9213-WC-03 Data File: 1M09013.D Analysis Date: 10/31/13 11:44

Date Rec/Extracted: 10/25/13-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml Final Vol: NA

Dilution: 1.00

Solids: 0

Units: mg/L

				1-131				
Cas#	Compound	RL	Conc	Cas #	Compound	RL	Conc	
75-35-4	1,1-Dichloroethene	0.0010	U	108-90-7	Chlorobenzene	0.0010	U	_
107-06-2	1,2-Dichloroethane	0.00050	U	67-66-3	Chloroform	0.0010	0.0014	
106-46-7	1,4-Dichlorobenzene	0.0010	υ	127-18-4	Tetrachloroethene	0.0010	0.0063	
78-93-3	2-Butanone	0.0010	υ	79-01-6	Trichloroethene	0.0010	0.0012	
71-43-2	Benzene	0,00050	0.00063	75-01-4	Vinyl Chloride	0.0010	U	
56-23-5	Carbon Tetrachloride	0.0010	U					

Worksheet #: 282442

Total Target Concentration

0.0095

R - Retention Time Out

ColumnID: (^) Indicates results from 2nd column

J - Indicates an estimated value when a compound is detected at less than the

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.

specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK

Client Id:

Data File: 1M09007.D Analysis Date: 10/31/13 09:43

Date Rec/Extracted:

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: mg/L

				· :::- —			
Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
75-35-4	1,1-Dichloroethene	0.0010	U	108-90-7	Chlorobenzene	0.0010	U
107-06-2	1,2-Dichloroethane	0.00050	U	67-66-3	Chloroform	0.0010	U
106-46-7	1,4-Dichlorobenzene	0.0010	U	127-18-4	Tetrachioroethene	0.0010	U
78-93-3	2-Butanone	0.0010	U	79-01-6	Trichloroethene	0.0010	U
71-43-2	Benzene	0.00050	U	75-01-4	Vinyl Chloride	0.0010	U
56-23-5	Carbon Tetrachloride	0.0010	U				
56-23-5	Carbon Tetrachloride	0.0010	U				

Worksheet #: 282442

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 usea

ORGANICS VOLATILE REPORT

Sample Number: EF-1V-175597(103013)

Client Id:

Data File: 1M09015.D Analysis Date: 10/31/13 12:29

Date Rec/Extracted:

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: mg/L

		• · · · · ·				
Compound	RL	Conc	Cas #	Compound	RL	Conc
1,1-Dichloroethene	0.0010	U	108-90-7	Chlorobenzene	0.0010	U
1,2-Dichloroethane	0.00050	U	67 -66-3	Chloroform	0.0010	U
1,4-Dichlorobenzene	0.0010	U	127-18-4	Tetrachloroethene	0.0010	U .
2-Butanone	0.0010	Ų	79-01-6	Trichloroethene	0.0010	- υ
Benzene	0.00050	Ų	75-01-4	Vinyl Chloride	0.0010	U
Carbon Tetrachloride	0.0010	U				
	Compound 1,1-Dichloroethene 1,2-Dichloroethane 1,4-Dichlorobenzene 2-Butanone Benzene Carbon Tetrachloride	1,1-Dichloroethene 0.0010 1,2-Dichloroethane 0.00050 1,4-Dichlorobenzene 0.0010 2-Butanone 0.0010 Benzene 0.00050	Compound RL Conc 1,1-Dichloroethene 0.0010 U 1,2-Dichloroethane 0.0050 U 1,4-Dichlorobenzene 0.0010 U 2-Butanone 0.0010 U Benzene 0.00050 U	1,1-Dichloroethene 0.0010 U 108-90-7 1,2-Dichloroethane 0.00050 U 67-66-3 1,4-Dichlorobenzene 0.0010 U 127-18-4 2-Butanone 0.0010 U 79-01-6 Benzene 0.00050 U 75-01-4	Compound RL Conc Cas # Compound 1,1-Dichloroethene 0.0010 U 108-90-7 Chlorobenzene 1,2-Dichloroethane 0.00050 U 67-66-3 Chloroform 1,4-Dichlorobenzene 0.0010 U 127-18-4 Tetrachloroethene 2-Butanone 0.0010 U 79-01-6 Trichloroethene Benzene 0.00050 U 75-01-4 Vinyl Chloride	Compound RL Conc Cas # Compound RL 1,1-Dichloroethene 0.0010 U 108-90-7 Chlorobenzene 0.0010 1,2-Dichloroethane 0.00050 U 67-66-3 Chloroform 0.0010 1,4-Dichlorobenzene 0.0010 U 127-18-4 Tetrachloroethene 0.0010 2-Butanone 0.0010 U 79-01-6 Trichloroethene 0.0010 Benzene 0.00050 U 75-01-4 Vinyl Chloride 0.0010

J - Indicates an estimated value when a compound is detected at less than the

⁽⁾R - Retention Time Out

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.

specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Recovery Data QC Batch: MBS31263

Data File Spike or Dup: 1M08840.D Non Spike(If applicable): 1M08813.D

Sample ID: AC75142-016(T:MS) AC75142-016(T)

Analysis Date 10/28/2013 6:24:00 PM 10/28/2013 10:51:00 A

Inst Blank(If applicable):

Method: 8260C Matrix: Aqueous QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	24.291	0	20	121	20	130
1,1-Dichloroethene	1	29.0504	0	20	145*	50	130
1,1-Dichloroethane	1	25.7982	0	20	129	50	130
Chloroform	1	26.4285	1.092	20	127	50	130
1,2-Dichloroethane	1	24.7794	0	20	124	50	130
2-Butanone	1	25.4042	0	20	127	20	130
Carbon Tetrachloride	· 1	28.3111	0	20	142*	50	130
Trichloroethene	1	30.5928	0	20	153*	50	130
Benzene	1	26.1017	0	20	131 *	50	130
Tetrachioroethene	1	26.18	0	20	131*	50	130
Toluene	1	22.6992	0	20	113	50	130
Chlorobenzene	1	23.2237	0	20	116	50	130
1,4-Dichlorobenzene	1	22.0053	0	20	110	50	130
1,2-Dichlorobenzene	1	23.6967	0	20	118	50	130
n-Propylbenzene	1	22.8098	0	20	114	50	130
sec-Butylbenzene	1	21.6115	0	20	108	50	130

Data File Spike or Dup: 1M08841.D Sample ID:

Analysis Date AC75142-016(T:MSD)

Non Spike(If applicable): 1M08813.D

AC75142-016(T)

10/28/2013 6:41:00 PM

10/28/2013 10:51:00 A

Method: 8260C

Inst Blank(If applicable):

Matrix: Aqueous

QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	27.3985	0	20	137*	20	130
1,1-Dichloroethene	1	25.3166	0	20.	127	50	130
1.1-Dichloroethane	1	22.4853	0	20	112	50	130
Chloroform	1	24.0937	1.092	20	115	50	130
1,2-Dichloroethane	1	22.0487	0	20	110	50	130
2-Butanone	1	21.1049	0	20	106	20	130
Carbon Tetrachloride	1	24.2676	0	20	121	50	130
Trichloroethene	1	27.2959	0	20	136*	50	130
Benzene	1	23.1287	0	20	116	50	130
Tetrachloroethene	1	23.3704	0	20	117	50	130
Toluene	1	21.5449	٥	20	108	50	130
Chlorobenzene	1	21.3631	0 .	20	107	50	130
1.4-Dichlorobenzene	1	21.103	0	20	106	50	130
1,2-Dichlorobenzene	1	22.7089	0	20	114	50	130
n-Propylbenzene	1	21.6962	0	20	108	50	130
sec-Butylbenzene	1	21.488	0	20	107	50	130

Form1 **ORGANICS SEMIVOLATILE REPORT**

Sample Number: AC75387-001(T)

Client Id: 9213-WC-01 Data File: 10M40882.D

Analysis Date: 10/31/13 18:14 Date Rec/Extracted: 10/25/13-10/31/13

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D

Matrix: Aqueous

Initial Vol: 250ml

Final Vol: 1ml

Dilution: 1

Solids: 0

Units: ma/L

			Ollito. I	II'9'L			
Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
95-95-4	2,4,5-Trichlorophenol	0.0080	U	87-68-3	Hexachlorobutadiene	0.0080	U
88-06-2	2,4,6-Trichlorophenol	0.0080	U	67-72-1	Hexachloroethane	0.0080	U
121-14-2	2,4-Dinitrotoluene	0.0080	U	98-95-3	Nitrobenzene	0.0080	U
95-48-7	2-Methylphenol	0.0020	U	87-86-5	Pentachlorophenoi	0.040	U
106-44-5	3&4-Methylphenoi	0.0020	0.0020	110-86-1	Pyridine	0.040	U ,
118-74-1	Hexachlorobenzene	0.0080	U				

^{0.002}

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 usea

ORGANICS SEMIVOLATILE REPORT

Sample Number: AC75387-002(T)

Client Id: 9213-WC-03 Data File: 9M53627.D

Analysis Date: 10/31/13 18:40

Date Rec/Extracted: 10/25/13-10/31/13 Column: DB-5MS 30M 0.250mm ID 0.25um film Method: EPA 8270D

Matrix: Aqueous

Initial Vol: 250ml

Final Vol: 1ml

Dilution: 1

Solids: 0

Units: ma/L

		• · · · · ·	9. —			
Compound	RL	Conc	Cas#	Compound	RL	Conc
2,4,5-Trichlorophenol	0.0080	υ	87-68-3	Hexachlorobutadiene	0.0080	Ü
2,4,6-Trichlorophenol	0.0080	υ	67-72-1	Hexachloroethane	0.0080	U
2,4-Dinitrotoluene	0.0080	υ	98-95-3	Nitrobenzene	0.0080	U
2-Methylphenol	0.0020	U	87-86-5	Pentachlorophenol	0.040	U
3&4-Methylphenol	0.0020	υ	110-86-1	Pyridine	0.040	υ
Hexachlorobenzene	0.0080	υ				
	Compound 2,4,5-Trichlorophenol 2,4,6-Trichlorophenol 2,4-Dinitrotoluene 2-Methylphenol 3&4-Methylphenol Hexachlorobenzene	2,4,5-Trichlorophenol 0.0080 2,4,6-Trichlorophenol 0.0080 2,4-Dinitrotoluene 0.0080 2-Methylphenol 0.0020 3&4-Methylphenol 0.0020	Compound RL Conc 2,4,5-Trichlorophenol 0.0080 U 2,4,6-Trichlorophenol 0.0080 U 2,4,6-Trichlorophenol 0.0080 U 2,4-Dinitrotoluene 0.0080 U 2-Methylphenol 0.0020 U 3&4-Methylphenol 0.0020 U	2,4,5-Trichlorophenol 0.0080 U 87-68-3 2,4,6-Trichlorophenol 0.0080 U 67-72-1 2,4-Dinitrotoluene 0.0080 U 98-95-3 2-Methylphenol 0.0020 U 87-86-5 3&4-Methylphenol 0.0020 U 110-86-1	Compound RL Conc Cas # Compound 2,4,5-Trichlorophenol 0.0080 U 87-68-3 Hexachlorobutadiene 2,4,6-Trichlorophenol 0.0080 U 67-72-1 Hexachloroethane 2,4-Dinitrotoluene 0.0080 U 98-95-3 Nitrobenzene 2-Methylphenol 0.0020 U 87-86-5 Pentachlorophenol 3&4-Methylphenol 0.0020 U 110-86-1 Pyridine	Compound RL Conc Cas # Compound RL 2,4,5-Trichlorophenol 0.0080 U 87-68-3 Hexachlorobutadiene 0.0080 2,4,6-Trichlorophenol 0.0080 U 67-72-1 Hexachloroethane 0.0080 2,4-Dinitrotoluene 0.0080 U 98-95-3 Nitrobenzene 0.0080 2-Methylphenol 0.0020 U 87-86-5 Pentachlorophenol 0.040 3&4-Methylphenol 0.0020 U 110-86-1 Pyridine 0.040

Worksheet #: 282475

Total Target Concentration

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 usea

ORGANICS SEMIVOLATILE REPORT

Sample Number: WMB29092

Client Id:

Data File: 10M40880.D Analysis Date: 10/31/13 17:29

Date Rec/Extracted: NA-10/31/13

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D

Matrix: Aqueous

Initial Vol: 1000ml

Final Vol: 1ml

Dilution: 1

Solids: 0

Units: mg/L

		0111601 1				
Compound	RL	Conc	Cas #	Compound	RL	Conc
2,4,5-Trichlorophenol	0.0020	U	87-68-3	Hexachlorobutadiene	0.0020	U
2,4,6-Trichlorophenol	0.0020	ប	67-72-1	Hexachloroethane	0.0020	U
2,4-Dinitrotoluene	0.0020	U	98-95-3	Nitrobenzene	0.0020	υ
2-Methylphenol	0.00050	U	87-86-5	Pentachlorophenol	0.010	U
3&4-Methylphenol	0.00050	U	110-86-1	Pyridine	0.010	U
Hexachlorobenzene	0.0020	U				
	2,4,5-Trichlorophenol 2,4,6-Trichlorophenol 2,4-Dinitrotoluene 2-Methylphenol 3&4-Methylphenol	2,4,5-Trichlorophenol 0.0020 2,4,6-Trichlorophenol 0.0020 2,4-Dinitrotoluene 0.0020 2-Methylphenol 0.00050 3&4-Methylphenol 0.00050	Compound RL Conc 2,4,5-Trichlorophenol 0.0020 U 2,4,6-Trichlorophenol 0.0020 U 2,4-Dinitrotoluene 0.0020 U 2-Methylphenol 0.00050 U 3&4-Methylphenol 0.00050 U	2,4,5-Trichlorophenol 0.0020 U 87-68-3 2,4,6-Trichlorophenol 0.0020 U 67-72-1 2,4-Dinitrotoluene 0.0020 U 98-95-3 2-Methylphenol 0.00050 U 87-86-5 3&4-Methylphenol 0.00050 U 110-86-1	Compound RL Conc Cas # Compound 2,4,5-Trichlorophenol 0.0020 U 87-68-3 Hexachlorobutadiene 2,4,6-Trichlorophenol 0.0020 U 67-72-1 Hexachloroethane 2,4-Dinitrotoluene 0.0020 U 98-95-3 Nitrobenzene 2-Methylphenol 0.00050 U 87-86-5 Pentachlorophenol 3&4-Methylphenol 0.00050 U 110-86-1 Pyridine	Compound RL Conc Cas # Compound Compound RL 2,4,5-Trichlorophenol 0.0020 U 87-68-3 Hexachlorobutadiene 0.0020 2,4,6-Trichlorophenol 0.0020 U 67-72-1 Hexachloroethane 0.0020 2,4-Dinitrotoluene 0.0020 U 98-95-3 Nitrobenzene 0.0020 2-Methylphenol 0.00050 U 87-86-5 Pentachlorophenol 0.010 3&4-Methylphenol 0.00050 U 110-86-1 Pyridine 0.010

U - Indicates the compound was analyzed but not detected.

ColumnID: (^) Indicates results from 2nd column

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 usea

ORGANICS SEMIVOLATILE REPORT

Sample Number: EF-1 V-175597(10/30)

Client Id:

Data File: 9M53626.D Analysis Date: 10/31/13 18:17

Date Rec/Extracted: NA-10/31/13

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D

Matrix: Aqueous

Initial Vol: 250ml

Final Vol: 1ml

Dilution: 1

Solids: 0

Units: ma/l

			Cilius. I	g, <u>-</u>			
Cas#	Compound	RL	Conc	Cas #	Compound	RL	Conc
95-95-4	2,4,5-Trichlorophenol	0.0080	U	87-68-3	Hexachlorobutadiene	0.0080	U
88-06-2	2,4,6-Trichlorophenol	0.0080	U	67-72-1	Hexachloroethane	0.0080	U
121-14-2	2,4-Dinitrotoluene	0.0080	U	98-95-3	Nitrobenzene	0.0080	U
95-48-7	2-Methylphenol	0.0020	Ū	87-86-5	Pentachlorophenol	0.040	U
106-44-5	3&4-Methylphenol	0.0020	U	110-86-1	Pyridine	0.040	U
118-74-1	Hexachlorobenzene	0.0080	U			•	

Worksheet #: 282475

ColumnID: (^) Indicates results from 2nd column

Worksheet #: 282475 Total Target Concentration 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 usea

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
10M40880	.D WMB29092	Aqueous	10/31/13 17:29	1		41	24*	103	108	111	108
9M53626.	D EF-1 V-17559	Aqueous	10/31/13 18:17	1		76	60	113	113	111	144
10M40882	D AC75387-001	(Aqueous	10/31/13 18:14	1		78	63	104	106	114	111
9M53627.	D AC75387-002	(Aqueous	10/31/13 18:40	1		73	58	101	101	98	131
10M40878	D WMB29092(M	l Aqueous	10/31/13 16:45	1		46	27	116	110	122	124
10M40883	D AC75387-001	(Aqueous	10/31/13 18:36	1		82	68	106	100	113	115
10M40884	.D AC75387-001	(Aqueous	10/31/13 18:59	1		77	63	101	97	112	115

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8270D

Aqueous Limits

Compound	Spike Amt	Limits
S1=2-Fluorophenol	100	29-113
S2=Phenol-d5	100	27-115
S3=Nitrobenzene-d5	50	51-139
S4=2-Fluorobiphenyl	50	53-129
S5=2,4,6-Tribromophenol	HAZ 1350	54-149
S6=Terphenyl-d14	TAZ 135	55-146

ORGANICS PESTICIDE REPORT

Sample Number: AC75387-001(T)

Client Id: 9213-WC-01

Data File: 5G49121.D

Analysis Date: 11/01/13 18:25

Date Rec/Extracted: 10/25/13-10/31/13

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081B

Matrix: Aqueous

Initial Vol: 100ml

Final Vol: 5ml

Dilution: 1

Solids: 0

Units: mg/L

₩ 								
Cas#	Compound	RL	Conc	Cas #	Compound	RL	Conc	
57-74-9	Chlordane	0.0010	U	1024-57-3	Heptachlor Epoxide	0.00010	U	
72-20-8	Endrin	0.00010	U	72-43-5	Methoxychlor	0.00010	U	
58-89-9	gamma-BHC	0.00010	U	8001-35-2	Toxaphene	0.0025	U	
76-44-8	Heptachlor	0.00010	U					

Worksheet #: 283037

Total Target Concentration

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.

B - 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 usea

ORGANICS PESTICIDE REPORT

Sample Number: AC75387-002(T)

Client Id: 9213-WC-03 Data File: 5G49122.D Analysis Date: 11/01/13 18:42

Date Rec/Extracted: 10/25/13-10/31/13

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081B Matrix: Aqueous

Initial Vol: 100ml Final Vol: 5ml

> Dilution: 1 Solids: 0

Units: ma/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc	
57-74-9	Chlordane	0.0010	U	1024-57-3	Heptachlor Epoxide	0.00010	U	-
72-20-8	Endrin	0.00010	U	72-43-5	Methoxychlor	0.00010	U	
58-89-9	gamma-BHC	0.00010	υ	8001-35-2	Toxaphene	0.0025	U	
76-44-8	Heptachlor	0.00010	υ					

ColumnID: (^) Indicates results from 2nd column

R - Retention Time Out

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.

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 usea

ORGANICS PESTICIDE REPORT

Sample Number: WMB29090

Client Id:

Data File: 5G49116.D

Analysis Date: 11/01/13 16:56

Date Rec/Extracted: NA-10/31/13 Column: DB-17/1701P 30M 0.32mm ID 0.25um film Method: EPA 8081B

Matrix: Aqueous

Initial Vol: 1000ml

Final Vol: 5ml

Dilution: 1

Solids: 0

Units: mg/L

								
Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc	
57-74-9	Chlordane	0.00010	U	1024-57-3	Heptachlor Epoxide	0.000010	U	
72-20-8	Endrin	0.000010	· U	72-43-5	Methoxychlor	0.000010	U	
58-89-9	gamma-BHC	0.000010	U	8001-35-2	Toxaphene	0.00025	U	
76-44-8	Heptachlor	0.000010	U					

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 usea

ORGANICS PESTICIDE REPORT

Sample Number: EF-1-V175597(10/30)

Client Id:

Data File: 5G49079.D Analysis Date: 10/31/13 21:01

Date Rec/Extracted: NA-10/31/13

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081B

Matrix: Aqueous

Initial Vol: 100ml

Final Vol: 5ml

Dilution: 1

Solids: 0

Units: mg/L

Cas#	Compound	RL	Conc	Cas #	Compound	RL	Conc	
57-74-9	Chlordane	0.0010	U	1024-57-3	Heptachlor Epoxide	0.00010	U	
72-20-8	Endrin	0.00010	U	72-43-5	Methoxychlor	0.00010	U	
58-89-9	gamma-BHC	0.00010	U	8001-35-2	Toxaphene	0.0025	Ü	
76-44-8	Heptachlor	0.00010	U					

R - Retention Time Out

ColumnID: (^) Indicates results from 2nd column

C

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.

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 usea

ORGANICS HERBICIDE REPORT

Sample Number: AC75387-001(T) Client Id: 9213-WC-01

Data File: 2G85492.D Analysis Date: 11/01/13 14:00

Date Rec/Extracted: 10/25/13-10/31/13

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8151A

Matrix: Aqueous

Initial Vol: 100ml

Final Vol: 10ml

Dilution: 1

Solids: 0

Units: mg/L

Cas # Compound	RL	Conc	Cas # Compound	RL	Conc
94-75-7 2,4-D	0.0050	U	93-72-1 Silvex	0.0050	U

Worksheet #: 282498

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 usea

ORGANICS HERBICIDE REPORT

Sample Number: AC75387-002(T)

Client Id: 9213-WC-03 Data File: 2G85493.D

Analysis Date: 11/01/13 14:20 Date Rec/Extracted: 10/25/13-10/31/13

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8151A

Matrix: Aqueous

Initial Vol: 100ml Final Vol: 10ml

Dilution: 1

Solids: 0

Units: mg/L

		Onits. I	119/12		
Cas # Compound	RL	Conc	Cas # Compound	RL	Conc
94-75-7 2,4-D	0.0050	U	93-72-1 Silvex	0.0050	U

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 usea

ORGANICS HERBICIDE REPORT

Sample Number: WMB29088

Client Id:

Data File: 2G85494.D Analysis Date: 11/01/13 14:52

Date Rec/Extracted: NA-10/31/13

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8151A

Matrix: Aqueous

Initial Vol: 1000ml

Final Vol: 10ml

Dilution: 1

Solids: 0

Units: ma/L

				0-			
Cas#	Compound	RL	Conc	Cas #	Compound	RL	Conc
94-75-7	2,4-D	0.00050	U	93-72-1	Silvex	0.00050	U

Worksheet #: 282498

ColumnID: (^) Indicates results from 2nd column

Worksheet #: 282498 Total Target Concentration 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 usea

ORGANICS HERBICIDE REPORT

Sample Number: EF-1-V-175597(10/30)

Client Id:

Data File: 2G85507.D Analysis Date: 11/01/13 19:15

Date Rec/Extracted: NA-10/31/13

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8151A

Matrix: Aqueous

Initial Vol: 100ml

Final Vol: 10ml

Dilution: 1 Solids: 0

Units: ma/L

Cas # Compound	RL	Conc	Cas #	Compound	RL	Conc
94-75-7 2,4-D	0.0050	U	93-72-1	Silvex	0.0050	U

Worksheet #: 282931

Total Target Concentration

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.

J - Indicates an estimated value when a compound is detected at less than the

FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 10/31/13

Data File: T15651A2

Lab Name:

Veritech

Prep Batch: 27364

Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Lab Code: Contract:

Instrument: PEICP2A

Nras No:

Sdg No:

Units: All units in ppm except Hg and icp-ms in ppb

Case No:

Project Number: 3102538

Analyte	ICB V-174666- 9	CCB-22	CCB-34	CCB-44	CCB-53	MB 27364 (1)- 12	EF-V-175597- 48	
Arsenic	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U	.10	
Barium	.25 U	.25 U	.25 U	.25 U	.25 U	.25 U	.25 U	
Beryllium	.012 U	.012 U	.012 U	.012 U	.012 U	.012 U	.012 U	
Cadmium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05U	
Chromium	.1 U	.1 U	.1 U	.1 U	.1 U	.10	.10	
Lead	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	
Nickel	.1 U	, .1 U	.1 U	.1 U	.1 U	.10	.1U	
Selenium	.1 U	.1 U	.1 U	.1 U	.1 U	.10	10	
Silver	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05U	

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: 10/31/13

Data File: H15651T

Lab Name:

Veritech

Prep Batch: 27364

Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Lab Code:

Instrument: HGCV1A

Contract:

Nras No:

Units: All units in ppm except Hg and icp-ms in ppb

Sdg No:

Project Number: 3102538

Case No:

i								
:	ICB-10	CCB-22	CCB-34	CCB-40	MB 27364 (1)-	EF-V-175597-		1
Analyte					`11	38		:
Mercury	.7 U	.7U						

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

FORM5/FORM7 SPIKE RECOVERY DATA

PREP BATCH: 27364

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

	LCSMR	Mat	rix: TCLP		Sample	ID: LC	SW MR 27364	4				
Analyte	Batchld	DF	Data Fil	Seq#:			Spk Conc:		Spk Adde	Recov	Qual Lo Lim	Hi Lim
Arsenic	27364	1	T15651A2	14			0.5042		0.500	101	80	120
Barium	27364	1	T15651A2	14			0.4995		.5	100	80	120
Cadmium	27364	1	T15651A2	14			0.4966		0.500	99	80	120
Chromium	27364	1	T15651A2	14			0.4972		0.500	99	80	120
_ead	27364	1	T15651A2	14			0.5094		.5	102	80	120
Mercury	27364	1	H15651T	13			9.9417		10	99	80	120
Vickel	27364	1	T15651A2	14			0.5038		0.500	101	80	120
Selenium	27364	1	T15651A2	14			0.5106		0.500	102	80	120
Silver	27364	1	T15651A2	14		· · · · · · · · · · · · · · · · · · ·	0.0974		0.100	97	80	120
TxtQcType:	LCS	Mat	rix: TCLP		Sample	elD: LC	SW 27364					
	Batchid	DF		Coo#:					Spk Adde	Recov	Qual Lo Lim	Hi Lin
Analyte Arsenic	27364	1	Data Fil T15651A2	Seq#: 13			Spk Conc: 0.5127		0.500	103	80	120
Barium	27364	1	T15651A2	13			0.4994		.5	100	80	120
Cadmium	27364	1	T15651A2	13			0.4974		0.500	99	80	120
Chromium	27364	1	T15651A2	13			0.5018		0.500	100	80	120
Lead	27364	1.	T15651A2	13			0.5153		.5	103	80	120
Mercury	27364	1	H15651T	12			10.1018		10	101	80	120
Vickel	27364	1	T15651A2	13			0.5076		0.500	102	80	120
	27364	1	T15651A2	13			0.5152		0.500	103	80	120
Selenium Silver	27364		T15651A2	13					0.100	99	80	120
SKAGI	21304	•	11000174	13			0.0986		0.100	33	00	.20
TxtQcType:		Mat		13	Sample	elD: AC	0.0986 075403-001		0.100	33		
TxtQcType:				Seq#:	Sample NS Data Fil			NS Conc:	Spk Adde	Recov		
TxtQcType: Analyte	MS	Mat	trix: TCLP				C75403-001	NS Conc:		- V 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
TxtQcType: Analyte Arsenic	MS Batchid	Mat DF	trix: TCLP Data Fil	Seq#:	NS Data Fil	Seq#	275403-001 Spk Conc:		Spk Adde	Recov	Qual Lo Lim	
TxtQcType: Analyte Arsenic Barium	MS Batchld 27364 27364	Mat DF 1	trix: TCLP Data Fil T15651A2	Seq#:	NS Data Fil T15651A2	Seq#	275403-001 Spk Conc: 0.4926	.1U	Spk Adde 0.5	Recov 99	Qual Lo Lim 50	
TxtQcType: Analyte Arsenic Barium Cadmium	MS Batchid 27364 27364 27364	Mat DF 1	Data Fil T15651A2 T15651A2	Seq#: 24 24	NS Data Fil T15651A2 T15651A2	Seq# 23 23	Spk Conc: 0.4926 0.5311	.1U .25U	Spk Adde 0.5 0.5	Recov 99 106	Qual Lo Lim 50 50	
TxtQcType: Analyte Arsenic Barium Cadmium Chromium	MS Batchld 27364 27364	Mat DF 1 1	Data Fil T15651A2 T15651A2 T15651A2	Seq#: 24 24 24	NS Data Fil T15651A2 T15651A2 T15651A2	Seq# 23 23 23	Spk Conc: 0.4926 0.5311 0.4898	.1U .25U .05U	Spk Adde 0.5 0.5 0.5	Recov 99 106 98	Qual Lo Lim 50 50 50	
TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead	MS Batchid 27364 27364 27364 27364 27364	Mat DF 1 1 1	Data Fil T15651A2 T15651A2 T15651A2 T15651A2	Seq#: 24 24 24 24	NS Data Fil T15651A2 T15651A2 T15651A2 T15651A2	Seq# 23 23 23 23	Spk Conc: 0.4926 0.5311 0.4898 0.4960	.1U .25U .05U .1U	Spk Adde 0.5 0.5 0.5 0.5	Recov 99 106 98 99	Qual Lo Lim 50 50 50 50	
TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Mercury	MS Batchld 27364 27364 27364 27364 27364 27364	Mat DF 1 1 1 1	Data Fil T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 T15651A2	Seq#: 24 24 24 24 24	NS Data Fil T15651A2 T15651A2 T15651A2 T15651A2 T15651A2	Seq# 23 23 23 23 23	Spk Conc: 0.4926 0.5311 0.4898 0.4960 0.4949	.1U .25U .05U .1U .05U	Spk Adde 0.5 0.5 0.5 0.5 0.5	Recov 99 106 98 99	Qual Lo Lim 50 50 50 50 50	
TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Mercury	MS Batchid 27364 27364 27364 27364 27364 27364 27364	DF 1 1 1 1 1 1 1	Data Fil T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 H15651T	Seq#: 24 24 24 24 24 18	NS Data Fil T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 H15651T T15651A2	Seq# 23 23 23 23 23	Spk Conc: 0.4926 0.5311 0.4898 0.4960 0.4949 10.6284 0.4943	.1U .25U .05U .1U .05U .70U	Spk Adde 0.5 0.5 0.5 0.5 0.5 0.5	Recov 99 106 98 99 99	Qual Lo Lim 50 50 50 50 50 50	
	MS Batchld 27364 27364 27364 27364 27364 27364	Mat DF 1 1 1 1 1 1 1 1	Data Fil T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 H15651T	Seq#: 24 24 24 24 24 28 24 24 24 24 24 24	NS Data Fil T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 H15651T	Seq# 23 23 23 23 27 27 27 27 27 27 27 27 27 27 27 27 27	Spk Conc: 0.4926 0.5311 0.4898 0.4960 0.4949 10.6284	.1U .25U .05U .1U .05U .70U	Spk Adde 0.5 0.5 0.5 0.5 0.5 10 0.5	Recov 99 106 98 99 99 106 99	Qual Lo Lim 50 50 50 50 50 50 50 50	Hị Lin
TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Mercury Nickel Selenium	MS Batchid 27364 27364 27364 27364 27364 27364 27364 27364 27364	Mat DF 1 1 1 1 1 1 1 1 1 1 1 1 1	trix: TCLP Data Fil T15651A2 T15651A2 T15651A2 T15651A2 H15651A T15651A2 T15651A2 T15651A2	Seq#: 24 24 24 24 24 24 24 24 24 28	NS Data Fil T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 H15651T T15651A2 T15651A2 T15651A2	Seq# 23 23 23 23 27 23 23 23 23 23 23 23	Spk Conc: 0.4926 0.5311 0.4898 0.4960 0.4949 10.6284 0.4943 0.4930	.1U .25U .05U .1U .05U .70U .1U	Spk Adde 0.5 0.5 0.5 0.5 10 0.5 0.5	Recov 99 106 98 99 99 106 99	Qual Lo Lim 50 50 50 50 50 50 50 50 50	
TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Mercury Nickel Selenium Silver	MS Batchid 27364 27364 27364 27364 27364 27364 27364 27364 27364	Mat DF 1 1 1 1 1 1 1 1 1 1 1 1	trix: TCLP Data Fil T15651A2 T15651A2 T15651A2 T15651A2 H15651T T15651A2 T15651A2 T15651A2	Seq#: 24 24 24 24 24 24 24 24 24 28	NS Data Fil T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 H15651T T15651A2 T15651A2 T15651A2	Seq# 23 23 23 23 23 17 23 23 23 20 EID: AC	Spk Conc: 0.4926 0.5311 0.4898 0.4960 0.4949 10.6284 0.4943 0.4930 0.0967	.1U .25U .05U .1U .05U .70U .1U	Spk Adde 0.5 0.5 0.5 0.5 10 0.5 0.5	Recov 99 106 98 99 99 106 99 99	Qual Lo Lim 50 50 50 50 50 50 50 50 50	Hi Lir
TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Mercury Nickel Selenium Silver TxtQcType: Analyte	MS BatchId 27364 27364 27364 27364 27364 27364 27364 27364 MS	Mat DF 1 1 1 1 1 1 1 Mat	trix: TCLP Data Fil T15651A2 T15651A2 T15651A2 T15651A2 H15651A1 T15651A2 T15651A2 T15651A2 T15651A2	Seq#: 24 24 24 24 18 24 24 24 24 24 24 24	NS Data Fil T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 H15651T T15651A2 T15651A2 T15651A2	Seq# 23 23 23 23 23 17 23 23 23 20 EID: AC	Spk Conc: 0.4926 0.5311 0.4898 0.4960 0.4949 10.6284 0.4943 0.4930 0.0967	.1U .25U .05U .1U .05U .70U .1U .1U	Spk Adde 0.5 0.5 0.5 0.5 0.5 0.5 0.5 10 0.5 0.5 0.10	Recov 99 106 98 99 99 106 99 99	Qual Lo Lim 50 50 50 50 50 50 50 50 50 50	Hi Lir
TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Mercury Nickel Selenium Silver TxtQcType: Analyte Arsenic	MS Batchid 27364 27364 27364 27364 27364 27364 27364 27364 MS Batchid	Mat DF 1 1 1 1 1 1 1 Mat DF	trix: TCLP Data Fil T15651A2 T15651A2 T15651A2 T15651A2 H15651T T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 T15651A2	Seq#: 24 24 24 24 18 24 24 24 25 Seq#:	NS Data Fil T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 H15651T T15651A2 T15651A2 T15651A2	Seq# 23 23 23 23 27 27 28 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	275403-001 Spk Conc: 0.4926 0.5311 0.4898 0.4960 0.4949 10.6284 0.4943 0.4930 0.0967 275409-001 Spk Conc:	.1U .25U .05U .1U .05U .70U .1U .1U 0.05U	Spk Adde 0.5 0.5 0.5 0.5 0.5 0.5 0.5 10 0.5 0.5 0.5 Spk Adde	Recov 99 106 98 99 106 99 99 97	Qual Lo Lim 50 50 50 50 50 50 50 50 50 50 Company of the company o	Hi Lir
TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Mercury Nickel Selenium Silver TxtQcType: Analyte Arsenic Barium	MS Batchid 27364 27364 27364 27364 27364 27364 27364 27364 MS Batchid 27364	Mat DF 1 1 1 1 1 1 Mat DF 1	trix: TCLP Data Fil T15651A2 T15651A2 T15651A2 T15651A2 H15651A2 T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 T15651A2	Seq#: 24 24 24 24 18 24 24 24 25 24 27 27 28 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	NS Data Fil T15651A2	Seq# 23 23 23 23 17 23 23 23 23 17 5 15 15	Spk Conc: 0.4926 0.5311 0.4898 0.4960 0.4949 10.6284 0.4943 0.4930 0.0967 C75409-001 Spk Conc: 0.5875	.1U .25U .05U .1U .05U .70U .1U .1U 0.05U NS Conc:	Spk Adde 0.5 0.5 0.5 0.5 0.5 0.5 0.5 10 0.5 0.5 0.10 Spk Adde 0.5	Recov 99 106 98 99 106 99 97 Recov 117	Qual Lo Lim 50 50 50 50 50 50 50 50 50 60 50 50 50 50	Hi Lir
TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Mercury Nickel Selenium Silver TxtQcType: Analyte Arsenic Barium Cadmium Cadmium	MS Batchid 27364 27364 27364 27364 27364 27364 27364 27364 MS Batchid 27364 27364 27364	Mat DF 1 1 1 1 1 1 1 DF Mat DF	trix: TCLP Data Fil T15651A2	Seq#: 24 24 24 24 18 24 24 24 17 17	NS Data Fil T15651A2	Seq# 23 23 23 23 17 23 23 23 25 EID: AC Seq# 15 15	Spk Conc: 0.4926 0.5311 0.4898 0.4960 0.4949 10.6284 0.4943 0.4930 0.0967 C75409-001 Spk Conc: 0.5875 0.7904 0.5492	.1U .25U .05U .1U .05U .70U .1U .1U 0.05U NS Conc: .1U .25U	Spk Adde 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	Recov 99 106 98 99 106 99 97 Recov 117 158 110	Qual Lo Lim 50 50 50 50 50 50 50 50 50 50 50 50 50	Hi Lir
TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Mercury Nickel Belenium Silver TxtQcType: Analyte Arsenic Barium Cadmium Chromium	MS Batchid 27364 27364 27364 27364 27364 27364 27364 27364 MS Batchid 27364 27364 27364 27364 27364	Mat DF 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	trix: TCLP Data Fil T15651A2	Seq#: 24 24 24 24 18 24 24 24 7 17 17	NS Data Fil T15651A2	Seq# 23 23 23 23 27 27 28 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	Spk Conc: 0.4926 0.5311 0.4898 0.4960 0.4949 10.6284 0.4943 0.4930 0.0967 C75409-001 Spk Conc: 0.5875 0.7904 0.5492 0.5137	.1U .25U .05U .1U .05U .70U .1U .1U 0.05U NS Conc: .1U .25U .05U	Spk Adde 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	Recov 99 106 98 99 106 99 97 Recov 117 158 110 103	Qual Lo Lim 50 50 50 50 50 50 50 50 50 50 50 50 50	Hi Lir
TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Mercury Nickel Selenium Silver TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead	MS Batchid 27364 27364 27364 27364 27364 27364 27364 27364 MS Batchid 27364 27364 27364 27364 27364 27364 27364 27364	Mat DF 1 1 1 1 1 1 1 1 1 1 1 1 1	trix: TCLP Data Fil T15651A2	Seq#: 24 24 24 24 18 24 24 24 7 17 17	NS Data Fil T15651A2	Seq# 23 23 23 23 27 23 23 23 23 23 23 23 25 25 26ID: AC Seq# 15 15 15	Spk Conc: 0.4926 0.5311 0.4898 0.4960 0.4949 10.6284 0.4943 0.4930 0.0967 C75409-001 Spk Conc: 0.5875 0.7904 0.5492 0.5137 0.9379	.1U .25U .05U .1U .05U .70U .1U .1U 0.05U NS Conc: .1U .25U .05U	Spk Adde 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	Recov 99 106 98 99 99 106 99 97 Recov 117 158 110 103 116	Qual Lo Lim 50 50 50 50 50 50 50 50 50 50 50 50 50	Hi Lir
TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Mercury Nickel Selenium Silver TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Mercury	MS Batchld 27364 27364 27364 27364 27364 27364 27364 27364 MS Batchld 27364 27364 27364 27364 27364 27364 27364 27364 27364 27364	Mat DF 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	trix: TCLP Data Fil T15651A2 T15651A2	Seq#: 24 24 24 24 18 24 24 24 27 17 17 17 17 16	NS Data Fil T15651A2	Seq# 23 23 23 23 27 23 23 23 23 23 23 23 25 25 26 D: AC	Spk Conc: 0.4926 0.5311 0.4898 0.4960 0.4949 10.6284 0.4943 0.4930 0.0967 C75409-001 Spk Conc: 0.5875 0.7904 0.5492 0.5137 0.9379 10.1833	.1U .25U .05U .1U .05U .70U .1U .1U 0.05U NS Conc: .1U .25U .05U .1U 0.3598 .70U	Spk Adde 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.10 Spk Adde 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	Recov 99 106 98 99 106 99 97 Recov 117 158 110 103 116 102	Qual Lo Lim 50 50 50 50 50 50 50 50 50 5	Hi Lir
TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Mercury Nickel Selenium	MS Batchid 27364 27364 27364 27364 27364 27364 27364 27364 MS Batchid 27364 27364 27364 27364 27364 27364 27364 27364	Mat DF 1 1 1 1 1 1 1 1 1 1 1 1 1	trix: TCLP Data Fil T15651A2	Seq#: 24 24 24 24 18 24 24 24 7 17 17	NS Data Fil T15651A2	Seq# 23 23 23 23 23 17 23 23 23 23 25 EID: AC Seq# 15 15 15 15 15 15 15	Spk Conc: 0.4926 0.5311 0.4898 0.4960 0.4949 10.6284 0.4943 0.4930 0.0967 C75409-001 Spk Conc: 0.5875 0.7904 0.5492 0.5137 0.9379	.1U .25U .05U .1U .05U .70U .1U .1U 0.05U NS Conc: .1U .25U .05U	Spk Adde 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	Recov 99 106 98 99 99 106 99 97 Recov 117 158 110 103 116	Qual Lo Lim 50 50 50 50 50 50 50 50 50 50 50 50 50	

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 27364

Instrument 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:	CLP	Sam	SampleID: LCSW MR 27364						
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit	
Arsenic	27364	T15651A2	14	T15651A2	13	0.5042	0.5127	1.7		20	
Barium	27364	T15651A2	14	T15651A2	13	0.4995	0.4994	.007		20	
Cadmium	27364	T15651A2	14	T15651A2	13	0.4966	0.4974	.17		20	
Chromium	27364	T15651A2	14	T15651A2	13	0.4972	0.5018	.17		20	
Lead	27364	T15651A2	14	T15651A2	13	0.5094	0.5153	1.2		20	
Mercury	27364	H15651T	13	H15651T	12	9.9417	10.1018	1.6		20	
Nickel	27364	T15651A2	14	T15651A2	13	0.5038	0.5076	.75		20	
Selenium	27364	T15651A2	14	T15651A2	13	0.5106	0.5152	.89		20	
Silver	27364	T15651A2	14	T15651A2	13	0.0974	0.0986	1,2		20	
TxtQcType:	MR	Matrix:	CLP	Sam	pleID: AC754	109-001					
Analyte	Batchid	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit	
Arsenic	27364	T15651A2	16	T15651A2	15	.10	.1U			20	
3arium	27364	T15651A2	16	T15651A2	15	0.2566	.25U			20	
Cadmium	27364	T15651A2	16	T15651A2	15	.05U	.05U			20	
Chromium	27364	T15651A2	16	T15651A2	15	.1U	.1U			20	
Lead	27364	T15651A2	16	T15651A2	15	0.3822	0.3598	6		20	
Mercury	27364	H15651T	15	H15651T	14	.70U	.70U			20	
Nickel	27364	T15651A2	16	T15651A2	15	.1U	.1U			20	
Selenium	27364	T15651A2	16	T15651A2	15	.10	.1U			20	
Silver	27364	T15651A2	16	T15651A2	15	0.05U	0.05U			20	
TxtQcType:	SD	Matrix:	CLP	Sam	pielD: AC754	109-001					
Analyte	Batchld	Data Fil	Seq#:	NS File	Seq# DF	Result 1	Result 2	%Diff		Limit	
Arsenic	27364	T15651A2	19	T15651A2	15 5	0.0007	0.0019			10	
Barium	27364	T15651A2	19	T15651A2	15 5	0.0505	0.2492	1.3		10	
Cadmium	27364	T15651A2	19	T15651A2	15 5	0.0040	0.0044	354	C	10	
Chromium	27364	T15651A2	19	T15651A2	15 5	0.0030	0.0037	307	С	10	
_ead	27364	T15651A2	19	T15651A2	15 5	0.0723	0.3598	0.48		10	
Vickel	27364	T15651A2	19	T15651A2	15 5	0.0070	0.0236	47	C.	10	
Selenium	27364	T15651A2	19	T15651A2	15 5	-0.0080	-0.0108			10	
Silver	27364	T15651A2	19	T15651A2	15 5	0.0030	0.0035	318	С	10	

ZERO HEADSPACE EXTRACTION- SAMPLE ENTRY

Hampton-Clarke/Veritech

*Ext. Type ** Initials o			Ac 75387-002	# 75397-00 AID	Ac 75359-00/33	AC75 338-00/ AS	Ac 75302-001	ac 75276-001	N 75236-602	Dc75236-001	Eq. 175597		Ac75048-001	Ac75042-00	V-174524	02538 ample ID
e TCLP=T s of person tak	1		-00)	7-8	1-00/	6-001	ool	100	5002	00	97		100-8	00	24	
P=T ASTI n taking cust			6	710	33	3	Pi	Ale	29	PH	48		24	Aq	A8	Vessel #
*Ext. Type TCLP=T ASTM=A SPLP=S ** Initials of person taking custody of extractions									·		26		20	20	20	Initial Pressure
S MEP=M										-	20		४	20	20	Final Pressure
Ż											nssa7 EAU-		4	- :: :::::::::::::::::::::::::::::::::	1-13 1-13	Ext. Fluid #
• •										25g	Some		-	MORS/	THODS	Wt./Vol. Of Sample
•											15 - S		(Elala	Start Date
				***							12:00				14/0	Start Time
											10.30		k		10/11/13	Finish Date
						-	-			-	\$100		-		11.25	Finish Time
***														i .		Final pH
											7				-4	Ext. Type*
											SW		K		ABM	Analyst (s)
		4								-	(A)	•	1	-2	P	Transfer To**
																Transfer To**
				3											. •	Comments

LEACHATE PREPARATION LOG (TCLP, SPLP)

Hampton-Clerke/Veritech

1

700														•		,					<u>\$</u> 7	Z						
*Ext. Type: TCLP = T (Methods 1311) LAMP=L (Methods 1311 / A SPLP = P (Method 1312) MEP=M (Method 1320) ZHE = Z (Method 1311/1312) The pH of the extraction fluid must be checked prior to use and must be within flmits specified above		100.1	112/16	100000	`ار` -ال	AC 75250-006 -	H 75142 020 774	AT 75142 019 8.03	At 75142,018 8.30	7	Ac 75427-006 6.42	, 7	AT 75427-004 6.89	7548-002 6	75387	7538	۱, `	75403-005		75403-003 -		` ' [-6 100-60h	Sample # (units)		Start Date:))	L
11) (2) (1/1312) ecked prior to use and		(3		1	1.60	1.61	1.69	1.72	2 1.68	1.72		1.80	1.58	1 1.97	1		7.67	(2.32	3 167	<u>,</u>	_	pH in	•		
LAMP=L MEP=M must be within fin			407	46.67	692	69.8	5.43	5.86	5.70	5,03	4.95	4.90	85.71	5.18	5-04	5,25	24.8	8.32	5.33	8.63	5.16	5.29	498	(units)	Final			
(Methods 1311 / (Method 1320) nits specified abov		1/301/	77	1		11 3495	<									EF1115597	١	١	[ef 1557]	¥	EE1 12887	١	EP45597	(number)	Ext.	Finish Date:		
(Methods 1311 / ANSI/NEMA C78.LL 1256-2003) (Method 1320) s specified above		20	2 5) - -		1000/20	₩			1509/36	~	,	1,	1000 26	~	1509131	<	300mL	1209126	300 m	7009/2L	30897 F	1509136	(g or mL)	of Sample		~	(TCL
.L 1256-2003)		•	+															_				L	01 Co :3/2	ــــا	Start		· ·	(TCLP SPLP)
	-		+												-)33 EX		Finish Ana		•	<i>ٺ</i>
		4	(•	† 		4	1															-	4	t	Analyst Ext.			
		Machania Con Con Con Control	AAD AA			Mcdads and	$ \Psi $			Metals and Osganics	<		HAZ	Mataks only.	9	Hetals and Organics	¥	Ti fured only	66 ignid	NA.	28% solve 72% liquid	-	Metal s and Organics			**SPLP Ext. Fluid #3 pH: 4/1/ (criteria: 4.20 ± 0.5)	16/	



Last Page of Report



175 ROUTE 48 WEST, UNIT D · FAIRFIELD, NJ 07004 2 MADISON ROAD, FAIRFIELD, NJ 07004 800-428-9992 · 973-244-9770 FAX: 973-244-9787

WWW.HCVLAB.COM

Project: 9213 Gowanus

Client PO: 0084240

Report To: Weston Solutions Inc.

205 Campus Drive Edison, NJ 08837

Attn: Dyna Krumich-Ogonowski

Received Date: 10/25/2013

Report Date:

Deliverables: NYDOH-CatA

Lab ID: AC75388

Lab Project No: 3102539

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 Veritech to all parties shall not exceed Veritech's total fee for analytical services rendered.

Robin Cousineau - Quality Assurance Director

OR

Stanley Gilewicz - Laboratory Director

(07071)

(68-00463)

(ELAP11408) (90124)

KY

CT (PH-0671)



(07071 and 07069)

NY (ELAP11408 and 11939)

(68-00463 and 68-04409)

(90124)ΚY

WV (353) MA (NJ386)

(PH-0671)

USACE

Report Of Analysis veritech laboratories

To: Weston Solutions Inc.

Attention: Project:

Dyna Krumich-Ogonows

Date Submitted:

10/25/2013

205 Campus Drive

Date Reported:

11/6/2013

E	dison	NJ	088	337	
Lab#:	AC75388-001	Sampl	eID:	9213-SB-02	

9213 Gowanus

	TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
AC7538	38-001	9213-SB-02		Date C	ollected 10/25/2013	
	% Solids SM2	2540G				_
		% Solids	1	Percent		87
	Mercury (Soil	I/Waste) 7471A				
		Mercury	1	mg/Kg	0.096	0.18
	Organochlorii	ne Pesticides 8081				
	0.ga00	Aldrin	1	mg/Kg	0.0057	ND
		Alpha-BHC	1	mg/Kg	0.0011	ND
		beta-BHC	1	mg/Kg	0.0011	ND
		Chlordane	1	mg/Kg	0.029	ND
		delta-BHC	1	mg/Kg	0.0057	ND
		Dieldrin	1	mg/Kg	0.0011	ND
		Endosulfan I	1	mg/Kg	0.0057	ND
		Endosulfan II	1	mg/Kg	0.0057	ND
		Endosulfan Sulfate	1	mg/Kg	0.0057	ND
		Endrin	. 1	mg/Kg	0.0057	ND
		Endrin Aldehyde	1	mg/Kg	0.0057	ND
		Endrin Ketone	1	mg/Kg	0.0057	ND
		gamma-BHC	1	mg/Kg	0.0011	ND
		Heptachlor	1	mg/Kg	0.0057	ND
		Heptachlor Epoxide	1	mg/Kg	0.0057	ND
		Methoxychlor	1	mg/Kg	0.0057	ND
		p,p'-DDD	1	mg/Kg	0.0029	ND
		p,p'-DDE	1	mg/Kg	0.0029	ND
		p,p'-DDT	1	mg/Kg	0.0029	ND
		Toxaphene	1	mg/Kg	0.029	ND
	PCB 8082					
		Aroclor (Total)	1	mg/Kg	0.029	ND
		Aroclor-1016	1	mg/Kg	0.029	ND
		Aroclor-1221	1	mg/Kg	0.029	ND
		Aroclor-1232	1	mg/Kg	0.029	ND
		Aroclor-1242	1	mg/Kg	0.029	ND
		Aroclor-1248	1	mg/Kg	0.029	ND
		Aroclor-1254	1	mg/Kg	0.029	ND
		Aroclor-1260	1	mg/Kg	0.029	ND
		Aroclor-1262	1	mg/Kg	0.029	ND
		Aroclor-1268	1	mg/Kg	0.029	ND

Lab#: AC75388-001	SampleID: 9213-SB-02				-
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Semivolatile C	Organics (no search) 8270				
	1,1'-Biphenyl	3	mg/Kg	0.23	ND
•	1,2,4,5-Tetrachlorobenzene	3	mg/Kg	0.23	ND
	2,3,4,6-Tetrachlorophenol	3	mg/Kg	0.23	ND
	2,4,5-Trichlorophenol	3	mg/Kg	0.23	ND
	2,4,6-Trichlorophenol	3	mg/Kg	0.23	ND
	2,4-Dichlorophenol	3	mg/Kg	0.057	ND
	2,4-Dimethylphenol	3	mg/Kg	0.057	ND
	2,4-Dinitrophenol	3	mg/Kg	1.1	ND
	2,4-Dinitrotoluene	3	mg/Kg	0.23	ND
	2,6-Dinitrotoluene	3	mg/Kg	0.23	ND
	2-Chloronaphthalene	3	mg/Kg	0.23	ND
	2-Chlorophenol	3	mg/Kg	0.23	ND
,	2-Methylnaphthalene	3	mg/Kg	0.23	6.6
	2-Methylphenol	3	mg/Kg	0.057	ND
	2-Nitroaniline	3	mg/Kg	0.23	ND
•	2-Nitrophenol	3	mg/Kg	0.23	ND
	3&4-Methylphenol	3	mg/Kg	0.057	ND
	3,3'-Dichlorobenzidine	3	mg/Kg	0.23	ND
	3-Nitroaniline	3	mg/Kg	0.23	ND
	4,6-Dinitro-2-methylphenol	3	mg/Kg	1.1	ND
	4-Bromophenyl-phenylether	3	mg/Kg	0.23	ND
	4-Chloro-3-methylphenol	3	mg/Kg	0.23	ND
	4-Chloroaniline	3	mg/Kg	0.11	ND
	4-Chlorophenyl-phenylether	3	mg/Kg	0.23	ND
	4-Nitroaniline	3	mg/Kg	0.23	ND
	4-Nitrophenol	3	mg/Kg	0.23	ND
•	Acenaphthene	3	mg/Kg	0.23	0.61
	Acenaphthylene	3	mg/Kg	0.23	ND
	Acetophenone	3	mg/Kg	0.23	ND
	Anthracene	3	mg/Kg	0.23	2.0
	Atrazine	3	mg/Kg	0.23	ND
	Benzaldehyde	3	mg/Kg	0.23	ND
	Benzo[a]anthracene	3	mg/Kg	0.23	5.5
	Benzo[a]pyrene	3	mg/Kg	0.23	3.9
	Benzo[b]fluoranthene	3	mg/Kg	0.23	5.8
	Benzo[g,h,i]perylene	3	mg/Kg	0.23	1.8
	Benzo[k]fluoranthene	3	mg/Kg	0.23	1.8
	bis(2-Chloroethoxy)methane	3	mg/Kg	0.23	ND
	bis(2-Chloroethyl)ether	3	mg/Kg	0.057	ND ·
	bis(2-Chloroisopropyl)ether	3	mg/Kg	0.23	ND
	bis(2-Ethylhexyl)phthalate	3	mg/Kg	0.23	ND
	Butylbenzylphthalate	3	mg/Kg	0.23	ND
· · · · · · · · · · · · · · · · · · ·	Caprolactam	3	mg/Kg	0.23	ND
	Carbazole	3	mg/Kg	0.23	0.96
	Chrysene	3	mg/Kg	0.23	5.1
	Dibenzo[a,h]anthracene	3	mg/Kg	0.23	0.76
	Dibenzofuran	3	mg/Kg	0.057	0.64
	Diethylphthalate	3	mg/Kg	0.23	ND
	Dimethylphthalate	3	mg/Kg	0.23	ND:
	Di-n-butylphthalate	3	mg/Kg	0.12	ND
		3			
	Di-n-octylphthalate		mg/Kg	0.23	ND o E
	Fluoranthene	3	mg/Kg	0.23	8.5 0.0e
	Fluorene	3	mg/Kg	0.23	0.96
	Hexachlorobenzene	3	mg/Kg	0.23	ND
	Hexachlorobutadiene	3	mg/Kg	0.23	ND

_ab#:	AC75388-001	SampleID: 9213-SB-02				
	TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
		Hexachlorocyclopentadiene	3	mg/Kg	0.23	ND
		Hexachloroethane	3	mg/Kg	0.23	ND
		Indeno[1,2,3-cd]pyrene	3	mg/Kg	0.23	2.1
		Isophorone	3	mg/Kg	0.23	ND
		Naphthalene	3	mg/Kg	0.057	8.3
		Nitrobenzene	3	mg/Kg	0.23	ND
		N-Nitroso-di-n-propylamine	3	mg/Kg	0.057	ND
		N-Nitrosodiphenylamine	3	mg/Kg	0.23	ND
		Pentachlorophenol	3	mg/Kg	1.1	ND
		Phenanthrene	3	mg/Kg	0.23	9.4
		Phenoi	3	mg/Kg	0.23	ND
		Pyrene	3	mg/Kg	0.23	9.5
	TAL Metals 6	010				
		Aluminum	1	mg/Kg	230	7300
		Arsenic	1	mg/Kg	4.6	ND
		Barium	1	mg/Kg	11	44
		Calcium	1	mg/Kg	1100	3000
		Chromium	1	mg/Kg	5.7	12
		Cobalt	1	mg/Kg	2.9	6.3
		Copper	1	mg/Kg	5.7	18
		Iron	1	mg/Kg	230	15000
		Lead	1	mg/Kg	5.7	39
		Magnesium	1 .	mg/Kg	570	3000
		Manganese	1	mg/Kg	11	240
		Nickel	1	mg/Kg	5.7	16
		Potassium	1	mg/Kg	570	1000
		Sodium	1	mg/Kg	290	ND
		Thallium	1	mg/Kg	1.7	ND
		Vanadium	1	mg/Kg	11	16
		Zinc	1	mg/Kg	11	41
	TAL Metals 6	020				
	•	Antimony	1	mg/Kg	0.23	ND
		Beryllium	1	mg/Kg	0.23	0.25
		Cadmium	1	mg/Kg	0.46	ND
		Selenium	1	mg/Kg	2.3	ND
		Silver	1	mg/Kg	0.23	ND

ab#: AC75388-002	SampleID: 9213-SB-03				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
C75388-002	9213-SB-03		Date C	ollected 10/25/2013	
% Solids SM2	540G	•			_'
	% Solids	1	Percent		62
Mercury (Soil	/Waste) 7471A				
	Mercury	1	mg/Kg	0.13	ND
Organochlori	ne Pesticides 8081		0 0		
Organicomor.	Aldrin	1	mg/Kg	0.0081	ND
	Alpha-BHC	1	mg/Kg	0.0001	ND
	beta-BHC	1	mg/Kg	0.0016	ND
	Chlordane	1	mg/Kg	0.040	ND
	delta-BHC	1	mg/Kg	0.0081	ND
	Dieldrin	1	mg/Kg	0.0016	ND
	Endosulfan I	1	mg/Kg	0.0081	ND
	Endosulfan II	1	mg/Kg	0.0081	ND
	Endosulfan Sulfate	1	mg/Kg	0.0081	ND
	Endrin	1	mg/Kg	0.0081	ND
	Endrin Aldehyde	1	mg/Kg	0.0081	ND
·	Endrin Ketone	1	mg/Kg	0.0081	ND
	gamma-BHC	1	mg/Kg	0.0016	ND
	Heptachlor	. 1	mg/Kg	0.0081	ND
	Heptachlor Epoxide	1	mg/Kg	0.0081	ND
	Methoxychlor	1	mg/Kg	0.0081	ND
	p,p'-DDD	1	mg/Kg	0.0040	ND
	p,p'-DDE	1	mg/Kg	0.0040	ND
	p,p'-DDT	· 1	mg/Kg	0.0040	ND
	Toxaphene	1	mg/Kg	0.040	ND
PCB 8082					
	Aroclor (Total)	1	mg/Kg	0.040	ND
	Aroclor-1016	. 1	. mg/Kg	0.040	ND
	Aroclor-1221	1	mg/Kg	0.040	ND
	Aroclor-1232	1	mg/Kg	0.040	ND
	Aroclor-1242	1	mg/Kg	0.040	ND
	Aroclor-1248	1	mg/Kg	0.040	ND
	Arocior-1254	1	mg/Kg	0.040	ND
	Arocior-1260	1	mg/Kg	0.040	ND
	Aroclor-1262	1	mg/Kg	0.040	ND
•	Aroclor-1268	1	mg/Kg	0.040	ND

Lab#: AC75388-002	SampleID: 9213-SB-03				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Semivolatile O	rganics (no search) 8270				
,	1,1'-Biphenyl	1	mg/Kg	0.054	ND
	1,2,4,5-Tetrachlorobenzene	1	mg/Kg	0.054	ND
	2,3,4,6-Tetrachlorophenol	· 1	mg/Kg	0.054	ND
	2,4,5-Trichlorophenol	1	mg/Kg	0.054	ND
	2,4,6-Trichlorophenol	1 .	mg/Kg	0.054	ND
	2,4-Dichlorophenol	1	mg/Kg	0.013	ND
	2,4-Dimethylphenol	1 .	mg/Kg	0.013	ND
	2,4-Dinitrophenol	1	mg/Kg	0.27	ND
	2,4-Dinitrotoluene	1	mg/Kg	0.054	ND
	2,6-Dinitrotoluene	1	mg/Kg	0.054	ND
	2-Chloronaphthalene	1	mg/Kg	0.054	ND
	2-Chlorophenol	1	mg/Kg	0.054	ND
	2-Methylnaphthalene	1	mg/Kg	0.054	ND
	2-Methylphenol	1	mg/Kg	0.013	ND
	2-Nitroaniline	1	mg/Kg	0.054	ND
	2-Nitrophenol	1	mg/Kg	0.054	ND
	3&4-Methylphenol	1	mg/Kg	0.013	ND
	3,3'-Dichlorobenzidine	1	mg/Kg	0.054	ND
	3-Nitroaniline	1	mg/Kg	0.054	ND
	4,6-Dinitro-2-methylphenol	1	mg/Kg	0.27	ND
	4-Bromophenyl-phenylether	1	mg/Kg	0.054	ND
	4-Chloro-3-methylphenol	1	mg/Kg	0.054	ND
	4-Chloroaniline	4	mg/Kg	0.025	ND
	4-Chlorophenyl-phenylether	1	mg/Kg	0.054	ND
	4-Nitroaniline	.'	mg/Kg	0.054	ND
		1	mg/Kg	0.054	ND
	4-Nitrophenol	1	mg/Kg	0.054	ND
	Acenaphthene	.1		0.054	ND
	Acenaphthylene	· I	mg/Kg		ND
	Acetophenone	1	mg/Kg	0.054 0.054	ND
	Anthracene	1	mg/Kg	0.054	
	Atrazine	1	mg/Kg		ND
	Benzaldehyde	1	mg/Kg	0.054	ND
	Benzo[a]anthracene	. 1	mg/Kg	0.054	ND
	Benzo[a]pyrene	1	mg/Kg	0.054	ND
	Benzo[b]fluoranthene	1	mg/Kg	0.054	ND
	Benzo[g,h,i]perylene	1	mg/Kg	0.054	ND
	Benzo[k]fluoranthene	1	mg/Kg	0.054	ND
	bis(2-Chloroethoxy)methane	1	mg/Kg	0.054	ND
	bis(2-Chloroethyl)ether	1	mg/Kg	0.013	ND
	bis(2-Chloroisopropyl)ether	1	mg/Kg	0.054	ND
	bis(2-Ethylhexyl)phthalate	1	mg/Kg	0.054	ND
	Butylbenzylphthalate	. 1	mg/Kg	0.054	ND
	Caprolactam	1	mg/Kg	0.054	ND
	Carbazole	1	mg/Kg	0.054	ND
	Chrysene	1	mg/Kg	0.054	ND -
	Dibenzo[a,h]anthracene	1	mg/Kg	0.054	ND
	Dibenzofuran	1	mg/Kg	0.013	ND
	Diethylphthalate	1	mg/Kg	0.054	ND
	Dimethylphthalate	1	mg/Kg	0.054	ND
	Di-n-butylphthalate	1	mg/Kg	0.027	ND
	Di-n-octylphthalate	1	mg/Kg	0.054	ND
	Fluoranthene	1	mg/Kg	0.054	ND
	Fluorene	1	mg/Kg	0.054	ND
	Hexachlorobenzene	1	mg/Kg	0.054	ND
	Hexachlorobutadiene		mg/Kg	0.054	ND

ab#: AC75388-002	SampleID: 9213-SB-03				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
	Hexachlorocyclopentadiene	1	mg/Kg	0.054	ND
	Hexachloroethane	1	mg/Kg	0.054	ND
	Indeno[1,2,3-cd]pyrene	1	mg/Kg	0.054	ND ND
	Isophorone	1	mg/Kg	0.054	ND
	Naphthalene	1	mg/Kg	0.013	ND
	Nitrobenzene	1	mg/Kg	0.054	ND
	N-Nitroso-di-n-propylamine	· 1	mg/Kg	0.013	ND
	N-Nitrosodiphenylamine	1	mg/Kg	0.054	ND
	Pentachlorophenol	1	mg/Kg	0.27	ND
	Phenanthrene	1	mg/Kg	0.054	ND
	Phenol	1	mg/Kg	0.054	ND
	Pyrene	1	mg/Kg	0.054	0.057
TAL Metals 6	010				
	Aluminum	1	mg/Kg	320	12000
	Arsenic	1	mg/Kg	6.5	ND
	Barium	· 1	mg/Kg	16	47
	Calcium	1	mg/Kg	1600	4700
	Chromium	. 1	mg/Kg	8.1	22
	Cobalt	1	mg/Kg	4.0	9.0
	Copper	1	mg/Kg	8.1	21
	Iron	, 1	mg/Kg	320	24000
	Lead	1	mg/Kg	8.1	27
	Magnesium	1	mg/Kg	810	5000
	Manganese	1	mg/Kg	16	380
	Nickel	1	mg/Kg	8.1	23
	Potassium	1	mg/Kg	810	2400
	Sodium	1	mg/Kg	400	800
	Thailium	1	mg/Kg	2.4	ND
	Vanadium ·	1	mg/Kg	16	31
	Zinc	1	mg/Kg	16	62
TAL Metals 6	020				
	Antimony	1	mg/Kg	0.32	ND
	Beryllium	1 .	mg/Kg	0.32	0.49
	Cadmium	1	mg/Kg	0.65	ND
	Selenium	1	mg/Kg	3.2	ND
	Silver	1	mg/Kg	0.32	ND

_ab#: AC75388-003	SampleID: 9213-SB-05				
TestGroup	Analyte	. DF	Units	MDL/PQL/RL	Result
AC75388-003	9213-SB-05	· · · · · · · · · · · · · · · · · · ·	Date C	ollected 10/25/2013	
% Solids SM2	540G				
	% Solids	1	Percent		79
Mercury (Soil	/Waste) 7471A				
	Mercury	1	mg/Kg	0.11	ND
Organochlori	ne Pesticides 8081				
Organocinori	Aldrin	1	mg/Kg	0.0063	ND
	Alpha-BHC	1	mg/Kg	0.0013	ND
	beta-BHC	1	mg/Kg	0.0013	ND
	Chlordane	1 .	mg/Kg	0.032	ND
	delta-BHC	1	mg/Kg	0.0063	ND
	Dieldrin	1	mg/Kg	0.0013	ND
	Endosulfan I	1	mg/Kg	0.0063	ND
	Endosulfan II	1	mg/Kg	0.0063	ND
	Endosulfan Sulfate	1	mg/Kg	0.0063	ND
	Endrin	1	mg/Kg	0.0063	ND
	Endrin Aldehyde	· 1	mg/Kg	0.0063	. ND
	Endrin Ketone	1	mg/Kg	0.0063	ND
	gamma-BHC	1	mg/Kg	0.0013	ND
4	Heptachlor	1	mg/Kg	0.0063	ND
	Heptachlor Epoxide	1	mg/Kg	0.0063	ND
	Methoxychlor	1	mg/Kg	0.0063	ND
	p,p'-DDD	1	mg/Kg	0.0032	ND
	p,p'-DDE	1	mg/Kg .	0.0032	ND
	p,p'-DDT	1	mg/Kg	0.0032	ND
	Toxaphene	1	mg/Kg	0.032	ND
PCB 8082					
	Arocior (Total)	· 1	mg/Kg	0.032	ND
	Aroclor-1016	1	mg/Kg	0.032	ND
	Aroclor-1221	1	mg/Kg	0.032	ND
	Aroclor-1232	1	mg/Kg	0.032	ND
	Aroclor-1242	1	mg/Kg	0.032	ND
	Aroclor-1248	1	mg/Kg	0.032	ND
	Aroclor-1254	1	mg/Kg	0.032	ND
	Aroclor-1260	1	mg/Kg	0.032	ND
	Aroclor-1262	1	mg/Kg	0.032	ND .
	Aroclor-1268	1	mg/Kg	0.032	ND

Lab#: AC75388-003	SampleID: 9213-SB-05				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Semivolatile Or	ganics (no search) 8270				
	1,1'-Biphenyl	1 .	mg/Kg	0.042	ND
	1,2,4,5-Tetrachlorobenzene	1	mg/Kg	0.042	ND
	2,3,4,6-Tetrachlorophenol	1	mg/Kg	0.042	ND
	2,4,5-Trichlorophenol	1	mg/Kg	0.042	ND
	2,4,6-Trichlorophenol	1	mg/Kg	0.042	ND
	2,4-Dichlorophenol	1	mg/Kg	0.011	ND
	2,4-Dimethylphenol	1	mg/Kg	0.011	ND
	2,4-Dinitrophenol	1	mg/Kg	0.21	ND
	2,4-Dinitrotoluene	1	mg/Kg	0.042	ND
	2,6-Dinitrotoluene	1	mg/Kg	0.042	ND
	2-Chloronaphthalene	1	mg/Kg	0.042	ND
	2-Chlorophenol	1	mg/Kg	0.042	ND
	2-Methylnaphthalene	1	mg/Kg	0.042	ND
	2-Methylphenol	1	mg/Kg	0.011	ND
	2-Nitroaniline	1	mg/Kg	0.042	ND
	2-Nitrophenol	1	mg/Kg	0.042	ND
	3&4-Methylphenol	1	mg/Kg	0.042	ND
		·			
	3,3'-Dichlorobenzidine	1	mg/Kg	0.042	ND
•	3-Nitroaniline	1	mg/Kg	0.042	ND
	4,6-Dinitro-2-methylphenol	1	mg/Kg	0.21	ND
	4-Bromophenyl-phenylether	1	mg/Kg	0.042	ND
	4-Chloro-3-methylphenol	1	mg/Kg	0.042	ND
	4-Chloroaniline	1	mg/Kg	0.020	ND
	4-Chlorophenyl-phenylether	1	mg/Kg	0.042	ND
	4-Nitroaniline	1	mg/Kg	0.042	ND
	4-Nitrophenol	1	mg/Kg	0.042	ND
	Acenaphthene	1	mg/Kg	0.042	ND
	Acenaphthylene	1	mg/Kg	0.042	ND
	Acetophenone	1	mg/Kg	0.042	ND
	Anthracene	. 1	mg/Kg	0.042	ND
	Atrazine	1	mg/Kg	0.042	ND
	Benzaldehyde	1	mg/Kg	0.042	ND
	Benzo[a]anthracene	1	mg/Kg	0.042	ND
•	Benzo[a]pyrene	1	mg/Kg	0.042	ND
	Benzo[b]fluoranthene	1	mg/Kg	0.042	ND
	Benzo[g,h,i]perylene	1	mg/Kg	0.042	ND
	Benzo[k]fluoranthene	1	mg/Kg	0.042	ND
	bis(2-Chloroethoxy)methane	1	mg/Kg	0.042	ND
	bis(2-Chloroethyl)ether	1	mg/Kg	0.011	ND
	bis(2-Chloroisopropyl)ether	1	mg/Kg	0.042	ND
	bis(2-Ethylhexyl)phthalate	1	mg/Kg	0.042	ND
	Butylbenzylphthalate	1	mg/Kg	0.042	ND
	Caprolactam	1	mg/Kg	0.042	ND
	Carbazole	1	mg/Kg	0.042	ND
	Chrysene	1	mg/Kg	0.042	ND
	Dibenzo[a,h]anthracene	1	mg/Kg	0.042	ND
	Dibenzofuran	1		0.011	
	Diethylphthalate	1	mg/Kg	0.042	ND ND
	* •	-	mg/Kg		ND ND
	Dimethylphthalate	1	mg/Kg	0.042	ND
	Di-n-butylphthalate	1	mg/Kg	0.021	ND
	Di-n-octylphthalate	1	mg/Kg	0.042	ND
	Fluoranthene	1	mg/Kg	0.042	ND
	Fluorene	1	mg/Kg	0.042	ND
	Hexachlorobenzene	1	mg/Kg	0.042	ND
	Hexachlorobutadiene	1	mg/Kg	0.042	ND

_ab#: AC75388-003	SampleID: 9213-SB-05				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
	Hexachlorocyclopentadiene	1	mg/Kg	0.042	ND
	Hexachloroethane	1	mg/Kg	0.042	ND
	Indeno[1,2,3-cd]pyrene	1	mg/Kg	0.042	ND
	Isophorone	1	mg/Kg	0.042	ND
	Naphthalene	1	mg/Kg	0.011	ND
	Nitrobenzene	1	mg/Kg	0.042	ND
	N-Nitroso-di-n-propylamine	1	mg/Kg	0.011	ND
	N-Nitrosodiphenylamine	1	mg/Kg	0.042	ND
	Pentachlorophenol	1	mg/Kg	0.21	ND -
	Phenanthrene	1	mg/Kg	0.042	ND
	Phenol	1	mg/Kg	0.042	ND
	Pyrene	1	mg/Kg	0.042	ND
TAL Metals 60	010				
	Aluminum	1	mg/Kg	250	7600
	Arsenic	1	mg/Kg	5.1	ND
	Barium	1	mg/Kg	13	35
	Calcium	1	mg/Kg	1300	1300
	Chromium	1	mg/Kg	6.3	13
	Cobalt	1	mg/Kg	3.2	6.4
	Copper	1	mg/Kg	6.3	15
	Iron	1	mg/Kg	250	14000
	Lead	1	mg/Kg	6.3	19
	Magnesium	1	mg/Kg	630	2900
	Manganese	1	mg/Kg	13	310
	Nickel	1	mg/Kg	6.3	16
	Potassium	1	mg/Kg	630	970
	Sodium	1	mg/Kg	320	ND
	Thallium	1	mg/Kg	1.9	ND
	Vanadium	1	mg/Kg	13	20
	Zinc	1	mg/Kg	13	43
TAL Metals 6					
	Antimony	1	mg/Kg	0.25	ND
	Beryllium	1	mg/Kg	0.25	0.28
	Cadmium	. 1	mg/Kg	0.51	ND
	Selenium	1	mg/Kg	2.5	ND
	Silver	1	mg/Kg	0.25	ND

Veritech-Project: 3102539

Lab#:	AC75388-004	SampleID: 9213-SB-06				
	TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
AC7538	38-004	9213-SB-06		Date C	ollected 10/25/2013	Ī
	% Solids SM2	540G		·		
		% Solids	1	Percent		80
	Mercury (Soil/	Waste) 7471A				
		Mercury	1	mg/Kg	0.10	0.13
	Organochlorin	ne Pesticides 8081				
	Organocinomi	Aldrin	1	mg/Kg	0.0063	ND
		Alpha-BHC	1	mg/Kg	0.0013	ND
		beta-BHC	1	mg/Kg	0.0013	ND
		Chlordane	1	mg/Kg	0.031	ND
		delta-BHC	1	mg/Kg	0.0063	ND
		Dieldrin	1	mg/Kg	0.0013	ND
		Endosulfan I	1	mg/Kg	0.0063	ND
		Endosulfan II	1	mg/Kg	0.0063	ND
		Endosulfan Sulfate	1	mg/Kg	0.0063	ND
		Endrin	1	mg/Kg	0.0063	ND
		Endrin Aldehyde	1	mg/Kg	0.0063	ND
		Endrin Ketone	1	mg/Kg	0.0063	ND
		gamma-BHC	1	mg/Kg	0.0013	ND
		Heptachlor	1	mg/Kg	0.0063	ND
		Heptachlor Epoxide	1	mg/Kg	0.0063	ND
		Methoxychlor	1	mg/Kg	0.0063	ND
		p,p'-DDD	1	mg/Kg	0.0031	ND
		p,p'-DDE	1	mg/Kg	0.0031	ND
		p,p'-DDT	1	mg/Kg	0.0031	ND
		Toxaphene	1	mg/Kg	0.031	ND
	PCB 8082					
		Aroclor (Total)	1	mg/Kg	0.031	ND
		Aroclor-1016	1	mg/Kg	0.031	ND
		Aroclor-1221	1	mg/Kg	0.031	ND
		Aroclor-1232	1	mg/Kg	0.031	ND
		Aroclor-1242	1	mg/Kg	0.031	ND
		Aroclor-1248	1	mg/Kg	0.031	ND
		Aroclor-1254	1	mg/Kg	0.031	ND
		Aroclor-1260	1	mg/Kg	0.031	ND
		Aroclor-1262	1	mg/Kg	0.031	ND
		Aroclor-1268	1	mg/Kg	0.031	ND

hb#: AC75388-004	SampleID: 9213-SB-06				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resu
Semivolatile Or	ganics (no search) 8270				
	1,1'-Biphenyl	1	mg/Kg	0.042	ND
	1,2,4,5-Tetrachlorobenzene	1	mg/Kg	0.042	ND
	2,3,4,6-Tetrachlorophenol	1	mg/Kg	0.042	ND
	2,4,5-Trichlorophenol	, 1	mg/Kg	0.042	ND
	2,4,6-Trichlorophenol	1	mg/Kg	0.042	ND
	2,4-Dichlorophenol	1	mg/Kg	0.010	ND
	2,4-Dimethylphenol	1	mg/Kg	0.010	ND
	2,4-Dinitrophenol	1	mg/Kg	0.21	ND
	2,4-Dinitrotoluene	1	mg/Kg	0.042	ND
	2,6-Dinitrotoluene	1	mg/Kg	0.042	ND
	2-Chloronaphthalene	1	mg/Kg	0.042	ND
	2-Chlorophenol	1	mg/Kg	0.042	ND
	2-Methylnaphthalene	1	mg/Kg	0.042	ND
	2-Methylphenol	1	mg/Kg	0.010	ND
	2-Nitroaniline	1	mg/Kg	0.042	ND
	2-Nitrophenol	1	mg/Kg	0.042	ND
	3&4-Methylphenol	1	mg/Kg	0.010	ND
	3,3'-Dichlorobenzidine	1	mg/Kg	0.042	ND
	3-Nitroaniline	1	mg/Kg	0.042	ND
	4,6-Dinitro-2-methylphenol	1	mg/Kg	0.21	ND
	• •	1	mg/Kg	0.042	ND
	4-Bromophenyi-phenylether	1	mg/Kg	0.042	ND
	4-Chloro-3-methylphenol 4-Chloroaniline	1	mg/Kg	0.020	ND
				0.042	ND
	4-Chlorophenyl-phenylether	1	mg/Kg		
	4-Nitroaniline	1	mg/Kg	0.042	ND
	4-Nitrophenol	1	mg/Kg	0.042	ND
	Acenaphthene	1	mg/Kg	0.042	ND
	Acenaphthylene	1	mg/Kg	0.042	ND
	Acetophenone	1	mg/Kg	0.042	ND
	Anthracene	1	mg/Kg	0.042	ND
	Atrazine	1	mg/Kg	0.042	ND
	Benzaldehyde	1	mg/Kg	0.042	ND
	Benzo[a]anthracene	1	mg/Kg	0.042	0.066
	Benzo[a]pyrene	1	mg/Kg	0.042	0.053
	Benzo[b]fluoranthene	1	mg/Kg	0.042	0.086
	Benzo[g,h,i]perylene	1	mg/Kg	0.042	0.042
	Benzo[k]fluoranthene	1	mg/Kg	0.042	ND
	bis(2-Chloroethoxy)methane	1	mg/Kg	0.042	ND
	bis(2-Chloroethyl)ether	1	mg/Kg	0.010	ND
	bis(2-Chloroisopropyl)ether	1	mg/Kg	0.042	ND
	bis(2-Ethylhexyl)phthalate	1	mg/Kg	0.042	0.049
	Butylbenzylphthalate	1	mg/Kg	0.042	0.25
	Caprolactam	1	mg/Kg	0.042	ND
	Carbazole	1	mg/Kg	0.042	ND
	Chrysene	1	mg/Kg	0.042	0.070
	Dibenzo[a,h]anthracene	1	mg/Kg	0.042	ND
	Dibenzofuran	1	mg/Kg	0.010	ND
	Diethylphthalate	1	mg/Kg	0.042	ND
	Dimethylphthalate	1	mg/Kg	0.042	ND
	Di-n-butylphthalate	1	mg/Kg	0.021	0.029
	Di-n-octylphthalate	1	mg/Kg	0.042	ND
٠	Fluoranthene	1	mg/Kg	0.042	0.12
	Fluorene	1	mg/Kg	0.042	ND
	Hexachlorobenzene	1	mg/Kg	0.042	ND
			11129/1129	VIVIM	

ab#: AC75388	-004 SampleID: 9213-SB-06				
TestGr	oup Analyte	DF	Units	MDL/PQL/RL	Result
	Hexachlorocyclopentadiene	1	mg/Kg	0.042	ND
	Hexachloroethane	1	mg/Kg	0.042	ND
	Indeno[1,2,3-cd]pyrene	1	mg/Kg	0.042	ND
	Isophorone	1	mg/Kg	0.042	ND
	Naphthalene	1	mg/Kg	0.010	ND
	Nitrobenzene	1	mg/Kg	0.042	ND
	N-Nitroso-di-n-propylamine	1	mg/Kg	0.010	ND
	N-Nitrosodiphenylamine	1	mg/Kg	0.042	ND
	Pentachlorophenol	1	mg/Kg	0.21	ND
	Phenanthrene	1	mg/Kg	0.042	0.10
	Phenol	1	mg/Kg	0.042	ND
	Pyrene	1	mg/Kg	0.042	0.16
TAL M	etals 6010				
	Aluminum	1	mg/Kg	250	7700
	Arsenic	1	mg/Kg	5.0	ND
	Barium	1	mg/Kg	12	40
	Calcium	1	mg/Kg	1200	2400
	Chromium	1	mg/Kg	6.2	15
	Cobalt	1	mg/Kg	3.1	6.9
	Copper	1	mg/Kg	6.2	29
	Iron	1	mg/Kg	250	14000
	Lead	1	mg/Kg	6.2	47
	Magnesium	1	mg/Kg	620	2900
	Manganese	1	mg/Kg	12	200
	Nickel	1	mg/Kg	6.2	18
	Potassium	ì	mg/Kg	620	1000
	Sodium	1	mg/Kg	310	ND
	Thallium	1	mg/Kg	1.9	ND
	Vanadium	1	mg/Kg	12	23
	Zinc	1	mg/Kg	12	52
TAL M	etals 6020				
	Antimony	1	mg/Kg	0.25	ND
	Beryllium	1	mg/Kg	0.25	0.32
	Cadmium	. 1	mg/Kg	0.50	ND
	Selenium	1	mg/Kg	2.5	ND
	Silver	1	mg/Kg	0.25	ND

Lab#: AC75388-005	SampleID: 9213-SB-07				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
AC75388-005	9213-SB-07		Date C	ollected 10/25/2013	
% Solids SM2	2540G		<u> </u>		
	% Solids	1	Percent		82
Mercury (Soil	I/Waste) 7471A				
mercury (con	Mercury	1	mg/Kg	0.10	0.21
Organoshlari	ne Pesticides 8081	·			
Organochion	Aldrin	1	mg/Kg	0.0061	ND
	Alpha-BHC	1	mg/Kg	0.0012	ND
	beta-BHC	1	mg/Kg	0.0012	ND
	Chlordane	1	mg/Kg	0.030	ND
	delta-BHC	1	mg/Kg	0.0061	ND
	Dieldrin	1	mg/Kg	0.0012	ND
•	Endosulfan I	1	mg/Kg	0.0061	ND
	Endosulfan II	1	mg/Kg	0.0061	ND
	Endosulfan Sulfate	1	mg/Kg	0.0061	ND
	Endrin	1	mg/Kg	0.0061	ND
	Endrin Aldehyde	1	mg/Kg	0.0061	ND
	Endrin Ketone	1	mg/Kg	0.0061	ND
	gamma-BHC	1	mg/Kg	0.0012	ND
	Heptachlor	1	mg/Kg	0.0061	ND
	Heptachlor Epoxide	1	mg/Kg	0.0061	ND
	Methoxychlor	1	mg/Kg	0.0061	ND
	p,p'-DDD	1	mg/Kg	0.0030	ND
	p,p'-DDE	1	mg/Kg	0.0030	ND
	p,p'-DDT	1	mg/Kg	0.0030	ND
	Toxaphene	1	mg/Kg	0.030	ND
PCB 8082					
	Aroclor (Total)	1	mg/Kg	0.030	ND
	Aroclor-1016	1	mg/Kg	0.030	ND
	Aroclor-1221	1	mg/Kg	0.030	ND
	Aroclor-1232	1	mg/Kg	0.030	ND
	Aroclor-1242	1	mg/Kg	0.030	ND
	Aroclor-1248	1	mg/Kg	0.030	ND
	Aroclor-1254	1	mg/Kg	0.030	ND
	Aroclor-1260	1	mg/Kg	0.030	ND
	Aroclor-1262	1	mg/Kg	0.030	ND
	Aroclor-1268	1	mg/Kg	0.030	ND

Lab#: AC75388-005	SampleID: 9213-SB-07				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
Semivolatile Or	ganics (no search) 8270			, , , , , , , , , , , , , , , , , , , ,	
	1,1'-Biphenyl	1	mg/Kg	0.041	ND
	1,2,4,5-Tetrachlorobenzene	1	mg/Kg	0.041	ND
	2,3,4,6-Tetrachlorophenol	1	mg/Kg	0.041	ND
	2,4,5-Trichlorophenol	1	mg/Kg	0.041	ND
	2,4,6-Trichlorophenol	1	mg/Kg	0.041	ND
	2,4-Dichlorophenol	1	mg/Kg	0.010	ND .
	2,4-Dimethylphenol	1	mg/Kg	0.010	ND
	2,4-Dinitrophenol	1	mg/Kg	0.20	ND
	2,4-Dinitrotoluene	1	mg/Kg	0.041	ND
	2,6-Dinitrotoluene	1	mg/Kg	0.041	ND
	2-Chloronaphthalene	1	mg/Kg	0.041	ND
	2-Chlorophenol	1	mg/Kg	0.041	ND
	2-Methylnaphthalene	1	mg/Kg	0.041	ND
	2-Methylphenol	1	mg/Kg	0.010	ND
	2-Nitroaniline	1 .	mg/Kg	0.041	ND
	2-Nitrophenol	1	mg/Kg	0.041	ND
	3&4-Methylphenol	1	mg/Kg	0.010	ND
	3,3'-Dichlorobenzidine	1	mg/Kg	0.041	ND
	3-Nitroaniline	1	mg/Kg	0.041	ND
	4,6-Dinitro-2-methylphenol	1	mg/Kg	0.20	ND
	4-Bromophenyl-phenylether	1	mg/Kg	0.041	ND
	4-Chloro-3-methylphenol	1	mg/Kg	0.041	ND
	4-Chloroaniline	1	mg/Kg	0.019	ND
	4-Chlorophenyl-phenylether	1 .	mg/Kg	0.041	ND
	4-Nitroaniline	. 1	mg/Kg	0.041	ND
	4-Nitrophenol	1	mg/Kg	0.041	ND
	Acenaphthene	.1	mg/Kg	0.041	ND
	Acenaphthylene	1	mg/Kg	0.041	ND
	Acetophenone	1	mg/Kg	0.041	ND
	Anthracene	1	mg/Kg	0.041	ND
	Atrazine	1	mg/Kg	0.041	ND
	Benzaldehyde	1	mg/Kg	0.041	ND
	Benzo[a]anthracene	1	mg/Kg	0.041	ND
	Benzo[a]pyrene	1	mg/Kg	0.041	ND
	Benzo[b]fluoranthene	1	mg/Kg	0.041	ND
	Benzo[g,h,i]perylene	1	mg/Kg	0.041	ND
	Benzo[k]fluoranthene	1	mg/Kg	0.041	ND
	bis(2-Chloroethoxy)methane	1	mg/Kg	0.041	ND
	bis(2-Chloroethyl)ether	1	mg/Kg	0.010	ND
	bis(2-Chloroisopropyl)ether	1	mg/Kg	0.041	ND
	bis(2-Ethylhexyl)phthalate	1	mg/Kg	0.041	ND
	Butylbenzylphthalate	1	mg/Kg	0.041	ND
	Caprolactam	1	mg/Kg	0.041	ND
•	Carbazole	1	mg/Kg	0.041	ND
	Chrysene	1.	mg/Kg	0.041	ND
	Dibenzo[a,h]anthracene	1	mg/Kg	0.041	ND
	Dibenzofuran	1	mg/Kg	0.010	ND
	Diethylphthalate	1	mg/Kg	0.041	ND
	Dimethylphthalate	1	mg/Kg	0.041	ND
	Di-n-butylphthalate	. '	mg/Kg	0.020	ND
	Di-n-octylphthalate	1		0.020	
	Fluoranthene	1	mg/Kg		ND
•		1	mg/Kg	0.041	ND
	Fluorene	1	mg/Kg	0.041	ND
	Hexachlorobenzene	1	mg/Kg	0.041	ND
	Hexachlorobutadiene	1	mg/Kg	0.041	ND

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p#: AC75388-005	SampleID: 9213-SB-07				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
	Hexachlorocyclopentadiene	1	mg/Kg	0.20	ND
	Hexachloroethane	1	mg/Kg	0.041	ND
	indeno[1,2,3-cd]pyrene	1	mg/Kg	0.041	ND
	Isophorone	1	mg/Kg	0.041	ND
	Naphthalene	1	mg/Kg	0.010	ND
	Nitrobenzene	1	mg/Kg	0.041	ND
	N-Nitroso-di-n-propylamine	1	mg/Kg	0.010	ND
	N-Nitrosodiphenylamine	1	mg/Kg	0.041	ND
	Pentachlorophenol	1	mg/Kg	0.20	ND
	Phenanthrene	1	mg/Kg	0.041	ND
	Phenol	1	mg/Kg	0.041	ND
	Pyrene	1	mg/Kg	0.041	0.051
TAL Metals 6	010				
	Aluminum	1	mg/Kg	240	8000
	Arsenic	1	mg/Kg	4.9	ND
	Barium	1	mg/Kg	12	42
	Calcium	1	mg/Kg	1200	9300
	Chromium	1	mg/Kg	6.1	15
	Cobalt	1	mg/Kg	3.0	5.8
	Copper	1	mg/Kg	6.1	77
	Iron	1	mg/Kg	240	13000
	Lead	1	mg/Kg	6.1	47
	Magnesium	1	mg/Kg	610	6300
	Manganese	1	mg/Kg	12	160
	Nickel	1	mg/Kg	6.1	17
	Potassium	1	mg/Kg	610	860
	Sodium	1	mg/Kg	300	ND
•	Thallium	1	mg/Kg	1.8	ND
	Vanadium	1	mg/Kg	12	21
	Zinc	1	mg/Kg	12	83
TAL Metals 6	020				
	Antimony	1	mg/Kg	0.24	ND
	Beryllium	1	mg/Kg	0.24	0.32
	Cadmium	1	mg/Kg	0.49	ND
	Selenium	1	mg/Kg	2.4	ND
	Silver	1	mg/Kg	0.24	ND

ab#: AC75388-006	SampleID: 9213-DUP-01	DE				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul	
C75388-006	9213-DUP-01		Date Collected 10/25/2013			
% Solids SM2	540G					
	% Solids	1	Percent		71	
Mercury (Soil	/Waste) 7471A		•			
	Mercury	1	mg/Kg	0.12	ND	
Organochlori	ne Pesticides 8081					
0.9	Aldrin	1	mg/Kg	0.0070	ND	
	Alpha-BHC	1	mg/Kg	0.0014	ND	
	beta-BHC	1	mg/Kg	0.0014	ND	
	Chlordane	1	mg/Kg	0.035	ND	
	delta-BHC	1	mg/Kg	0.0070	ND	
	Dieldrin	1	mg/Kg	0.0014	ND	
	Endosulfan I	1	mg/Kg	0.0070	ND	
•	Endosulfan II	. 1	mg/Kg	0.0070	ND	
	Endosulfan Sulfate	1	mg/Kg	0.0070	ND	
	Endrin	1	mg/Kg	0.0070	ND	
	Endrin Aldehyde	1	mg/Kg	0.0070	ND	
	Endrin Ketone	1	mg/Kg	0.0070	ND	
	gamma-BHC	1	mg/Kg	0.0014	ND	
	Heptachlor	1	mg/Kg	0.0070	ND	
	Heptachlor Epoxide	1	mg/Kg	0.0070	ND	
	Methoxychlor	1	mg/Kg	0.0070	ND	
	p,p'-DDD	1	mg/Kg	0.0035	ND	
	p,p'-DDE	1	mg/Kg	0.0035	ND	
	p,p'-DDT	1	mg/Kg	0.0035	ND	
	Toxaphene	1	mg/Kg	0.035	ND	
PCB 8082						
	Aroclor (Total)	1	mg/Kg	0.035	ND	
	Aroclor-1016	1	mg/Kg	0.035	ND	
	Aroclor-1221	1	mg/Kg	0.035	ND	
	Aroclor-1232	· 1	mg/Kg	0.035	ND	
	Aroclor-1242	1	mg/Kg	0.035	ND	
	Aroclor-1248	1	mg/Kg	0.035	ND	
	Aroclor-1254	1	mg/Kg	0.035	ND	
	Aroclor-1260	1	mg/Kg	0.035	ND	
	Aroclor-1262	1	mg/Kg	0.035	ND	
	Aroclor-1268	1	mg/Kg	0.035	ND	

Lab#: AC75388-006	SampleID: 9213-DUP-01				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Semivolatile C	organics (no search) 8270				
	1,1'-Biphenyl	1	mg/Kg	0.047	ND
	1,2,4,5-Tetrachlorobenzene	1	mg/Kg	0.047	ND
	2,3,4,6-Tetrachlorophenol	1	mg/Kg	0.047	ND
	2,4,5-Trichlorophenol	1	mg/Kg	0.047	ND
	2,4,6-Trichlorophenol	1	mg/Kg	0.047	ND
	2,4-Dichlorophenol	1	mg/Kg	0.012	ND
	2,4-Dimethylphenol	1 .	mg/Kg	0.012	ND
	2,4-Dinitrophenol	1	mg/Kg	0.23	ND
	2,4-Dinitrotoluene	1	mg/Kg	0.047	ND
	2,6-Dinitrotoluene	1	mg/Kg	0.047	ND
•	2-Chloronaphthalene	1	mg/Kg	0.047	ND
	2-Chlorophenol	1	mg/Kg	0.047	ND
	2-Methylnaphthalene	1	mg/Kg	0.047	ND
	2-Methylphenol	1	mg/Kg	0.012	ND
	2-Nitroaniline	1	mg/Kg	0.047	ND
	2-Nitrophenol	1	mg/Kg	0.047	ND
	3&4-Methylphenol	1	mg/Kg	0.012	ND
	3,3'-Dichlorobenzidine	1	mg/Kg	0.047	ND
	3-Nitroaniline	1	mg/Kg	0.047	ND
	4,6-Dinitro-2-methylphenol	1	mg/Kg	0.23	ND
	4-Bromophenyl-phenylether	1	mg/Kg		ND
•	4-Chloro-3-methylphenol	1	mg/Kg		ND
	4-Chloroaniline	1	mg/Kg		ND
	4-Chlorophenyl-phenylether	1	mg/Kg		ND
	4-Nitroaniline	1	mg/Kg		ND
	4-Nitrophenol	1	mg/Kg		ND
	Acenaphthene	1	mg/Kg		ND
	Acenaphthylene	1	mg/Kg		ND
	Acetophenone	1	mg/Kg		ND
	Anthracene	1	mg/Kg		ND
	Atrazine	1	mg/Kg		ND
	Benzaldehyde	1	mg/Kg		ND
	Benzo[a]anthracene	1	mg/Kg		ND
	Benzo[a]pyrene	1	mg/Kg		ND
	Benzo[b]fluoranthene	1	mg/Kg		ND
	Benzo[g,h,i]perylene	1	mg/Kg		ND ·
	Benzo[k]fluoranthene	1	mg/Kg		ND
	bis(2-Chloroethoxy)methane	1	mg/Kg		ND
	bis(2-Chloroethyl)ether	1	mg/Kg	9 0.012 9 0.012 9 0.047	ND
•	bis(2-Chloroisopropyl)ether	1	mg/Kg		ND
	bis(2-Ethylhexyl)phthalate	1	mg/Kg		ND
		1	mg/Kg		ND
	Butylbenzylphthalate	1			
	Caprolactam		mg/Kg		ND
	Carbazole	1	mg/Kg		ND
	Chrysene Dihenzele blanthragene	1	mg/Kg mg/Kg		ND ND
	Dibenzo[a,h]anthracene	1	mg/Kg		ND
	Dibenzofuran	1	mg/Kg		ND
	Diethylphthalate	1	mg/Kg		ND
	Dimethylphthalate	1	mg/Kg		ND 0.064
	Di-n-butylphthalate	1	mg/Kg		0.064
	Di-n-octylphthalate	. 1	mg/Kg		ND
	Fluoranthene	1	mg/Kg	0.047	ND
	Fluorene	1	mg/Kg	0.047	ND
	Hexachlorobenzene	1	mg/Kg	0.047	ND
	Hexachlorobutadiene	1	mg/Kg	0.047	ND

_ab#: AC75388-006	SampleID: 9213-DUP-01				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
	Hexachlorocyclopentadiene	1	mg/Kg	0.23	ND
	Hexachloroethane	1	mg/Kg	0.047	ND
	Indeno[1,2,3-cd]pyrene	1	mg/Kg	0.047	ND
	Isophorone	1	mg/Kg	0.047	ND
	Naphthalene	1	mg/Kg	0.012	ND
	Nitrobenzene	1	mg/Kg	0.047	ND
	N-Nitroso-di-n-propylamine	1	mg/Kg	0.012	ND
	N-Nitrosodiphenylamine	1	mg/Kg	0.047	ND
	Pentachlorophenol	1	mg/Kg	0.23	ND.
	Phenanthrene	1	mg/Kg	0.047	ND
	Phenol	1	mg/Kg	0.047	ND
	Pyrene	1	mg/Kg	0.047	ND
TAL Metals	6010				
	Aluminum	1	mg/Kg	280	9200
	Arsenic	1	mg/Kg	5.6	ND
	Barium	1	mg/Kg	14	40
	Calcium	1	mg/Kg	1400	1500
	Chromium ·	1	mg/Kg	7.0	15
	Cobalt	1	mg/Kg	3.5	6.7
	Copper	1	mg/Kg	7.0	16
	Iron	1	mg/Kg	280	15000
	Lead	1	mg/Kg	7.0	17
	Magnesium	1	mg/Kg	700	3200
	Manganese	1	mg/Kg	14	290
	Nickel	1	mg/Kg	7.0	17
	Potassium	1	mg/Kg	700	1100
	Sodium	1	mg/Kg	350	ND
	Thallium	1	mg/Kg	2.1	ND
•	Vanadium	1	mg/Kg	14	22
	Zinc	1	mg/Kg	14	45
TAL Metals	6020				
	Antimony	1	mg/Kg	0.28	ND
	Beryllium	1	mg/Kg	0.28	0.36
	Cadmium	1	mg/Kg	0.56	ND
	Selenium	1	mg/Kg	2.8	ND
	Silver	1	mg/Kg	0.28	ND

AC75388-007 SampleID: 9213-SB-02-19.5 TestGroup Analyte DF Units MDL/PQL/RL Result Date Collected 10/25/2013 9213-SB-02-19.5 AC75388-007 % Solids SM2540G 1 Percent 84 % Solids

Lab#: AC75388-007	SampleID: 9213-SB-02-19.5				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Volatile Organ	ics (no search) 8260				
	1,1,1-Trichloroethane	10100	mg/Kg	12	ND
	1,1,2,2-Tetrachloroethane	10100	mg/Kg	12	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	10100	mg/Kg	12	ND
	1,1,2-Trichloroethane	10100	mg/Kg	12	ND
	1,1-Dichloroethane	10100	mg/Kg		ND
	1,1-Dichloroethene	10100	mg/Kg		ND
	1,2,3-Trichlorobenzene	10100	mg/Kg		ND
	1,2,4-Trichlorobenzene	10100	mg/Kg		ND
	1,2-Dibromo-3-chloropropane	10100	mg/Kg		ND
	1,2-Dibromoethane	10100	mg/Kg		ND
	1,2-Dichlorobenzene	10100	mg/Kg		ND
	1,2-Dichloroethane	10100	mg/Kg		ND
	1,2-Dichloropropane	10100	mg/Kg		ND
	1,3-Dichlorobenzene	10100	mg/Kg		ND
	1,4-Dichlorobenzene	10100	mg/Kg		ND
	1,4-Dioxane	10100	mg/Kg		ND
	2-Butanone	10100	mg/Kg		ND
	2-Hexanone	10100	mg/Kg		ND
	4-Methyl-2-pentanone	10100	mg/Kg		ND
•	Acetone	10100	mg/Kg		ND
	Benzene	10100	mg/Kg		37
	Bromochloromethane	10100	mg/Kg		ND
	Bromodichloromethane				
•		10100	mg/Kg		ND
	Bromoform	10100	mg/Kg		ND
	Bromomethane	10100	mg/Kg		ND
	Carbon disulfide	10100	mg/Kg		ND
	Carbon tetrachloride	10100	mg/Kg		ND
	Chlorobenzene	10100	mg/Kg		ND
	Chloroethane	10100	mg/Kg		ND
	Chloroform	10100	mg/Kg		ND
	Chloromethane	10100	mg/Kg		ND
	cis-1,2-Dichloroethene	10100	mg/Kg		ND
	cis-1,3-Dichloropropene	10100	mg/Kg		ND
	Cyclohexane	10100	mg/Kg		17
	Dibromochloromethane	10100	mg/Kg		ND
	Dichlorodifluoromethane	10100	mg/Kg		ND
	Ethylbenzene	10100	mg/Kg		190
	Isopropylbenzene	10100	mg/Kg	12	24
	m&p-Xylenes	10100	mg/Kg	12	640
	Methyl Acetate	10100	mg/Kg	12 12 12 12 12 12 12 12 12 12 12 12 12 1	ND
	Methylcyclohexane	10100	mg/Kg	12	47
	Methylene chloride	10100	mg/Kg	12	ND
	Methyl-t-butyl ether	10100	mg/Kg	6.0	ND
	o-Xylene	10100	mg/Kg	12	260
	Styrene	10100	mg/Kg		ND
	Tetrachloroethene	10100	mg/Kg		ND
	Toluene	10100	mg/Kg		530
	trans-1,2-Dichloroethene	10100	mg/Kg		ND
	trans-1,3-Dichloropropene	10100	mg/Kg		ND
	Trichloroethene	10100	mg/Kg		ND
	Trichlorofluoromethane	10100	mg/Kg		ND
	Vinyl chloride	10100	mg/Kg	12	ND
	Xylenes (Total)	10100	mg/Kg	12	900
		13100			000

Veritech_Project: 3102539

SampleID: Lab#: AC75388-008 9213-SB-03 VO TestGroup DF Analyte Units MDL/PQL/RL Result 9213-SB-03 VO Date Collected 10/25/2013 AC75388-008 % Solids SM 2540G 1 91 % Solids Percent

Lab#: AC75388-008	SampleID: 9213-SB-03 VO				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Volatile Organics	s (no search) 8260				
	1,1,1-Trichloroethane	1	mg/Kg	0.0022	ND
	1,1,2,2-Tetrachloroethane	1	mg/Kg	0.0022	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	1	mg/Kg	0.0022	ND
	1,1,2-Trichloroethane	1	mg/Kg	0.0022	ND
	1,1-Dichloroethane	1	mg/Kg	0.0022	ND
	1,1-Dichloroethene	1	mg/Kg	0.0022	ND
	1,2,3-Trichlorobenzene	1	mg/Kg	0.0022	ND
	1,2,4-Trichlorobenzene	1	mg/Kg	0.0022	ND
	1,2-Dibromo-3-chloropropane	1	mg/Kg	0.0022	ND
	1,2-Dibromoethane	1	mg/Kg	0.0022	ND
	1,2-Dichlorobenzene	1	mg/Kg	0.0022	ND
	1,2-Dichloroethane	1	mg/Kg	0.0011	ND
	1,2-Dichloropropane	1	mg/Kg	0.0022	ND
	1,3-Dichlorobenzene	1	mg/Kg	0.0022	ND
	1,4-Dichlorobenzene	1	mg/Kg	0.0022	ND
	1,4-Dioxane	1	mg/Kg	0.11	ND
	2-Butanone	1	mg/Kg	0.0022	ND
	2-Hexanone	1	mg/Kg	0.0022	ND
	4-Methyl-2-pentanone	1	mg/Kg	0.0022	ND
	Acetone -	1	mg/Kg	0.011	ND
	Benzene	1	mg/Kg	0.0011	ND
	Bromochloromethane	1	mg/Kg	0.0022	ND
	Bromodichloromethane	1	mg/Kg	0.0022	ND
	Bromoform	1	mg/Kg	0.0022	ND
	Bromomethane	1	mg/Kg	0.0022	ND
	Carbon disulfide	1	mg/Kg	0.0022	ND
	Carbon tetrachloride	1	mg/Kg	0.0022	ND
	Chlorobenzene Chloroethane	1 1	mg/Kg	0.0022	ND
	Chloroform	1	mg/Kg	0.0022 0.0022	ND ND
	Chloromethane	1	mg/Kg mg/Kg	0.0022	ND ND
	cis-1,2-Dichloroethene	1	mg/Kg	0.0022	ND
	cis-1,3-Dichloropropene	1	mg/Kg	0.0022	ND
	Cyclohexane	1	mg/Kg	0.0022	ND
	Dibromochloromethane	1	mg/Kg	0.0022	ND
	Dichlorodifluoromethane	1	mg/Kg	0.0022	ND
	Ethylbenzene	1	mg/Kg	0.0022	ND
	isopropylbenzene	1	mg/Kg	0.0011	ND
	m&p-Xylenes	1	mg/Kg	0.0011	ND
	Methyl Acetate	1	mg/Kg	0.0022	ND
	Methylcyclohexane	1	mg/Kg	0.0022	ND
	Methylene chloride	1	mg/Kg	0.0022	ND
	Methyl-t-butyl ether	1	mg/Kg	0.0011	ND
	o-Xylene	1	mg/Kg	0.0011	ND
	Styrene	1	mg/Kg	0.0022	ND
	Tetrachloroethene	1	mg/Kg	0.0022	ND
•	Toluene	1	mg/Kg	0.0011	ND
1	trans-1,2-Dichloroethene	1	mg/Kg	0.0022	ND
	trans-1,3-Dichloropropene	1	mg/Kg	0.0022	ND
	Trichloroethene	1	mg/Kg	0.0022	ND
	Trichlorofluoromethane	1	mg/Kg	0.0022	ND
	Vinyl chloride	1	mg/Kg	0.0022	ND
	Xylenes (Total)	1	mg/Kg	0.0011	ND
	, ,				

Veritech_Project: 3102539

SampleID: 9213-SB-05-19 AC75388-009 TestGroup Analyte DF Units MDL/PQL/RL Result 9213-SB-05-19 Date Collected 10/25/2013 AC75388-009 % Solids SM 2540G 1 79 % Solids Percent

Veritech Project: 3102539

Lab#: AC75388-009	SampleID: 9213-SB-05-19				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Volatile Organics	s (no search) 8260				
	1,1,1-Trichloroethane	0.99	mg/Kg	0.0025	ND
	1,1,2,2-Tetrachloroethane	0.99	mg/Kg	0.0025	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	0.99	mg/Kg	0.0025	ND
	1,1,2-Trichloroethane	0.99	mg/Kg	0.0025	ND
	1,1-Dichloroethane	0.99	mg/Kg	0.0025	ND
	1,1-Dichloroethene	0.99	mg/Kg	0.0025	ND
	1,2,3-Trichlorobenzene	0.99	mg/Kg	0.0025	ND
	1,2,4-Trichlorobenzene	0.99	mg/Kg	0.0025	ND
	1,2-Dibromo-3-chloropropane	0.99	mg/Kg	0.0025	ND
,	1,2-Dibromoethane	0.99	mg/Kg	0.0025	ND
•	1,2-Dichlorobenzene	0.99	mg/Kg	0.0025	ND
	1,2-Dichloroethane	0.99	mg/Kg	0.0013	ND
	1,2-Dichloropropane	0.99	mg/Kg	0.0025	ND
,	1,3-Dichlorobenzene	0.99	mg/Kg	0.0025	ND
	1,4-Dichlorobenzene	0.99	mg/Kg	0.0025	ND
	1,4-Dioxane	0.99	mg/Kg	0.13	ND
:	2-Butanone	0.99	mg/Kg	0.0025	ND
;	2-Hexanone	0.99	mg/Kg	0.0025	ND
•	4-Methyl-2-pentanone	0.99	mg/Kg	0.0025	ND
	Acetone	0.99	mg/Kg	0.013	ND
Į	Benzene	0.99	mg/Kg	0.0013	ND
1	Bromochloromethane	0.99	mg/Kg	0.0025	ND
	Bromodichloromethane	0.99	mg/Kg	0.0025	ND
	Bromoform	0.99	mg/Kg	0.0025	ND
·	Bromomethane	0.99	mg/Kg	0.0025	ND
(Carbon disulfide	0.99	mg/Kg	0.0025	ND
•	Carbon tetrachloride	0.99	mg/Kg	0.0025	ND
•	Chlorobenzene	0.99	mg/Kg	0.0025	ND
•	Chloroethane	0.99	mg/Kg	0.0025	ND
(Chloroform	0.99	mg/Kg	0.0025	ND
(Chloromethane	0.99	mg/Kg	0.0025	ND
•	cis-1,2-Dichloroethene	0.99	mg/Kg	0.0025	ND
	cis-1,3-Dichloropropene	0.99	mg/Kg	0.0025	ND
(Cyclohexane	0.99	mg/Kg	0.0025	ND
1	Dibromochloromethane	0.99	mg/Kg	0.0025	ND
1	Dichlorodifluoromethane	0.99	mg/Kg	0.0025	ND
1	Ethylbenzene	0.99	mg/Kg	0.0013	ND
•	sopropylbenzene	0.99	mg/Kg	0.0013	ND
• 1	m&p-Xylenes	0.99	mg/Kg	0.0013	ND
	Methyl Acetate	0.99	mg/Kg	0.0025	ND
ı	Methylcyclohexane	0.99	mg/Kg	0.0025	ND
ı	Methylene chloride	0.99	mg/Kg	0.0025	ND
·	Methyl-t-butyl ether	0.99	mg/Kg	0.0013	ND
,	o-Xylene	0.99	mg/Kg	0.0013	ND
	Styrene	0.99	mg/Kg	0.0025	ND
	Tetrachloroethene	0.99	mg/Kg	0.0025	ND
	Toluene	0.99	mg/Kg	0.0013	0.0020
1	rans-1,2-Dichloroethene	0.99	mg/Kg	0.0025	ND
t	rans-1,3-Dichloropropene	0.99	mg/Kg	0.0025	ND
•	Trichloroethene	0.99	mg/Kg	0.0025	ND
•	Trichlorofluoromethane	0.99	mg/Kg	0.0025	ND
•	Vinyl chloride	0.99	mg/Kg	0.0025	ND
	Kylenes (Total)	0.99	mg/Kg	0.0013	ND

SampleID: Lab#: AC75388-010 9213-SB-06-19.5 TestGroup Analyte DF Units MDL/PQL/RL Result 9213-SB-06-19.5 Date Collected 10/25/2013 AC75388-010 % Solids SM2540G 86 % Solids 1 Percent

-ab#: AC75388-010	SampleID: 9213-SB-06-19.5				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
Volatile Organic	cs (no search) 8260				
_	1,1,1-Trichloroethane	0.994	mg/Kg	0.0023	ND
	1,1,2,2-Tetrachloroethane	0.994	mg/Kg	0.0023	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	0.994	mg/Kg	0.0023	ND
	1,1,2-Trichloroethane	0.994	mg/Kg	0:0023	ND
	1,1-Dichloroethane	0.994	mg/Kg	0.0023	ND
	1,1-Dichloroethene	0.994	mg/Kg	0.0023	ND.
	1,2,3-Trichlorobenzene	0.994	mg/Kg	0.0023	ND
	1,2,4-Trichlorobenzene	0.994	mg/Kg	0.0023	ND
	1,2-Dibromo-3-chloropropane	0.994	mg/Kg	0.0023	ND
	1,2-Dibromoethane	0.994	mg/Kg	0.0023	ND
	1,2-Dichlorobenzene	0.994	mg/Kg	0.0023	ND
	1,2-Dichloroethane	0.994	mg/Kg	0.0012	ND
	1,2-Dichloropropane	0.994	mg/Kg	0.0023	ND .
	1.3-Dichlorobenzene	0.994	mg/Kg	0.0023	ND
	1,4-Dichlorobenzene	0.994	mg/Kg	0.0023	ND
	1,4-Dioxane	0.994	mg/Kg	0.12	ND
	2-Butanone	0.994	mg/Kg	0.0023	ND
	2-Hexanone	0.994	mg/Kg	0.0023	ND
	4-Methyl-2-pentanone	0.994	mg/Kg	0.0023	ND
	Acetone	0.994	mg/Kg	0.012	ND
	Benzene	0.994	mg/Kg	0.0012	ND
	Bromochloromethane	0.994	mg/Kg	0.0023	ND
	Bromodichloromethane	0.994	mg/Kg	0.0023	ND
	Bromoform	0.994	mg/Kg	0.0023	ND
	Bromomethane	0.994	mg/Kg	0.0023	ND
	Carbon disulfide	0.994	mg/Kg	0.0023	ND
	Carbon tetrachloride	0.994	mg/Kg	0.0023	ND.
	Chlorobenzene	0.994	mg/Kg	0.0023	ND
	Chloroethane	0.994	mg/Kg	0.0023	ND
	Chloroform	0.994	mg/Kg	0.0023	ND
•	Chloromethane	0.994	mg/Kg	0.0023	ND
	cis-1,2-Dichloroethene	0.994	mg/Kg	0.0023	ND
	cis-1,3-Dichloropropene	0.994	mg/Kg	0.0023	ND
	Cyclohexane	0.994		0.0023	ND
	-		mg/Kg		
	Dibromochloromethane	0.994	mg/Kg	0.0023	ND
	Dichlorodifluoromethane	0.994	mg/Kg	0.0023	ND
	Ethylbenzene	0.994	mg/Kg	0.0012	ND
	Isopropylbenzene	0.994	mg/Kg	0.0012	ND
	m&p-Xylenes	0.994	mg/Kg	0.0012	ND
	Methyl Acetate	0.994	mg/Kg	0.0023	ND
	Methylcyclohexane	0.994	mg/Kg	0.0023	ND
	Methylene chloride	0.994	mg/Kg	0.0023	ND
	Methyl-t-butyl ether	0.994	mg/Kg	0.0012	ND
	o-Xylene	0.994	mg/Kg	0.0012	ND
•	Styrene	0.994	mg/Kg	0.0023	ND
	Tetrachloroethene	0.994	mg/Kg	0.0023	ND
,	Toluene	0.994	mg/Kg	0.0012	ND
	trans-1,2-Dichloroethene	0.994	mg/Kg	0.0023	ND
	trans-1,3-Dichloropropene	0.994	mg/Kg	0.0023	ND
	Trichloroethene	0.994	mg/Kg	0.0023	ND
	Trichlorofluoromethane	0.994	mg/Kg	0.0023	ND
	Vinyl chloride	0.994	mg/Kg	0.0023	ND
	Xylenes (Total)	0.994	mg/Kg	0.0012	ND

AC75388-011 SampleID: 9213-SB-07 12:37 TestGroup Analyte DF Units MDL/PQL/RL Result Date Collected 10/25/2013 9213-SB-07 12:37 AC75388-011 % Solids SM2540G % Solids 1 Percent 84

-ab#: AC75388-011	SampleID: 9213-SB-07 12:37	·			
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
Volatile Organi	ics (no search) 8260				
	1,1,1-Trichloroethane	1.02	mg/Kg	0.0024	ND
	1,1,2,2-Tetrachloroethane	1.02	mg/Kg	0.0024	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	1.02	mg/Kg	0.0024	ND
	1,1,2-Trichloroethane	1.02	mg/Kg	0.0024	ND
	1,1-Dichloroethane	1.02	mg/Kg	0.0024	ND
	1,1-Dichloroethene	1.02	mg/Kg	0.0024	ND
	1,2,3-Trichlorobenzene	1.02	mg/Kg	0.0024	ND
	1,2,4-Trichlorobenzene	1.02	mg/Kg	0.0024	ND
	1,2-Dibromo-3-chloropropane	1.02	mg/Kg	0.0024	ND
	1,2-Dibromoethane	1.02	mg/Kg	0.0024	ND
	1,2-Dichlorobenzene	1.02	mg/Kg	0.0024	ND
	1,2-Dichloroethane	1.02	mg/Kg	0.0012	ND
	1,2-Dichloropropane	1.02	mg/Kg	0.0024	ND
	1,3-Dichlorobenzene	1.02	mg/Kg	0.0024	ND
	1,4-Dichlorobenzene	1.02	mg/Kg	0.0024	ND
	1,4-Dioxane	1.02	mg/Kg	0.12	ND
	2-Butanone	1.02	mg/Kg	0.0024	ND
•	2-Hexanone	1.02	mg/Kg	0.0024	ND
•	4-Methyl-2-pentanone	1.02	mg/Kg	0.0024	ND
	Acetone	1.02	mg/Kg	0.012	ND
	Benzene	1.02	mg/Kg	0.0012	ND
	Bromochloromethane	1.02	mg/Kg	0.0024	ND
	Bromodichioromethane	1.02	mg/Kg	0.0024	ND
	Bromoform	1.02	mg/Kg	0.0024	ND
'	Bromomethane	1.02	mg/Kg	0.0024	ND
	Carbon disulfide	1.02	mg/Kg	0.0024	ND
	Carbon tetrachloride	1.02	mg/Kg	0.0024	ND
	Chlorobenzene	1.02	mg/Kg	0.0024	ND
	Chloroethane	1.02	mg/Kg	0.0024	ND
	Chloroform	1.02	mg/Kg	0.0024	ND .
	Chloromethane	1.02	mg/Kg	0.0024	ND
	cis-1,2-Dichloroethene	1.02	mg/Kg	0.0024	ND
	cis-1,3-Dichloropropene	1.02	mg/Kg	0.0024	ND
	Cyclohexane	1.02	mg/Kg	0.0024	ND
	Dibromochloromethane	1.02	mg/Kg	0.0024	ND
•	Dichlorodifluoromethane	1.02	mg/Kg	0.0024	ND
	Ethylbenzene	1.02	mg/Kg	0.0012	ND
	Isopropylbenzene	1.02	mg/Kg	0.0012	ND
	m&p-Xylenes	1.02	mg/Kg	0.0012	ND
	Methyl Acetate	1.02	mg/Kg	0.0024	ND.
	Methylcyclohexane	1.02	mg/Kg	0.0024	ND
	Methylene chloride	1.02	mg/Kg	0.0024	ND
	Methyl-t-butyl ether	1.02	mg/Kg	0.0012	ND
	o-Xylene	1.02	mg/Kg	0.0012	ND
	Styrene	1.02	mg/Kg	0.0024	ND
	Tetrachloroethene	1.02	mg/Kg	0.0024	ND
	Toluene	1.02	mg/Kg	0.0012	0.0012
	trans-1,2-Dichloroethene	1.02	mg/Kg	0.0024	ND
	trans-1,3-Dichloropropene	1.02	mg/Kg	0.0024	ND
	Trichloroethene	1.02	mg/Kg	0.0024	ND
	Trichlorofluoromethane	1.02	mg/Kg	0.0024	ND
•	Vinyl chloride	1.02	mg/Kg	0.0024	ND
	Xylenes (Total)	1.02	mg/Kg	0.0012	ND

Lab#: AC75388-012	SampleID: 9213-TB-02		***		
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Result
AC75388-012	9213-TB-02		Date C	ollected 10/25/2013	
Volatile Organ	ics (no search) 8260				
	1,1,1-Trichloroethane	1 .	ug/L	1.0	ND
	1,1,2,2-Tetrachloroethane	1	ug/L	1.0	ND
•	1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/L	1.0	ND
	1,1,2-Trichloroethane	· 1	ug/L	1.0	ND
	1,1-Dichloroethane	1	ug/L	1.0	ND
	1,1-Dichloroethene	1	ug/L	1.0	ND
	1,2,3-Trichlorobenzene	1	ug/L	1.0	ND
	1,2,4-Trichlorobenzene	1 .	ug/L	1.0	ND
	1,2-Dibromo-3-chloropropane	· 1	ug/L	1.0	ND
	1,2-Dibromoethane	1	ug/L	1.0	ND
	1,2-Dichlorobenzene	1	ug/L	1.0	ND
•	1,2-Dichloroethane	1	ug/L	0.50	ND
	1,2-Dichloropropane	1	ug/L	1.0	ND
	1,3-Dichlorobenzene	1	ug/L	1.0	ND
	1,4-Dichlorobenzene	1	ug/L	1.0	ND
	1,4-Dioxane	1	ug/L	50	ND
•	2-Butanone	1	ug/L	1.0	ND
	2-Hexanone	1	ug/L	1.0	ND
	4-Methyl-2-pentanone	1	ug/L	1.0	ND
	Acetone	1	ug/L	10	ND
•	Benzene	. 1	ug/L	0.50	ND
	Bromochloromethane	1	ug/L	1.0	ND
	Bromodichloromethane	1	ug/L ug/L	1.0	ND
		1	-	1.0	ND
	Bromoform	1	ug/L		ND
	Bromomethane	1	ug/L	1.0 1.0	ND
	Carbon disulfide	1	ug/L		
	Carbon tetrachloride	1	ug/L	1.0	ND ND
	Chlorobenzene	1	ug/L	1.0	ND
	Chloroethane	1	ug/L	1.0	ND
	Chloroform	1	ug/L	1.0	ND
	Chloromethane	1	ug/L	1.0	ND
	cis-1,2-Dichloroethene	1	ug/L	1.0	ND
	cis-1,3-Dichloropropene	1	ug/L	1.0	ND
	Cyclohexane	1	ug/L	1.0	ND
	Dibromochloromethane	1	ug/L	1.0	ND
	Dichlorodifluoromethane	1	ug/L	1.0	ND
	Ethylbenzene	1	ug/L	1.0	ND
	Isopropylbenzene	. 1	ug/L	1.0	ND
	m&p-Xylenes	1	ug/L	1.0	ND
	Methyl Acetate	. 1	ug/L	1.0	ND
	Methylcyclohexane	1	ug/L	1.0	ND
	Methylene chloride	1 .	ug/L	1.0	ND
	Methyl-t-butyl ether	1	ug/L	0.50	ND
	o-Xylene	1	ug/L	1.0	ND
	Styrene	1	ug/L	1.0	ND
	Tetrachloroethene	1	ug/L	1.0	ND
	Toluene	1	ug/L	1.0	ND
	trans-1,2-Dichloroethene	1	ug/L	1.0	ND
	trans-1,3-Dichloropropene	1	ug/L	1.0	ND
	Trichloroethene	1	ug/L	1.0	ND
	Trichlorofluoromethane	1	ug/L	1.0	ND
	Vinyl chloride	1	ug/L	1.0	ND
		•	ug/L	1.0	ND

Lab#: AC75388-013 SampleID: 9213-DUP-01-19 TestGroup Analyte DF Units MDL/PQL/RL Result 9213-DUP-01-19 Date Collected AC75388-013 10/25/2013 % Solids SM2540G % Solids 83 Percent

h#: AC75388-013	SampleID: 9213-DUP-01-19				
TestGroup	Analyte	DF	Units	MDL/PQL/RL	Resul
Volatile Organi	ics (no search) 8260				
•	1,1,1-Trichloroethane	1.01	mg/Kg	0.0024	ND
	1,1,2,2-Tetrachloroethane	1.01	mg/Kg	0.0024	ND
	1,1,2-Trichloro-1,2,2-trifluoroethane	1.01	mg/Kg	0.0024	ND
	1,1,2-Trichloroethane	1.01	mg/Kg	0.0024	ND
	1,1-Dichloroethane	1.01	mg/Kg	0.0024	ND
	1,1-Dichloroethene	1.01	mg/Kg	0.0024	ND
	1,2,3-Trichlorobenzene	1.01	mg/Kg	0.0024	ND
	1,2,4-Trichlorobenzene	1.01	mg/Kg	0.0024	ND
	1,2-Dibromo-3-chloropropane	1.01	mg/Kg	0.0024	ND
	1,2-Dibromoethane	1.01	mg/Kg	0.0024	ND
	1,2-Dichlorobenzene	1.01	mg/Kg	0.0024	ND
•	1,2-Dichloroethane	1.01	mg/Kg	0.0012	ND
	1,2-Dichloropropane	1.01	mg/Kg	0.0024	ND
	1,3-Dichlorobenzene	1.01	mg/Kg	0.0024	ND
	1,4-Dichlorobenzene	1.01	mg/Kg	0.0024	ND
	1,4-Dioxane	1.01	mg/Kg	0.12	ND
	2-Butanone	1.01	mg/Kg	0.0024	ND
•	2-Hexanone	1.01	mg/Kg	0.0024	ND
	4-Methyl-2-pentanone	1.01	mg/Kg	0.0024	ND
	Acetone	1.01	mg/Kg	0.012	ND
	Benzene	1.01	mg/Kg	0.0012	ND
	Bromochloromethane	1.01	mg/Kg	0.0024	ND
	Bromodichloromethane	1.01	mg/Kg	0.0024	ND
	Bromoform	1.01	mg/Kg	0.0024	ND
	Bromomethane	1.01	mg/Kg	0.0024	ND
	Carbon disulfide	1.01	mg/Kg	0.0024	ND
	Carbon tetrachloride	1.01	mg/Kg	0.0024	ND
	Chlorobenzene	1.01	mg/Kg	0.0024	ND
	Chloroethane	1.01	mg/Kg	0.0024	ND
	Chloroform	1.01	mg/Kg	0.0024	ND
	Chloromethane	1.01	mg/Kg	0.0024	ND
	cis-1,2-Dichloroethene	1.01	mg/Kg	0.0024	ND
	cis-1,3-Dichloropropene	1.01	mg/Kg	0.0024	ND
	Cyclohexane	1.01	mg/Kg	0.0024	ND
	Dibromochloromethane	1.01	mg/Kg	0.0024	ND
	Dichlorodifluoromethane	1.01	mg/Kg	0.0024	ND
	Ethylbenzene	1.01	mg/Kg	0.0012	ND
	Isopropylbenzene	1.01	mg/Kg	0.0012	ND
	m&p-Xylenes	1.01	mg/Kg	0.0012	ND
	Methyl Acetate	1.01	mg/Kg	0.0024	ND
	Methylcyclohexane	1.01	mg/Kg	0.0024	ND
	Methylene chloride	1.01	mg/Kg	0.0024	ND
	Methyl-t-butyl ether	1.01	mg/Kg	0.0012	ND
	o-Xylene	1.01	mg/Kg	0.0012	ND
	Styrene	1.01	mg/Kg	0.0024	ND
	Tetrachioroethene	1.01	mg/Kg	0.0024	ND
	Toluene	1.01	mg/Kg	0.0012	ND
	trans-1,2-Dichloroethene	1.01	mg/Kg	0.0024	ND
	trans-1,3-Dichloropropene	1.01	mg/Kg	0.0024	ND
	Trichloroethene	1.01	mg/Kg	0.0024	ND
	Trichlorofluoromethane	1.01	mg/Kg	0.0024	ND
	Vinyl chloride	1.01	mg/Kg	0.0024	ND
*	Xylenes (Total)	1.01	mg/Kg	0.0012	- ND

9213-DUP-01-19 SampleID: AC75388-013 **TestGroup** Analyte DF Units MDL/PQL/RL Result RL = Reporting Limit ND = Not Detected RL Definitions: SW846 Inorganics reported to PQL Clean Water Act Inorganics reported to PQL SW846 Organics reported to PQL CLP Organics reported to CRQL Clean Water Act Organics reported to PQL CLP Inorganics reported to CRQL This report is a true report of results obtained from our tests of this material. In lieu of a formal contract document, the total aggregate liability of Veritech to all parties shall not exceed Veritech's total fee for analytical services rendered. Or **Robin Cousineau - Quality Assurance Director** Stanley Gilewicz - Laboratory Director

e:	Sampler (print name): Date:	name):	11)Sampler (print name):			
Cooler Temperature		Project-Specific Reporting Limits High Contaminant Concentrations NJ LSRP Project	High Contaminan NJ LSRP Project	S61517295, 2019	、一分5cmswski 色) Medro	Additional Notes Cincil (Coulty to Dyan Kemich - Scarowski @) Wester Solutions, con
	g) ·	Metals-Soil (ICP-MS 6020 for Be & Ag) Check if applicable:	Metals-Soil (ICP- Note: Check if applicable:	/		
		EN or BNA (82/0C SIM) VOC (8260B SIM or 8011) Metals (ICP-MS 200.8 or 6020)		1865/1750	161	
ndards in NJ or PA:	equired to meet current star	Check if low-level groundwater methods required to meet current standards in NJ or PA:	Note: Check if low-			
ARDS	cial Requirements, HAZ	Comments, Notes, Spec		Date Time	Ancepted by:	10)Relinguished by:
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9)Commonts	aOH CI 2SO4 NO3	one leOH n Core		Fab (G SVX ALM PCB	6)Sample	
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Excel - NY Regulatory	Full / Category B	1 Week (25%; EPH)	Oscaski	2b) Project Mgr. Dyncs Krumich -		on, 25 0
Excel - NJ Regulatory	CLP	4 Days (35%; TPH)		58k2006		
EQuiS EPA Region 2 or 5	Red - NJ / NY / PA	72 Hours (50%)	NUY	alect DOC 4th St Breakfyor	(sounies -Ongosusk, (Western) 2a) Project	fa) Customer: المرم الإنسانية المالية ا
Hazsite/CSV	Data Summary	24 Hours (100%)		#PH-06/1 KY #90124	NELACINJ#0/07 PA#88-00463 NY #11408 CI #PH-0671 KY #90124	NELACINA
Electronic Deliv.	Report Type	Turnaround	russ Enterprise	A Women-Owned, Disadvantaged, Small Business Enterprise	856-780-6056	Ph (Service Center): 856-780-6057 Fax: 856-780-6056
se circle)	JRepoiling Requirements (Flease Circle)	Jichoun		LABORATORIES	[[Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
sa Cimia)	ng Requirements (Pleas	3)Parorting Page	RECORD			Ph: 800-426-9992 973-244-9770 Fax: 973-244-9787 973-439-1458
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175 ROUTE 46 WEST, UNIT D · FAIRFIELD, NJ 07004 2 MADISON ROAD, FAIRFIELD, NJ 07004 800-426-9992 · 973-244-9770 FAX: 973-244-9787

WWW.HCVLAB.COM

Project: 9213 Gowanus

Client PO: 0084240

Report To: Weston Solutions Inc.

205 Campus Drive Edison, NJ 08837

Attn: Dyna Krumich-Ogonowski

Received Date: 10/28/2013

Report Date: 11/22/2013

Deliverables: NYDOH-CatA

Lab ID: AC75409

Lab Project No: 3102819

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 Veritech to all parties shall not exceed Veritech's total fee for analytical services rendered.

Robin Cousineau - Quality Assurance Director

OR

Stanley Gilewicz - Laboratory Director

NJ (07071)

PA (68-00463)

NY (ELAP11408) KY (90124) CT (PH-0671)

HAZ. - 186





THIS CATEGORY "A" REPORT IS NUMBERED FROM 1 to 42

HCV Case Narrative

Client: Weston Solutions Inc.

Project: 9213 Gowanus

HCV Project: 3102819

Hampton-Clarke/Veritech (HC·V) received the following samples on October 28, 2013:

Client ID 9213-WC-02 **HCV Sample ID Matrix** AC75409-001 Soil

GRO/DRO (8015D), Reactive Cyanide/Sulfide (SW846 7.3), Ignitability (1030),

pH (9045D), TCLP VO (8260C), TCLP BNA (8270D), TCLP Pesticides (8081B), TCLP Herbicides (8151A), TCLP Metals (6010C/7470A)

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.

Gasoline Range Organics Analysis:

Data conforms to method requirements.

Diesel Range Organics Analysis:

Data conforms to method requirements.

Wet Chemistry Analysis:

Sample AC75409-001 was analyzed for Reactivity using SW-846 7.3. SW-846 7.3 is not a NELAP accredited parameter.

TCLP Volatile Organic Analysis:

Chloroform was recovered in sample AC75409-001 suggesting laboratory contamination.

TCLP Base Neutral/Acid Extractable Analysis:

Sample WMB29092 has a surrogate recovery outside QC limits, but the recovery is greater than 10%, therefore, no corrective action was necessary.

TCLP Pesticide Analysis:

Data conforms to method requirements.

TCLP Herbicide Analysis:

Data conforms to method requirements.

TCLP Metals Analysis:

Data conforms to method requirements.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Robin Cousineau **Quality Assurance Director**

Or

Stanley Gilewicz **Laboratory Director**

				1880	(Wantuff	10)Relinquished by:	SHALLOW THE TANK THE SHALLOW S					00 9213-WC-02	Lab Sample # 4)Customer Sample ID		ACTSH09 OT - Other (please specify under Item 9, Comments)	Batch # WW - Waste Water OL - Oil				For the national content of the production of th	1d) Send Report to: \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		m 1374175800	3 Edjew, NJ 68837		© Customer Information		(Service Center): 856-78	Pri: 800-426-9992 9/3-244-9770 Fax: 9/3-244-9787 9/3-439-1458 Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054	175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
				111.6	CA 7	Accepted by:						5 10/25/15/1656	Matrix Date Time	5) 6)Sample	der item 9, Comments)	SL - Sludge OL - Oil	odes i A-Air	Creck if Contingent ====		A CONTRACTOR OF THE PROPERTY O			FOX 732 4175861		SKI W CSTAN		#07071 PA #68-00463 NY #1	: 856-780-6056	rel, New Jersey 08054	aporatories id, New Jersey 07004
		Musica Globert		7 10/26	10/20	d by: Date						XXXX	Gra	mposi b (G) LP		IRI C	Sample	gen ===>			2d) Quote/PO # (If Applicable):		tion (City/State):	2b) Project Mgr. Dync. K	La) Ploject	Project I	NELAC/NJ#07071 PA#68-00463 NY #11408 CT #PH-0671 KY #90124	A Women-Owned, Disadvant	HAMPTONCLARKE VENTECH	トロト
A fee	11) Sampler (print name):	High Co	Note: Check if a	1650	1610	Time Note: Check if																	Brough syny	Krumich - Ochnowsk	Drads V	ntormation		A Women-Owned, Disadvantaged, Small Business Enterprise	KECORD	CHAIN OF CUSTODY
A fee of \$5/sample will be assessed for storage should sample not be activated for any analysis.	witt name):	Project-Specific Reporting Limits High Contaminant Concentrations NJ LSRP Project	Metals-Soil (ICP-MS 6020 for Be & Ag) Check if applicable:	(8260B SIM or 8011) is (ICP-MS 200.8 or 6020)	BN or BNA (8270C SIM)	Comments, Notes, Spec	The state of the s					_	Non MeC	ЭН	#			<=== Check If Contingent			Other:	2 Weeks	10 Days (10%)	T Week (25%; EPH)	72 Hours (50%)	48 Hours (75%)	24 Hours (100%)	Turnaround	3)Report	3/028/9
ompleted your analytical age should sample not be activate	Date:		J)		denied to meet called it stell o	Comments, Notes, Special Requirements, HAZARDS vel croundwater methods required to meet current streets in N. 1. 2.							NaO HCI H2S HNC	04	# of Bottles		1	f Contingent	·	Expedited TAT Not Always Available. Please Check with Lab.		Other:	Category A	Eull / Category B	Red - NJ / NY / PA	Waste	Data Summary	Report Type	3)Reporting Requirements (Please Circle)	Page_
work may be delayed. ed for any analysis.		Cooler Temperature	•		ands if the or FA.	RDS	THE STATE OF THE S				H		9)Comments 189	ı						Sheck with Lab.	Other:	PDF	Excel - PA Regulatory	Excel - NJ Regulatory	EQuIS EPA Region 2 or 5	EQuIS 4-File / EZ / NYS	Hazsite/CSV	Electronic Deliv.	e Circle)	of.

PROJECT MODIFICATIONS

Client: WESTON-NJ
Project: 9213 Gowanus

HCV Project #: 3102819

sherree192.168.1.52 10/29/2013 5:22:18 PM

Per Dyna Krumich-Ogonowski, the project name is 9213 Gowanus. SB 10/29/13

CONDITION UPON RECEIPT

Batch Number AC75409

Entered By: VINCENT

Date Entered 10/28/2013 6:54:00 PM

		Date Entered 10/E0/2010 0.04.00 1 M
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	Yes	Are the COC seals intact?
4	Yes	Please specify the Temperature inside the container (in degC) 2.0
. 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 commentsSpecify
14	NA	Corrective actions (Specify item number and corrective action taken).

Internal Chain of Custody

		Loc		1		 -			Loc	<u> </u>		A AND A MARKET
		or		1	l .				or	1 .	A/	
Lab#:	DateTime:	User	Nu	M.	Analysis	 J	Lab#:	DateTime:	User	Nu	M.	Analysis
AC75409-001	10/28/13 16:50	VINCE	0	M	Received		•					
AC75409-001	10/28/13 18:54	VINCE	0	М	Login							
AC75409-001	10/29/13 10:12	R30	2	A	NONE							
AC75409-001	10/31/13 09:38	SG	2	A	GRO							
AC75409-001	10/31/13 09:43	R30	2	Α	NONE							
AC75409-001	10/28/13 22:04	PA	3	A	mixing	 						
AC75409-001	10/28/13 22:05	R12	3	A	NONE							•
AC75409-001	10/29/13 09:39	HS	3	Α	%solids							
AC75409-001	10/29/13 15:06	R12	3	Α	NONE							
AC75409-001	10/29/13 16:32	RAMO	3	A	TCLP							<i>₽</i>
AC75409-001	10/29/13 16:33	RAMO	3	A	R12	 						
AC75409-001	10/30/13 09:02	SDL	3	A	PH							
AC75409-001	10/30/13 13:59	HS	3	Α	rcn/rs							
AC75409-001	10/30/13 16:42	R12	3	A	NONE			•				
AC75409-001	11/03/13 11:19	KVR	3	Α	TPH							
AC75409-001	11/03/13 16:57	R12	3	Α	NONE	 						
AC75409-001	11/04/13 10:06	sw	3	Α	zhe							
AC75409-001	11/04/13 10:07	R12	3	Α	NONE							
AC75409-001	10/31/13 09:43	R31	4	A	NONE							

Laboratory Chronicle

Client: Weston Solutions Inc.

Project: 9213 Gowanus

HCV Project #: 3102819

Lab#: AC75409-001

Sample ID: 9213-WC-02

	Prep .	Prep		Analytical	Analysis	
Test Code	Method	Date	Ву	Method	Date	Ву
% Solids SM2540G				SM 2540G	10/29/13 00:00	hossain
Diesel Range Organics 8015B	Mod. Shaker	11/03/13	KVR	EPA 8015D	11/4/13 13:38	RAK/KD/AHD
Gasoline range organics 8015B	EPA5030/5035		•	EPA 8015D	10/31/13 10:27	SG
Ignitability (EPA 1030)		10/30/13	SDL	EPA 1030	10/30/13 00:00	SDL
Mercury (TCLP) 7470A	EPA 7470A	10/31/13	Julijana	EPA 7470A	10/31/13 15:58	OA
pH 9040C/9045D				9040C/9045D	10/30/13 13:55	SDL
Reactive Cyanide	SW846 7.3.3	10/30/13	hossain	SW846 7.3.3	10/31/13 10:46	af
Reactive Sulfide	SW846 7.3.4	10/30/13	HS	SW846 7.3.4	10/31/13 00:00	HS
TCLP Herbicides 8151	EPA 8151A	10/31/13	тагіе	EPA 8151A	11/1/13 17:14	MAS
TCLP Metals 6010	3005&10/3050	10/31/13	Julijana	EPA 6010C	10/31/13 11:16	SRB
TCLP Metals Extraction 1311	EPA 1311	10/29/13	Ramos		10/30/13 00:00	Ramos
TCLP Organics Extraction 1311	EPA 1311	10/29/13	Ramos		10/30/13 00:00	Ramos
TCLP Pesticides 8081	EPA 3510	11/05/13	lynda ·	EPA 8081B	11/5/13 14:59	MAS
TCLP Semivolatiles 8270	EPA 3510	10/31/13	dyr	EPA 8270D	10/31/13 19:02	AHD/JB
TCLP Volatiles 8260	EPA 5030C	•		EPA 8260C	11/5/13 14:51	SG
TCLP Zero Headspace Extraction	EPA 1311	11/04/13	sw	•		

HCV 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

DATA QUALIFIERS

- 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.

^{*}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.

HCV Report Of Analysis

Client: Weston Solutions Inc.

Project: 9213 Gowanus

HCV Project #: 3102819

Sample ID: 9213-WC-02

Lab#: AC75409-001

Matrix: Soil

Collection Date: 10/25/2013

Receipt Date: 10/28/2013

% Solids SM2540G	·			·
Analyte	DF	Units	RL	Result
% Soilds	1	percent		82
Diesel Range Organics 8015B				
Analyte	DF	Units	RL	Result
Diesel Range Organics	1	mg/kg	73	ND
Gasoline range organics 8015B				
Analyte	DF	Units	RL	Result
Gasoline Range Organics	92.9	mg/kg	57	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
pH 9040C/9045D		***		
Analyte	DF	Units	RL	Result
pH	1	ph		9
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 Herbicides 8151				
Analyte	DF	Units	RL.	Result
2,4-D	1	mg/l	0.0050	ND
Silvex	1	mg/i	0.0050	ND
CLP Metals 6010				
Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	1	mg/i	0.25	ND
Cadmlum	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/f	0.050	0.36
Nickel	1	mg/l	0.10	ND
Selenium	1	mg/l	0.10	ND
Silver	1	mg/l	0.050	ND
CLP Pesticides 8081				

Analyte

Units

RL

DF HAZ. - 195 Result

	9213-WC-02 AC75409-001 Soil				Collection Date: Receipt Date:	
	Chlordane		1	mg/i	0.0010	ND
	Endrin		1	mg/l	0.00010	ND
	gamma-BHC		1	mg/l	0.00010	ND
	Heptachlor		1	mg/l	0.00010	ND
	Heptachlor Epoxide		1	mg/l	0,00010	ND
	Methoxychlor		1	mg/l	0.00010	ND
	Toxaphene		1	mg/l	0.0025	ND
7	CLP Semivolatiles 8270					
-	Analyte		DF	Units	RL	Result
	2,4,5-Trichlorophenol		1	mg/l	0.0080	ND
	2,4,6-Trichlorophenol		1 .	mg/i	0.0080	ND
	2,4-Dinitrotoluene		1	mg/l	0.0080	ND
	2-Methylphenol	•	1	mg/l	0.0020	ND
	3&4-Methylphenol		1	mg/l	0.0020	ND
	Hexachlorobenzene		1	mg/l	0.0080	ND
	Hexachlorobutadiene		1	mg/l	0.0080	ND
	Hexachloroethane		1	mg/l	0.0080	ND
	Nitrobenzene		1	mg/l	0.0080	ND
	Pentachlorophenol	•	1	mg/l	0.040	ND
	Pyridine		1	mg/l	0.040	ND
7	CLP Volatiles 8260	N 17 /8 W 7 W 1997 1997 1997			* * * * * * * * * * * * * * * * * * * *	•
-	Analyte		DF	Units	RL	Result
	1,1-Dichloroethene	•	1	mg/l	0.0010	ND
	1,2-Dichloroethane	1	1	mg/l	0.00050	ND
	1,4-Dichlorobenzene		1	mg/l	0.0010	ND .
	2-Butanone	å	1	mg/l	0.0010	ND
	Benzene		1	mg/l	0,00050	ND
	Carbon tetrachloride		1	mg/i	0.0010	ND
	Chlorobenzene		1	mg/l	0.0010	ND
	Chloroform		. 1	mg/l	0.0010	0.0010
	Tetrachloroethene		1	mg/l	0.0010	ND
	Trichloroethene		1	mg/l	0.0010	ND

Vinyl chloride

mg/l

0.0010

ND

Form1 ORGANICS REPORT

Sample Number: AC75409-001

Client Id: 9213-WC-02 Data File: 8M82587.D

Analysis Date: 10/31/13 10:27

Date Rec/Extracted: 10/28/13-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8015D

Matrix: Methanol Initial Vol: 5.38g:10ml

Final Vol: NA

Dilution: 92.9

Solids: 82

Units: mg/Kg

and the second s							
Cas # Co	mpound	RL	Conc	Cas #	Compound	RL	Conc
phog Gas	soline Range Organics	57	u				

Worksheet #: 282660

Total Target Concentration

(

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 usea

Form1

ORGANICS REPORT

Sample Number: DAILY BLANK

Client Id:

Data File: 8M82583.D

Analysis Date: 10/31/13 09:25

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

Units: mg/Kg

Cas # Compound RL Conc Cas # Compound RL Conc phcg Gasoline Range Organics 50 U

Worksheet #: 282660

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

Form1

ORGANICS PETROLEUM HYDROCARBON REPORT

Sample Number: AC75409-001

Client Id: 9213-WC-02

Data File: 7G32720.D Analysis Date: 11/04/13 13:38

Date Rec/Extracted: 10/28/13-11/03/13

Column:DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8015D

Matrix: Soil

Initial Vol: 5g

Final Vol: 1ml

Dilution: 1

Solids: 82

Units: mg/Kg

Cas # Compound RL Conc Cas # Compound RL Conc
PHCHPD2 Diesel Range Organics 73 U

Worksheet #: 282595

Total Target Concentration

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.

Form1

ORGANICS PETROLEUM HYDROCARBON REPORT

Sample Number: SMB29122

Client Id:

Data File: 7G32716.D

Analysis Date: 11/04/13 11:54

Date Rec/Extracted: NA-11/03/13

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8015D

Matrix: Soil

Initial Vol: 5g

Final Vol: 1ml

Dilution: 1

Solids: 100

Units: mg/Kg

		Oille. I	ng/1/g	
Cas # Compound	RL	Conc	Cas # Compound	RL Conc
PHCHPD2 Diesel Range Organics	60	U		

Worksheet #: 282595

Total Target Concentration

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

 $[\]it 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.

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AC75409-001 Matrix Soil

Client SampleID: 9213-WC-02

Project Number: 3102819 Received Date: 10/28/2013

Collect Date: 10/25/2013

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide (Reactive)	CN-REACTIVE	1	ND	mg/Kg	0.50	10/30/13	10/31/13
Ignitability Screen (POS/NEG)	IGNIT-1030	1	NEG			10/30/13	10/30/13
Burning Rate (mm/sec)	IGN!T-1030	1	NA			10/30/13	10/30/13
Flame Propagation (POS/NEG)	IGNIT-1030	1	NA			10/30/13	10/30/13
Hq	PH-SOIL	1	9	pН			10/30/13
Sulfide (Reactive)	S-REACTIVE	1	ND	mg/kg	100	10/30/13	10/31/13

MS/MSD/DUP Recovery

3102819 0015

Prep Batch: S-617

Sample ID: AC75428-002

Method: SW846 7.3.3

Matrix: Soil

Qc Type:	MS	Limits		MS	Sample			M	S/MSD/	DUP	. !	Non Spi	ke
Analyte	Amt	Recov	Dif	Conc	Conc	% Rec	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide (Reactive)	0.4	75-125	1	0.3328	0	83		20131031095	13	10/31/13 10:17	20131031095	15	10/31/13 10:21

	Qc Type: I	MSD	Lim	its		MSD	Sample				MS	S/MSD/	DUP		Non Spi	ke
Cycnids 0.4 75 125 20 1 0.3387 0 85 1.8 20131031095 14 10/31/13 10:19 20131031095 15 10/31/1	Analyte	Amt	Recov	Rpd	Dil	Conc	Conc	% Rec	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
(Reactive)	Cyanide	0.4	75-125	20	1	0.3387	0	85	1.8		20131031095	14	10/31/13 10:19	20131031095	15	10/31/13 10:21

LCS Recoveries

Cvanide (Rea	0.4 75-125	84					<u> </u>
Analyte	SW846 7.3. Amt Limits Amt Limits	% Rec Flags	% Rec Flags	% Rec Flags	% Rec Flags	% Rec Flags	
	Matrix:>	Soil	Soil	Soil	Soil	Soil	
	Analytical Method:>	SW846 7.3.3				-	
	Date/Time:>	10/31/13 10:15		ii ii			- 1
	QcBatchID:>	LCSS-617					- 1
	BatchRunID/RunID:>	201310310952-12					

Instrument: DA1

Analysis Meth: SW846 7.3.3

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide (Reactive)	20131031095	9	ICV	96	0.4	90-110
Cyanide (Reactive)	20131031095	21	CCV	98	0.4	90-110
Cyanide (Reactive)	20131031095	33	CCV	98	0.4	90-110

Blank Summary

Instrument: DA1

Qc Type: Meth	od Blank Summary	Prep i	Date: 1	0/30/13		
Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20131031095	10/31/13 10:13	MBS-617	11	Cyanide (ND	0.50
Qc Type: ICB S	Summary	Prep	Date: N	IA	٠	
Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20131031095	10/31/13 10:10	CCB	10	Cyanide (ND	0.020
Qc Type: CCB	Summary	Prep	Date: N	ľΑ		
Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20131031095	10/31/13 10:36	ССВ	22	Cyanide (ND	0.020
20131031095	10/31/13 10:58	CCB	34	Cyanide (ND	0.020

Analysis Type: PH-S

Batch Number: PH-S-964

Units: pH

Calibration	Curve	Information

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
DUP	AC75427-004 LCS	9 4.4	NA 75-125	20 NA	7.81 4.3	NA 98	1.3 NA	

Qc Summary Results

Analytical Method(s) 9040C/9045D

Sam #	Туре	мв	Result	RL S	er iol	Ful Resu	l PH lt			Prep Date	Prep By		Anal By	
LCS	LCS	des tentrologische Andre Septer S. St. Steiner	4.3		100	4.3	4.30	e dem commentative de commentative and active manifes desired and stated described and commentative manifestat The commentative described and active and active manifestative and active active and active and active active a	in was pili a grap i dirik a kadika dirin inkanin inkanin inkanin inkanin	+ E3/4 ml : - 31 x 21	e produjena pe jese i je se n	10/30/13	SDL	
AC75427-004	DUP		7.8	j	100	7.81	7.81					10/30/13	SDL	
AC75427-004	Sample	•	7.7	1	100	7.71	7.71					10/30/13	SDL	
AC75403-002	Sample		7.2	1	100	7,16	7.16					10/30/13	SDL	
AC75403-004	Sample		7.5		00	7.49	7,49	appending the second				10/30/13	SDL	
AC75427-005	Sample		7.7	1	100	7,66	7.66					10/30/13	SDL	
AC75427-006	Sample		7.4		100	7.35	7.35					10/30/13		
AC75428-002	Sample		7.5		100	7.48	7.48					10/30/13		
AC75409-001	Sample		9		100	9	9.00					10/30/13		
AC75343-002	Sample		7.2		100	7,25	7.25					10/30/13	SDL	

Serriconis 10/30/13 10/31/13

Units: mg/kg

Calibration	Curve	Information
Callulation	Ouite	momation

production and a state of	serce-construction and the contract of the con											
Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags				
CAL-01	CAL-01-10/31/13	16	90-110	NA	16.8315	105	NA					
LCS	LCS	400	75-125	NA	410.76875	103	NA					
MS	AC75428-002	400	75-125	NA	410.76875	103	NA					
MSD	AC75428-002	400	75-125	20	400.75	100	2.5					

Analytical Method(s)

SW846 7.3.4

Sam #	Туре	МВ	Result	RL	Per Sol	Full Resul	Titr Vol t	lod Vol	ÐF	Sam Wt (g)	Scrb Vol (ml)	Prep Date	Prep By	Anal Date	Anal By
CAL-01-10/31/13	CAL-01	ind the palls thank distributions and delication to the a st	17	I di Sagna Li Martino A	100	16.831	5.8	10	1	250	250	en-vitage (Chiarte-Cord) (1.5 924 c	~**. * *********	10/31/13	HS
MB-1-10/30/13	MB	MB-1-10/30/13	ND	100	100	0	10.0	10	1	10	250	10/30/13	HS	10/31/13	HS
LCS	LCS	MB-1-10/30/13	410	100	100	410.77	5.9	10	i	10	250	10/30/13	HS	10/31/13	HS
AC75428-002	MS	MB-1-10/30/13	410	100	91	410.77	5.9	10	ł	10	250	10/30/13	HS	10/31/13	HS
AC75428-002	MSD	MB-1-10/30/13	400	100	91	400.75	6.0	10		10	250	10/30/13	HS	10/31/13	HS
AC75428-002	Sample	MB-1-10/30/13	ND	100	91	0	10.0	10	1	10	250	10/30/13	HS	10/31/13	HS
AC75403-001	Sample	MB-1-10/30/13	ND	100	100	20.038	9.8	10	1	10 "	250	10/30/13	HS	10/31/13	HS
AC75403-002	Sample	MB-1-10/30/13	ND	100	48	30.056	9.7	10	1	10	250	10/30/13	HS	10/31/13	HS
AC75403-003	Sample	MB-1-10/30/13	ND	100	100	20.038	9.8	10	1	10	250	10/30/13	HS	10/31/13	HS
AC75403-004	Sample	MB-1-10/30/13	ND	100	59	20,038	9,8	10		10	250	10/30/13	HS	10/31/13	HS
AC75403-005	Sample	MB-1-10/30/13	ND	100	100	30.056	9.7	10	1	10	250	10/30/13	HS	10/31/13	HS
AC75403-006	Sample	MB-1-10/30/13	ND	100	100	20.038	9.8	10	1	10	250	10/30/13	HS	10/31/13	HS
AC75427-004	Sample	MB-1-10/30/13	ND	100	95	20.038	9.8	10	1	10	250	10/30/13	HS	10/31/13	HS
AC75427-005	Sample	MB-1-10/30/13	ND	100	92	10.019	9.9	10	1	10	250	10/30/13	HS	10/31/13	HS
AC75427-006	Sample	MB-1-10/30/13	ND	100	92	20.038	9.8	.10	1	10	250	10/30/13	HS	10/31/13	HS
AC75409-001	Sample	MB-1-10/30/13	ND	100	82	10,019	9.9	10	I	10	250	10/30/13	HS	10/31/13	HS
AC75343-002	Sample	MB-1-10/30/13	ND	100	76	10.019	9.9	10	i	10	250	10/30/13	HS	10/31/13	HS
AC75344-010	Sample	MB-1-10/30/13	ND	100	95	20.038	9,8	10	1	10	250	10/30/13	HS	10/31/13	HS
AC75344-012	Sample	MB-1-10/30/13	ND	100	93	20.038	9.8	10	1 .	10	250	10/30/13	HS	10/31/13	HS
AC75370-001	Sample	MB-1-10/30/13	ND	100	100	10.019	9.9	10		10	250	10/30/13	HS	10/31/13	HS

% Solids Report

Analysis Type: SOLIDS-SS BatchID: SOLIDS-SS-2422

QcType	SampleID:	Rounded Result	Raw Result	Units	Tare Weight	Wet Weight	Dry Weight	Analysis Date	Analyzed By	QC RPD	Rpd Limit
DUP	AC75394-001	93	93.25946	Percent	1.09	11.92	11.18	10/29/13	hossain	0.4	5
Sample	AC75394-001	93	92.88355	Percent	1.10	11.92	11.15	10/29/13	hossain		
Sample	AC75409-001	82	82.37548	Percent	1.09	11.53	9.69	10/29/13	hossain		
Sample	AC75411-001	87	87.34770	Percent	1.09	11.76	10.41	10/29/13	hossain		
Sample	AC75411-002	73	72.89448	Percent	1.08	11.41	8.61	10/29/13	hossain		
Sample	AC75411-003	81 .	80.58252	Percent	1.10	12.43	10.22	10/29/13	hossain	•	
Sample	AC75411-004	81	81.46067	Percent	1.08	11.76	9.78	10/29/13	hossain		

^{* -} Indicates Failed Rpd Criteria

Form1 ORGANICS VOLATILE REPORT

Sample Number: AC75409-001(T)

Client Id: 9213-WC-02

Data File: 3M42069.D

Analysis Date: 11/05/13 14:51 Date Rec/Extracted: 10/28/13-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: mg/L

	=									
_	Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc		
	75-35-4	1,1-Dichloroethene	0.0010	U	108-90-7	Chlorobenzene	0.0010	U		
	107-06-2	1,2-Dichloroethane	0.00050	U	67-66-3	Chloroform	0.0010	0.0010		
	106-46-7	1,4-Dichlorobenzene	0.0010	U.	127-18-4	Tetrachloroethene	0.0010	· U		
	78-93-3	2-Butanone	0.0010	U	79-01-6	Trichloroethene	0.0010	, U		
	71-43-2	Benzene	0.00050	U	75-01-4	Vinyl Chloride	0.0010	U		
	56-23-5	Carbon Tetrachloride	0.0010	υ						

^{0.001}

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 usea

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK

Client Id:

Data File: 3M42068.D Analysis Date: 11/05/13 14:34

Date Rec/Extracted:

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml Final Vol: NA

Dilution: 1.00

Solids: 0

Units: mg/L	_
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Cas#	Compound	RL_	Conc	Cas#	Compound	RL	Conc
75-35-4	1,1-Dichloroethene	0.0010	U	108-90-7	Chlorobenzene	0.0010	U
107-06-2	1,2-Dichloroethane	0.00050	Ų	67-66-3	Chioroform	0.0010	U
106-46-7	1,4-Dichlorobenzene	0.0010	U	127-18-4	Tetrachloroethene	0.0010	U
78-93-3	2-Butanone	0.0010	U	79-01-6	Trichloroethene	0.0010	U
71-43-2	Benzene	0.00050	U	75-01-4	Vinyl Chloride	0.0010	U
56-23-5	Carbon Tetrachloride	0.0010	U				

Worksheet #: 283046

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 usea

Form₁

ORGANICS VOLATILE REPORT

Sample Number: EF-1V-176003(110513)

Client Id:

Data File: 3M42071.D

Analysis Date: 11/05/13 15:24

Date Rec/Extracted:

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: mg/L

Compound		Conc	Cas #	Compound	RL	Conc	
1,1-Dichloroethene	0.0010	U	108-90-7	Chlorobenzene	0.0010	U	
1,2-Dichloroethane	0.00050	U	67-66-3	Chloroform	0.0010	U	
1,4-Dichlorobenzene	0.0010	U	127-18-4	Tetrachloroethene	0.0010	U	
2-Butanone	0.0010	U	79-01-6	Trichloroethene	0.0010	Ų	
Benzene	0.00050	U	75-01-4	Vinyl Chloride	0.0010	U	
Carbon Tetrachloride	0.0010	U ·		•			
	1,1-Dichloroethene 1,2-Dichloroethane 1,4-Dichlorobenzene 2-Butanone Benzene	1,1-Dichloroethene 0.0010 1,2-Dichloroethane 0.00050 1,4-Dichlorobenzene 0.0010 2-Butanone 0.0010 Benzene 0.00050	1,1-Dichloroethene 0.0010 U 1,2-Dichloroethane 0.00050 U 1,4-Dichlorobenzene 0.0010 U 2-Butanone 0.0010 U Benzene 0.00050 U	1,1-Dichloroethene 0.0010 U 108-90-7 1,2-Dichloroethane 0.00050 U 67-66-3 1,4-Dichlorobenzene 0.0010 U 127-18-4 2-Butanone 0.0010 U 79-01-6 Benzene 0.00050 U 75-01-4	1,1-Dichloroethene 0.0010 U 108-90-7 Chlorobenzene 1,2-Dichloroethane 0.00050 U 67-66-3 Chloroform 1,4-Dichlorobenzene 0.0010 U 127-18-4 Tetrachloroethene 2-Butanone 0.0010 U 79-01-6 Trichloroethene Benzene 0.00050 U 75-01-4 Vinyl Chloride	1,1-Dichloroethene 0.0010 U 108-90-7 Chlorobenzene 0.0010 1,2-Dichloroethane 0.00050 U 67-66-3 Chloroform 0.0010 1,4-Dichlorobenzene 0.0010 U 127-18-4 Tetrachloroethene 0.0010 2-Butanone 0.0010 U 79-01-6 Trichloroethene 0.0010 Benzene 0.00050 U 75-01-4 Vinyl Chloride 0.0010	1,1-Dichforoethene 0.0010 U 108-90-7 Chlorobenzene 0.0010 U 1,2-Dichloroethane 0.00050 U 67-66-3 Chloroform 0.0010 U 1,4-Dichlorobenzene 0.0010 U 127-18-4 Tetrachloroethene 0.0010 U 2-Butanone 0.0010 U 79-01-6 Trichloroethene 0.0010 U Benzene 0.00050 U 75-01-4 Vinyl Chloride 0.0010 U

Worksheet #: 283046

Total Target Concentration

^{- (}

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 usea

ORGANICS SEMIVOLATILE REPORT

Sample Number: AC75409-001(T)

Client Id: 9213-WC-02 Data File: 9M53628.D

Analysis Date: 10/31/13 19:02 Date Rec/Extracted: 10/28/13-10/31/13

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D

Matrix: Aqueous Initial Vol: 250ml

Final Vol: 1ml

Dilution: 1

Solids: 0

Units: ma/L

	Omior mg/2										
Cas#	Compound	RL	Conc	Cas #	Compound	RL	Conc				
95-95-4	2,4,5-Trichlorophenol	0.0080	U	87-68-3	Hexachlorobutadiene	0.0080	U				
88-06-2	2,4,6-Trichlorophenol	0.0080	υ	67-72-1	Hexachloroethane	0.0080	U				
121-14-2	2,4-Dinitrotoluene	0.0080	U	98-95-3	Nitrobenzene	0.0080	U				
95-48-7	2-Methylphenol	0.0020	υ	87-86-5	Pentachlorophenol	0.040	U				
106-44-5	3&4-Methylphenol	0.0020	U	110-86-1	Pyridine	0.040	υ				
118-74-1	Hexachlorobenzene	0.0080	υ								

Worksheet #: 282548

Total Target Concentration

R - Retention Time Out

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.

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 usea

ORGANICS SEMIVOLATILE REPORT

Sample Number: WMB29092

Client Id:

Data File: 9M53622.D

Analysis Date: 10/31/13 16:46

Date Rec/Extracted: NA-10/31/13

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D

Matrix: Aqueous

Initial Vol: 1000ml

Final Vol: 1ml

Dilution: 1

Solids: 0

Units: mg/L

			•	··· • · · ·			
Cas#	Compound	RL	Conc	Cas#	Compound	RL	Conc
95-95-4	2,4,5-Trichlorophenol	0.0020	U	87-68-3	Hexachlorobutadiene	0.0020	U
88-06-2	2,4,6-Trichlorophenol	0.0020	· U	67-72-1	Hexachloroethane	0.0020	U
121-14-2	2,4-Dinitrotoluene	0.0020	U	98-95-3	Nitrobenzene	0.0020	· U
95-48-7	2-Methylphenol	0.00050	Ų	87-86-5	Pentachlorophenol	0.010	U ·
106-44-5	3&4-Methylphenol	0.00050	U	110-86-1	Pyridine	0.010	Ũ
118-74-1	Hexachlorobenzene	0.0020	U				

Worksheet #: 282548

Total Target Concentration

0

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 usea

ORGANICS SEMIVOLATILE REPORT

Sample Number: EF-1 V-175597(10/30)

Client Id:

Data File: 9M53626.D

Analysis Date: 10/31/13 18:17

Date Rec/Extracted: NA-10/31/13

Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D

Matrix: Aqueous

Initial Vol. 250ml

Final Vol: 1ml

Dilution: 1

Solids: 0

Units:	mg/L
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Cas #	Compound	RL.	Conc	Cas #	Compound	<u>RL</u>	Conc
95-95-4	2,4,5-Trichlorophenol	0.0080	U	87-68-3	Hexachlorobutadiene	0.0080	U
88-06-2	2,4,6-Trichlorophenol	0.0080	U	67-72-1	Hexachloroethane	0.0080	U
121-14-2	2,4-Dinitrotoluene	0.0080	U	98-95-3	Nitrobenzene	0.0080	U
95-48-7	2-Methylphenol	0.0020	U	87-86-5	Pentachlorophenol	0.040	U
106-44-5	3&4-Methylphenol	0.0020	U	110-86-1	Pyridine	0.040	U
118-74-1	Hexachlorobenzene	0.0080	U				

Worksheet #: 282548

Total Target Concentration

0

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 usea

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
9M53622.D	WMB29092	Aqueous	10/31/13 16:46	1		37	21*	105	111	100	127
9M53626.D	EF-1 V-17559	Aqueous	10/31/13 18:17	1		· 76	60	113	113	111	144
9M53628.D	AC75409-001	Aqueous	10/31/13 19:02	1		75	58	109	110	102	138
10M40878.E	WMB29092(M	Aqueous	10/31/13 16:45	1		46	27	116	110	122	124
10M40882.E	AC75387-001	Aqueous	10/31/13 18:14	1		78	63	104	106	114	111
10M40883.E	AC75387-001	Aqueous	10/31/13 18:36	1		82	68	106	100	113	115
10M40884.E	AC75387-001	Aqueous	10/31/13 18:59	1		77	63	101	97	112	115

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8270D

Aqueous Limits

Compound	Spike Amt	Limits
S1=2-Fluorophenol	100	29-113
S2=Phenoi-d5	100	27-115
S3=Nitrobenzene-d5	50	51-139
S4=2-Fluorobiphenyl	50	53-129
S5=2,4,6-Tribromophenol	Z 2150	54-149
S6=Terphenyi-d14	Z 2 50	55-146

ORGANICS PESTICIDE REPORT

Sample Number: AC75409-001(T)

Client Id: 9213-WC-02 Data File: 6G44766.D

Analysis Date: 11/05/13 14:59 Date Rec/Extracted: 10/28/13-11/05/13

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081B

Matrix: Aqueous

Initial Vol: 100ml

Final Vol: 5ml

Dilution: 1

Solids: 0

Units: mg/L

Cas#	Compound	RL	Conc	Cas #	Compound	RL	Conc
	Chlordane	0.0010	U	1024-57-3	Heptachlor Epoxide	0.00010	U
72-20-8	Endrin	0.00010	U	72-43-5	Methoxychlor	0.00010	บ
58-89-9	gamma-BHC	0.00010	υ	8001-35-2	Toxaphene	0.0025	U
76-44-8	Heptachlor	0.00010	U				

Worksheet #: 283240

Total Target Concentration

R - Retention Time Out

ColumnID: (^) Indicates results from 2nd column

J - Indicates an estimated value when a compound is detected at less than the

⁽

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.

specified detection limit. d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

ORGANICS PESTICIDE REPORT

Sample Number: WMB29136

Client Id:

Data File: 5G49222.D Analysis Date: 11/06/13 11:13

Date Rec/Extracted: NA-11/05/13

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081B

Matrix: Aqueous

Initial Vol: 1000ml

Final Vol: 5ml

Dilution: 1

Solids: 0

Units: mg/L

Cas#	Compound	RL	Conc	Cas #	Compound	RL	Conc
57-74-9	Chlordane	0.00010	U	1024-57-3	Heptachlor Epoxide	0.000010	U
72-20-8	Endrin	0.000010	U	72-43-5	Methoxychlor	0.000010	U
58-89-9	gamma-BHC	0.000010	U	8001-35-2	Toxaphene	0.00025	υ
76-44-8	Heptachlor	0.000010	U				

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 usea

ORGANICS PESTICIDE REPORT

Sample Number: WMB29090

Client Id:

Data File: 5G49116.D Analysis Date: 11/01/13 16:56

Date Rec/Extracted: NA-10/31/13

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081B

Matrix: Aqueous

Initial Vol: 1000ml

Final Vol: 5ml

Dilution: 1

Solids: 0

Units: mg/L

			01,1001					
Cas#	Compound	RL	Conc	Cas #	Compound	RL	Conc	
57-74-9	Chlordane	0.00010	, U	1024-57-3	Heptachlor Epoxide	0.000010	U	
72-20-8	Endrin	0.000010	U	72-43-5	Methoxychlor	0.000010	U	
58-89-9	gamma-BHC	0.000010	U	8001-35-2	Toxaphene	0.00025	U	
76-44-8	Heptachlor	0.000010	U					

Worksheet #: 283240

Total Target Concentration

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R - Retention Time Out

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.

specified detection limit. d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

J - Indicates an estimated value when a compound is detected at less than the

ORGANICS PESTICIDE REPORT

Sample Number: EF-1-V-175597(10/30)

Client Id:

Data File: 5G49079.D Analysis Date: 10/31/13 21:01

Date Rec/Extracted: NA-10/31/13

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081B

Matrix: Aqueous

Initial Vol: 100ml

Final Vol: 5ml

Dilution: 1

Solids: 0

Units: mg/L

Cas #	Compound	RL	Conc	Cas#	Compound	RL	Conc
57-74-9	Chlordane	0.0010	U	1024-57-3	Heptachlor Epoxide	0.00010	U
72-20-8	Endrin	0.00010	U	72-43-5	Methoxychlor	0.00010	U
58-89-9	gamma-BHC	0.00010	U	8001-35-2	Toxaphene	0.0025	U
76-44-8	Heptachlor	0.00010	U				

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 usea

ORGANICS HERBICIDE REPORT

Sample Number: AC75409-001(T)

Client Id: 9213-WC-02 Data File: 2G85501.D

Analysis Date: 11/01/13 17:14 Date Rec/Extracted: 10/28/13-10/31/13

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8151A

Matrix: Aqueous

Initial Vol: 100ml

Final Vol: 10ml Dilution: 1

Solids: 0

Units: mg/L

Cas # Compound	RL	Conc	Cas # Compound	RL	Conc
94-75-7 2,4-D	0.0050	U	93-72-1 Silvex	0,0050	U

Worksheet #: 282571

Total Target Concentration

U - Indicates the compound was analyzed but not detected. B - Indicates the analyte was found in the blank as well as in the sample.

 $\it J$ - Indicates an estimated value when a compound is detected at less than the specified detection limit.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

ORGANICS HERBICIDE REPORT

Sample Number: WMB29088

Client Id:

Data File: 2G85494.D Analysis Date: 11/01/13 14:52

Date Rec/Extracted: NA-10/31/13

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8151A

Matrix: Aqueous Initial Vol: 1000ml

Final Vol: 10ml

Dilution: 1

Solids: 0

Units: mg/L

Cas # Compound	RL	Conc	Cas #	Compound	RL	Conc
94-75-7 2,4-D	0.00050	U	93-72-1	Silvex	0.00050	U

Worksheet #: 282571

Total Target Concentration

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 usea

ORGANICS HERBICIDE REPORT

Sample Number: EF-1-V-175597(10/30)

Client Id:

Data File: 2G85507.D Analysis Date: 11/01/13 19:15

Date Rec/Extracted: NA-10/31/13

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8151A

Matrix: Aqueous

Initial Vol: 100ml

Final Vol: 10ml

Dilution: 1

Solids: 0

Units: ma/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
94-75-7	2,4-D	0.0050	U	93-72-1	Silvex	0.0050	U

Worksheet #: 282571

Total Target Concentration

ColumnID: (^) Indicates results from 2nd column

 \emph{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 usea

FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 10/31/13

Data File: T15651A2

Lab Name:

Veritech

Prep Batch: 27364

Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Lab Code: Contract:

Nras No:

Instrument: PEICP2A

Sdg No:

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 3102819

Case No:

Analyte	ICB V-174666- 9	CCB-22	CCB-34	CCB-44	CCB-53	MB 27364 (1)- 12	EF-V-175597- 48
\rsenic	.10	.1 U	.1U				
3arium	.25 U	.25 U	.25 U	.25 U	.25 U	.25 U	.25 U
Beryllium	012 U	.012 U	.012 U	.012 U	.012 U	.012 U	.012 U
Cadmium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Chromium	.1 U	.1 U	.1 U	.1 U	.1 U	.1U	.1U
.ead	.05 U	.05 U	.05 U	.05 U	.05 U	.05∪	.05U
Vickel	.10	.1 U	.1 U	.1 U	.1 U	.1U	.10
Selenium	.1 U	.1 ป	.1 U	.1 U	.1 U	.10	.1U
Silver	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05U

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: 10/31/13

Data File: H15651T

Lab Name: Veritech

Lab Code:

Prep Batch: 27364 Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Contract:

Instrument: HGCV1A

Nras No:

Sdg No:

Units: All units in ppm except Hg and icp-ms in ppb

Case No:

Project Number: 3102819

	ICB-10	CCB-22	CCB-34	CCB-40	MB 27364 (1)-	EF-V-175597-	
Analyte					11	38	
Mercury	.7 U	.7 ป	.7 U	.7 U	.7 U	.7U	

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

FORM5/FORM7 SPIKE RECOVERY DATA

PREP BATCH: 27364

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType:	LCSMR	Mat	rix: TCLP	· · · · · · · · · · · · · · · · · · ·	Sample	eID: LC	SW MR 27364	4				
Analyte	Batchid	DĘ	Data Fil	Seq#:			Spk Conc:		Spk Adde	Recov	Qual Lo Lim	Hi Lir
Arsenic	27364	1	T15651A2	14	•	•	0.5042		0.500	101	80	120
Barium	27364	1	T15651A2	14	· ·		0.4995		.5	100	80	120
Cadmium	27364	1	T15651A2	14			0.4966		0.500	99	80	120
Chromium	27364	1	T15651A2	14			0.4972		0.500	99	80	120
_ead	27364	1	T15651A2	14			0.5094		.5	102	80	120
Mercury	27364	1	H15651T	13			9.9417		10	99	80	120
Vickel	27364	1	T15651A2	14			0.5038		0.500	101	80	120
Selenium	27364	1	T15651A2	14			0.5106		0.500	102	80	120
Silver	27364	1	T15651A2	14		,	0.0974	<u>., </u>	0.100	97	80	120
TxtQcType:	LCS	Mat	trix: TCLP		Sample	eID: LC	SW 27364			···········		-
Analyte	Batchid	DF	Data Fil	Seq#:			Spk Conc:		Spk Adde	Recov	Qual Lo Lim	Hi Liı
Arsenic	27364	1	T15651A2	13			0.5127		0.500	103	80	120
3arium	27364	1	T15651A2	13			0.4994		.5	100	80	120
Cadmium	27364	1	T15651A2	13			0.4974		0.500	99	80	120
Chromium	27364	1	T15651A2	13			0.5018	,	0.500	100	80	120
_ead	27364	1	T15651A2	13			0.5153		.5	103	80	120
Mercury	27364	1	H15651T	12			10.1018		10	101	80	120
Vickel	27364	1	T15651A2	13			0.5076		0.500	102	80	120
Selenium	27364	1	T15651A2	13			0.5152		0.500	103	80	120
							·-·					
Silver	27364	1	T15651A2	13			0.0986		0.100	99	80	120
Silver TxtQcType:		1 Mat		13	Sample	elD: AC	0.0986		0.100	99	60	120
TxtQcType:				13 Seq#:	Sample NS Data Fil		C75403-001	NS Conc:	Spk Adde		Qual Lo Lim	
TxtQcType: Analyte	MS	Mat	trix: TCLP				C75403-001 Spk Conc:	NS Conc:				
TxtQcType: Analyte Arsenic	MS BatchId	Mat DF	trix: TCLP	Seq#:	NS Data Fil	Seq#	C75403-001 Spk Conc: 0.4926		Spk Adde	Recov	Qual Lo Lim	
TxtQcType: Analyte Arsenic Barium	MS BatchId 27364 27364	Mat DF	trix: TCLP Data Fil T15651A2	Seq#:	NS Data Fil T15651A2 T15651A2	Seq#	Spk Conc: 0.4926 0.5311	.1U .25U	Spk Adde 0.5 0.5	Recov 99 106	Qual Lo Lim 50	
TxtQcType: Analyte Arsenic Barium Cadmium	MS BatchId 27364	Mat DF 1	Data Fil T15651A2 T15651A2 T15651A2	Seq#: 24 24	NS Data Fil T15651A2 T15651A2 T15651A2	Seq# 23 23	Spk Conc: 0.4926 0.5311 0.4898	.1U .25U .05U	Spk Adde 0.5 0.5 0.5	Recov 99	Qual Lo Lim 50 50 50	
TxtQcType: Analyte Arsenic Barium Cadmium Chromium	MS Batchld 27364 27364 27364	Mat DF 1 1 1	Data Fil T15651A2 T15651A2	Seq#: 24 24 24	NS Data Fil T15651A2 T15651A2	Seq# 23 23 23	Spk Conc: 0.4926 0.5311 0.4898 0.4960	.1U .25U	Spk Adde 0.5 0.5	Recov 99 106 98	Qual Lo Lim 50 50	
TxtQcType: Analyte Arsenic Barium Cadmium Chromium	MS Batchid 27364 27364 27364 27364 27364	Mat DF 1 1 1 1	Data Fil T15651A2 T15651A2 T15651A2 T15651A2 T15651A2	Seq#: 24 24 24 24	NS Data Fil T15651A2 T15651A2 T15651A2 T15651A2 T15651A2	Seq# 23 23 23 23	Spk Conc: 0.4926 0.5311 0.4898	.1U .25U .05U .1U .05U	Spk Adde 0.5 0.5 0.5 0.5 0.5	Recov 99 106 98 99	Qual Lo Lim 50 50 50 50 50	
TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Mercury	MS Batchld 27364 27364 27364 27364 27364 27364 27364	Mat DF 1 1 1 1 1 1	TCLP Data Fil T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 H15651T	Seq#: 24 24 24 24 24 18	NS Data Fil T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 H15651T	Seq# 23 23 23 23 23 17	Spk Conc: 0.4926 0.5311 0.4898 0.4960 0.4949 10.6284	.1U .25U .05U .1U .05U .70U	Spk Adde 0.5 0.5 0.5 0.5 0.5	Recov 99 106 98 99 99	Qual Lo Lim 50 50 50 50 50 50	
TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Mercury	MS Batchld 27364 27364 27364 27364 27364 27364 27364	DF 1 1 1 1 1 1 1	TCLP Data Fil T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 H15651T T15651A2	Seq#: 24 24 24 24 24 18	NS Data Fil T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 H15651T T15651A2	Seq# 23 23 23 23 23 17 23	Spk Conc: 0.4926 0.5311 0.4898 0.4960 0.4949 10.6284 0.4943	.1U .25U .05U .1U .05U .70U .1U	Spk Adde 0.5 0.5 0.5 0.5 0.5 10 0.5	Recov 99 106 98 99 99 106 99	Qual Lo Lim 50 50 50 50 50 50 50 50	
TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Mercury Nickel Gelenium	MS Batchld 27364 27364 27364 27364 27364 27364 27364	Mat DF 1 1 1 1 1 1 1 1	TCLP Data Fil T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 H15651T	Seq#: 24 24 24 24 24 18	NS Data Fil T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 H15651T	Seq# 23 23 23 23 23 17	Spk Conc: 0.4926 0.5311 0.4898 0.4960 0.4949 10.6284	.1U .25U .05U .1U .05U .70U	Spk Adde 0.5 0.5 0.5 0.5 0.5	Recov 99 106 98 99 99	Qual Lo Lim 50 50 50 50 50 50	Hi Li
TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Mercury Nickel Selenium	MS Batchld 27364 27364 27364 27364 27364 27364 27364 27364 27364	Mat DF 1 1 1 1 1 1 1 1 1 1 1 1 1	Tix: TCLP Data Fil T15651A2 T15651A2 T15651A2 T15651A2 H15651A2 T15651A2 T15651A2 T15651A2	Seq#: 24 24 24 24 24 18 24 24	NS Data Fil T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 H15651T T15651A2 T15651A2 T15651A2	Seq# 23 23 23 23 17 23 23 23	Spk Conc: 0.4926 0.5311 0.4898 0.4960 0.4949 10.6284 0.4943 0.4930	.1U .25U .05U .1U .05U .70U .1U	Spk Adde 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	Recov 99 106 98 99 99 106 99	Qual Lo Lim 50 50 50 50 50 50 50 50 50	
TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Mercury Mickel Selenium Silver TxtQcType:	MS Batchld 27364 27364 27364 27364 27364 27364 27364 27364 27364	Mat DF 1 1 1 1 1 1 1 1 1 1 1 1 1	TCLP Data Fil T15651A2 T15651A2 T15651A2 T15651A2 H15651T T15651A2 T15651A2 T15651A2	Seq#: 24 24 24 24 24 18 24 24	NS Data Fil T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 H15651T T15651A2 T15651A2 T15651A2	Seq# 23 23 23 23 23 17 23 23 23 20 EID: AC	Spk Conc: 0.4926 0.5311 0.4898 0.4960 0.4949 10.6284 0.4943 0.4930 0.0967	.1U .25U .05U .1U .05U .70U .1U	Spk Adde 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	Recov 99 106 98 99 99 106 99 99	Qual Lo Lim 50 50 50 50 50 50 50 50 50	
TxtQcType: Analyte Arsenic Barium Cadmium Chromium ead Mercury dickel Gelenium Gillver TxtQcType:	MS BatchId 27364 27364 27364 27364 27364 27364 27364 27364 MS	Mat DF 1 1 1 1 1 1 1 Mate	trix: TCLP Data Fil T15651A2 T15651A2 T15651A2 T15651A2 H15651T T15651A2 T15651A2 T15651A2 T15651A2	Seq#: 24 24 24 24 24 24 24 24 24 24 24 24 24	NS Data Fil T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 H15651T T15651A2 T15651A2 T15651A2	Seq# 23 23 23 23 23 27 23 23 23 23 23 23 23 Seq#	Spk Conc: 0.4926 0.5311 0.4898 0.4960 0.4949 10.6284 0.4943 0.4930 0.0967	.1U .25U .05U .1U .05U .70U .1U .1U	Spk Adde 0.5 0.5 0.5 0.5 0.5 0.5 0.5 10 0.5 0.5 0.10	Recov 99 106 98 99 99 106 99 99	Qual Lo Lim 50 50 50 50 50 50 50 50 50	Hi Li
TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Mercury Bickel Belenium Sillver TxtQcType: Analyte Arsenic	MS Batchid 27364 27364 27364 27364 27364 27364 27364 27364 MS Batchid	Mat DF 1 1 1 1 1 1 1 Mate DF	trix: TCLP Data Fil T15651A2 T15651A2 T15651A2 T15651A2 H15651T T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 T15651A2	Seq#: 24 24 24 24 18 24 24 24 25 Seq#:	NS Data Fil T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 H15651A2 T15651A2 T15651A2 Sample	Seq# 23 23 23 23 17 23 23 23 26ID: AC Seq#	Spk Conc: 0.4926 0.5311 0.4898 0.4960 0.4949 10.6284 0.4943 0.4930 0.0967	.1U .25U .05U .1U .05U .70U .1U .1U 0.05U	Spk Adde 0.5 0.5 0.5 0.5 0.5 0.5 0.5 10 0.5 0.5 0.5 Spk Adde	Recov 99 106 98 99 106 99 99 97	Qual Lo Lim 50 50 50 50 50 50 50 50 50 60 60 Cual Lo Lim	Hi Li
TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Mercury Bickel Belenium Billver TxtQcType: Linalyte Lirsenic Larium	MS Batchld 27364 27364 27364 27364 27364 27364 27364 27364 MS Batchld 27364	Mat DF 1 1 1 1 1 1 Mate DF 1	trix: TCLP Data Fil T15651A2 T15651A2 T15651A2 T15651A2 H15651A2 T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 T15651A2	Seq#: 24 24 24 24 18 24 24 24 25 5eq#:	NS Data Fil T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 H15651A2 T15651A2 T15651A2 T15651A2 NS Data Fil T15651A2	Seq# 23 23 23 23 23 23 23 23 23 23 25 ED: AC Seq# 15 15	Spk Conc: 0.4926 0.5311 0.4898 0.4960 0.4949 10.6284 0.4943 0.4930 0.0967 C75409-001 Spk Conc: 0.5875	.1U .25U .05U .1U .05U .70U .1U .1U 0.05U NS Conc:	Spk Adde 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	Recov 99 106 98 99 99 106 99 97 Recov 117	Qual Lo Lim 50 50 50 50 50 50 50 50 50 60 50 50 50	Hi Li
TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Mercury Bickel Belenium Billver TxtQcType: Linalyte Lisenic Barium Badmium	MS Batchld 27364 27364 27364 27364 27364 27364 27364 27364 MS Batchld 27364 27364	Mat DF 1 1 1 1 1 1 Mate DF 1 1	Tix: TCLP Data Fil T15651A2 T15651A2 T15651A2 T15651A2 H15651A1 T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 T15651A2	Seq#: 24 24 24 24 18 24 24 24 27 5eq#:	NS Data Fil T15651A2	Seq# 23 23 23 23 23 17 23 23 23 23 EID: AC Seq# 15 15	Spk Conc: 0.4926 0.5311 0.4898 0.4960 0.4949 10.6284 0.4943 0.4930 0.0967 C75409-001 Spk Conc: 0.5875 0.7904	.1U .25U .05U .1U .05U .70U .1U .1U 0.05U NS Conc: .1U	Spk Adde 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	Recov 99 106 98 99 99 106 99 97 Recov 117 158	Qual Lo Lim 50 50 50 50 50 50 50 50 50 50 50 50 50	Hi Li
TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Mercury Sickel Belenium Silver TxtQcType: Lanalyte Larsenic Barium Badmium Chromium	MS Batchld 27364 27364 27364 27364 27364 27364 27364 27364 27364 27364 27364 27364 27364	Mat DF 1 1 1 1 1 1 Mate DF 1 1 1 1 1 1 1 1 1 1 1 1 1	Tix: TCLP Data Fil T15651A2 T15651A2 T15651A2 T15651A2 H15651A2 T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 T15651A2 T15651A2	Seq#: 24 24 24 24 18 24 24 24 27 17 17	NS Data Fil T15651A2	Seq# 23 23 23 23 23 27 23 23 23 23 23 25 25 25 26 27 27 28 28 28 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	Spk Conc: 0.4926 0.5311 0.4898 0.4960 0.4949 10.6284 0.4943 0.4930 0.0967 C75409-001 Spk Conc: 0.5875 0.7904 0.5492	.1U .25U .05U .1U .05U .70U .1U .1U 0.05U NS Conc: .1U .25U	Spk Adde 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	Recov 99 106 98 99 99 106 99 97 Recov 117 158 110	Qual Lo Lim 50 50 50 50 50 50 50 50 50 50 50 50 50	Hi Li
TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Mercury Nickel Selenium Silver TxtQcType: Analyte Arsenic Barium Cadmium Chromium Chromium	MS Batchid 27364 27364 27364 27364 27364 27364 27364 27364 MS Batchid 27364 27364 27364 27364 27364 27364	Mat DF 1 1 1 1 1 1 Mate DF 1 1 1 1 1 1 1 1 1 1 1 1 1	Trix: TCLP Data Fil T15651A2	Seq#: 24 24 24 24 18 24 24 24 7 17 17	NS Data Fil T15651A2	Seq# 23 23 23 23 27 27 28 28 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	Spk Conc: 0.4926 0.5311 0.4898 0.4960 0.4949 10.6284 0.4943 0.4930 0.0967 C75409-001 Spk Conc: 0.5875 0.7904 0.5492 0.5137	.1U .25U .05U .1U .05U .70U .1U .1U 0.05U NS Conc: .1U .25U .05U	Spk Adde 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	Recov 99 106 98 99 99 106 99 97 Recov 117 158 110 103	Qual Lo Lim 50 50 50 50 50 50 50 50 50 50 50 50 50	Hi Li
TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Mercury Nickel Selenium Silver TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Mercury	MS Batchid 27364 27364 27364 27364 27364 27364 27364 27364 MS Batchid 27364 27364 27364 27364 27364 27364 27364 27364	Mat DF 1 1 1 1 1 1 1 1 1 1 1 1 1	Trix: TCLP Data Fil T15651A2 T15651A2	Seq#: 24 24 24 24 18 24 24 24 7 17 17	NS Data Fil T15651A2	Seq# 23 23 23 23 27 27 28 28 28 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	Spk Conc: 0.4926 0.5311 0.4898 0.4960 0.4949 10.6284 0.4943 0.4930 0.0967 Spk Conc: 0.5875 0.7904 0.5492 0.5137 0.9379 10.1833	.1U .25U .05U .1U .05U .70U .1U .1U 0.05U NS Conc: .1U .25U .05U .1U	Spk Adde 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.10 Spk Adde 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	Recov 99 106 98 99 99 106 99 97 Recov 117 158 110 103 116 102	Qual Lo Lim 50 50 50 50 50 50 50 50 50 50 50 50 50	Hi Li
TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Mercury Nickel Selenium Silver TxtQcType: Analyte Arsenic Barium Cadmium Chromium Lead Arsenic Barium Chromium Chromium Chromium Lead Mercury Sickel Selenium	MS Batchid 27364 27364 27364 27364 27364 27364 27364 27364 MS Batchid 27364 27364 27364 27364 27364 27364 27364 27364 27364	Mat DF 1 1 1 1 1 1 1 1 1 1 1 1 1	Trix: TCLP Data Fil T15651A2	Seq#: 24 24 24 24 18 24 24 24 7 17 17 17 16	NS Data Fil T15651A2	Seq# 23 23 23 23 27 27 28 28 28 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	Spk Conc: 0.4926 0.5311 0.4898 0.4960 0.4949 10.6284 0.4943 0.4930 0.0967 Spk Conc: 0.5875 0.7904 0.5492 0.5137 0.9379	.1U .25U .05U .1U .05U .70U .1U .1U 0.05U NS Conc: .1U .25U .05U	Spk Adde 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.10 Spk Adde 0.5 0.5 0.5 0.5 0.5 0.5 0.5	Recov 99 106 98 99 99 106 99 97 Recov 117 158 110 103 116	Qual Lo Lim 50 50 50 50 50 50 50 50 50 50 50 50 50	Hi Li

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 27364

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: I		Sam	pleID: LCSW	MR 27364				
Analyte	Batchld	Data Fil Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	27364	T15651A2 14	T15651A2	13	0.5042	0.5127	1.7	20
Barium	27364	T15651A2 14	T15651A2	13	0.4995	0.4994	.007	20
Cadmium	27364	T15651A2 14	T15651A2	13	0.4966	0.4974	.17	20
Chromium	27364	T15651A2 14	T15651A2	13	0.4972	0.5018	.91	20
Lead	27364	T15651A2 14	T15651A2	13	0.5094	0.5153	1.2	20
Mercury	27364	H15651T 13	H15651T	12	9.9417	10.1018	1.6	20
Nickel	27364	T15651A2 14	T15651A2	13	0.5038	0.5076	.75	20
Selenium	27364	T15651A2 14	T15651A2	13	0.5106	0.5152	.89	20
Silver	27364	T15651A2 14	T15651A2	13	0.0974	0.0986	1.2	20
TxtQcType: I	MR	Matrix: TCLP	Sam	pleID: AC754	09-001			
Analyte	Batchid	Data Fil Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limi
Arsenic	27364	T15651A2 16	T15651A2	15	.1U	.1U		20
Barium	27364	T15651A2 16	T15651A2	15	0.2566	.25U		20
Cadmium	27364	T15651A2 16	T15651A2	15	.05U	.05U		20
Chromium	27364	T15651A2 16	T15651A2	15	.1U	.1U		20
Lead	27364	T15651A2 16	T15651A2	15	0.3822	0.3598	6	20
Mercury	27364	H15651T 15	H15651T	14	.70U	. 70 U		20
Nickel	27364	T15651A2 16	T15651A2	15	.1U	.1U		20
Selenium	27364	T15651A2 16	T15651A2	15	.1U	.1U		20
Silver	27364	T15651A2 16	T15651A2	15	0.05U	0.05U		20
TxtQcType:	SD	Matrix: TCLP	San	npleID: AC754	109-001			
Analyte	Batchld	Data Fil Seq#:	NS File	Seq# DF	Result 1	Result 2	%Diff	Limi
Arsenic	27364	T15651A2 19	T15651A2	15 5	0.0007	0.0019		10
Barium	27364	T15651A2 19	T15651A2	15 5	0.0505	0.2492	1.3	10
Cadmium	27364	T15651A2 19	T15651A2	15 5	0.0040	0.0044	354 с	10
Chromium	27364	T15651A2 19	T15651A2	15 5	0.0030	0.0037	307 с	10
Lead	27364	T15651A2 19	T15651A2	15 5	0.0723	0.3598	0.48	10
Nickel	27364	T15651A2 19	T15651A2	15 5	0.0070	0.0236	47 c	10
Selenium	27364	T15651A2 19	T15651A2	15 5	-0.0080	-0.0108		10
Silver	27364	T15651A2 19	T15651A2	15 5	0.0030	0.0035	318 c	10

ZERO HEADSPACE EXTRACTION- SAMPLE ENTRY

31028 ample ID	Vessel #	Initial Pressure	Final Pressure	Ext. Fluid #	Wt./Vol. Of Sample	Start Date	Start Time	Finish Date	Finish Tlme	Final pH	Ext. Type*	Analyst (s)	Transfer To**	Transfer To**	Comments
EFIV-176003	28	20	20	1760B	sooml	11-4	11:00	145	4.30		7	76)	tu des		1
Ac75409-001	<i>6)</i> (2)				asy	-				÷.		1			j
Ac 75450-601	16														
74C75USO-002 176	76			·											1
29 500-03 29	29					,		!			ž.				- 1
AC 75455-001	PE		: } 	Telegram											- 1
AC75455-002	7					.	-						<		
													•		
EF3-80/S	7	20	20	E 183	Saml	11-4	<u>کر: ا</u>	11-5	«ih		S	250	MOLO		<i>i</i> 1
800	23				assy								·		
AC 75408009	AS						·								1
AC 7540800	23						7								1
AC 78457-002 7D	AL.														Į.
												. [4
														·	1

Leachate prep log 2010

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.EACHATE PREPARATION LOG

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Finish Date: Ext. Wt.Vol 30 **TCLP Ext. Fluid #2 pH:
**SPLP Ext. Fluid #3 pH: "TCLP Ext. Fluid #1 pH:

90																			-	\$ C	2			
*Ext. Type: TCLP = T (Method 1311) LAMP=L (Methods 1311 / A SPLP = P (Method 1312) MEP=M (Method 1320) ZHE = Z (Method 1311/1312)		CFI 175587	SPCP 175716	AC 75250-007	AC 75250-006	AC 75/42/020	AT 75142 019	AC 75142,018	KC 75142-015	Ac 75427-006	Ar 75427, 005	Ar 75427-004	AC 75428-002	7538	AC 75387-001	AC 75403-006	AC 75403-005	AC 75403,004	AC 75403-063	200-cops 24	AC 75403-001	AC 75409-001	Sample #	
LP = T (Method 1311) SPLP = P (Method 1312) ZHE = Z (Method 1311/1312)		4.88	4.20	1	(7.74	8.03	8.30	8.91	6.42	6.97	6.89	25%	8.69	9.47	1		6.23	· ·	7,21	4-2-3	9.47	(units)	말
2)		(1	\	(1.60	1.61	1.69	1.72	89.	1.72	1.67	1.80). 58	(1,1)	(-	1.67	(2.32	1,-6-7	1.50	(units)	HCL
LAM₽=L MEP=M		4.92	9.68	6.92	8,67	5,43	286	5.70	5,03	14.95	495	86.71	5.18	5.04	5.25	8.45	8.32	5.33	8.63	5.16	8.29	498	(units)	모
(Methods 1311 / / (Method 1320)		65/75577	~		5848716	<									EF1 115597	1	\	CE 178577	Y	EF1 175597	1	EF45597	(number)	Fluid
(Methods 1311 / ANSI/NEMA C78.LL 1256-2003) (Method 1320)		36	26	R	1000126	~			1509/31	<		1,	1000/26	4	150913L	~	300mL	1209126	300 m	1009/26	308ml	1509136	(g or mL)	of Sample
L 1256-200:		K														-						19:80	Time	Start
3		_																				10730	Time	Finish
		4	_	_	_	-	_			_			_			_					-	EDR.	(s)	Analyst
		+(6		A	7						12									-	+	Type*	Ext.
	,	Helals and Organis	•	_	Mcdads only.	•			Metals and Osganics	<		The second secon	Metals only.		Matals and Organics	¥ .	a vy	44% Solid 56% Grand	Filtred ONW.	28% solid 72% liquid		Motal's and Organics	Comments	

Hampton-Clarke/Veritech

(criteria: 2.88 ± 0.05) (criteria: 4.20 ± 0.5)

(criteria: 4.93 ± 0.5)



Last Page of Report



175 ROUTE 46 WEST, UNIT D · FAIRFIELD, NJ 07004 2 MADISON ROAD, FAIRFIELD, NJ 07004 800-426-9992 · 973-244-9770 FAX: 973-244-9787

WWW.HCVLAB.COM

Project: 9213 Gowanus

Client PO: 0084240

Report To: Weston Solutions Inc.

205 Campus Drive Edison, NJ 08837

Attn: Dyna Krumich-Ogonowski

Received Date: 10/28/2013

Report Date: 11/22/2013

Deliverables: NYDOH-CatA

Lab ID: AC75411

Lab Project No: 3102821

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 Veritech to all parties shall not exceed Veritech's total fee for analytical services rendered.

HAZ. - 230

Robin Cousineau - Quality Assurance Director

OR

Stanley Gilewicz - Laboratory Director

NJ (07071)

PA (68-00463)

NY (ELAP11408)

KY (90124)

CT (PH-0671)





THIS CATEGORY "A" REPORT IS NUMBERED FROM 1 to 44

HCV Case Narrative

Client: Weston Solutions Inc.

HCV Project: 3102821

Project: 9213 Gowanus

Hampton-Clarke/Veritech (HC·V) received the following samples on October 28, 2013:

Client ID	HCV Sample ID	<u>Matrix</u>	<u>Analysis</u>
9213-SB-04-9.5	AC75411-001	Soil	VO (8260C)
9213-SB-04	AC75411-002	Soil	BNA (8270D), PCB (8082A), Pesticides (8081B), Metals (6010C/7471B)
9213-SB-01-6	AC75411-003	Soil	VO (8260C)
9213-SB-01	AC75411-004	Soil	BNA (8270D), PCB (8082A), Pesticides (8081B), Metals (6010C/7471B)

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 Matrix Spike and Matrix Spike Duplicate for batch 31300 had recoveries outside QC limits. However, since the associated Method Blank and Laboratory Control Sample were within control, no corrective action was necessary.

Base Neutral/Acid Extractable Analysis:

Data conforms to method requirements.

PCB Analysis:

Data conforms to method requirements.

Pesticide Analysis:

Data conforms to method requirements.

Metals Analysis:

The Matrix Spike Duplicate for batch 23571 had recoveries outside QC limits. However, since the associated Method Blank and Laboratory Control Sample were within control, no corrective action was necessary. Also, the RPD between the QC sample and the Method Replicate had recoveries outside QC limits. The RPD criteria were met between the LCS/LCS Method Replicate. In addition, the serial dilution is outside QC limits, suggesting matrix interference.

The Matrix Spike, Matrix Spike Duplicate, and Post Spike for batch 27358 had recoveries outside QC limits. However, since the associated Method Blank and Laboratory Control Sample were within control, no corrective action was necessary. Also, the RPD between the LCS and LCSMR had recoveries outside QC limits. The RPD criteria were met between the Matrix Spike and Matrix Spike Duplicate. In addition, the serial dilution is outside QC limits, suggesting matrix interference.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Robin Cousineau Or Stanley Gilewicz Date

Quality Assurance Director Laboratory Director

Processing Pro		·	3102821 0002
2 All Abach note if failed (five Jersey 1900) 2 All Abach note if fa	10)Relinquished by:	22 22 2	1a) c 1b) E 1c) s 1d) s
Character Char		Matrix Cox Drinking Water S - Soil Ground Water SL - Sli Ground Water OL - OI Other (please specify under SB-04-15 -5B-04-5 -5B-04-5 -5B-04-5	13.244-9770 Fax: 973-244-9770 Fax: 973-244-9770 Fax: 973-244-9770 Fax: 973-244-9770 Fax: 973-244-9770 Fax: 9 NELAC/NJ #0 Customer Information (customer
CHAIN OF CUSTODY RECORD Time Turnaround Turnaround Report Type 24 Hours (100%) A Koului LA Syde(LV) (1) A Koului LA Syde(LV) (2) To Days (10%) Phase Time Note: Check if Iow-level groundwater methods required to meet current standard to acheate of the other and to acheate of the other of the other and to acheate of the other o		Check If Continues A - Air udge If a comments 5) 6)Sample Matrix Date Time S \(\frac{1}{2} \frac{3}{2} \frac{1}{2} \frac{1}{2} \frac{5}{2} \frac{1}{2} \fra	d, New Jersey 07004 9787 973-439-1458 9, New Jersey 08054 856-780-6056 17071 PA #68-00463 NY #1 To X + #772 4773
CHAIN OF CUSTODY RECORD Time Turnaround Turnaround Report Type 24 Hours (100%) A Koului LA Syde(LV) (1) A Koului LA Syde(LV) (2) To Days (10%) Phase Time Note: Check if Iow-level groundwater methods required to meet current standard to acheate of the other and to acheate of the other of the other and to acheate of the other o	ed by:	SUBCTCL EPASING	HAMPTON CLARGE VERTE LA 8 O R A T O R 1 E A Women-Owne 11408 CT #PH-0671 KY # 2a) Project: DX 2b) Project Location (C 2b) Project Location (C 2d) Quote/PO # (If Ap)
Signature Page Pa	ale Tin	× × pest 8081 × × pres (1897	CHAIN C RE 90124 90124 Project Information Style
Turnaround Reporting Requirements (Please Circle) Turnaround Report Type Electronic D 24 Hours (100%) 48 Hours (75%) 72 Hours (50%) 4 Days (35%; TPH) 10 Days (70%) 2 Weeks Other: Expedited TAY Not Always Available. Please Circle with Lab. 2 Weeks Other: Expedited TAY Not Always Available. Please Circle with Lab. 2 Weeks Other: Expedited TAY Not Always Available. Please Circle with Lab. 2 Weeks Other: Expedited TAY Not Always Available. Please Circle with Lab. 2 Weeks Other: Expedited TAY Not Always Available. Please Circle with Lab. 2 Weeks Other: Expedited TAY Not Always Available. Please Circle with Lab. 2 Weeks Other: Expedited TAY Not Always Available. Please Circle with Lab. 2 Weeks Other: Expedited TAY Not Always Available. Please Circle with Lab. Excel - NV Regult Cother: Other: Expedited TAY Not Always Available. Please Circle with Lab. Excel - NV Regult Excel - NV Regult Cother: Other: Dither: Other: Expedited TAY Not Always Available. Please Circle with Lab. Excel - NV Regult Excel - NV Reg	Note: Chec	W. VOC	
Porting Requirements (Please Circle) Report Type Report Type Red - NJ / NY / PA Regult Excel - NJ Regult Excel - NJ Regult Excel - PA Regult Recult - PA Regult Red - NJ / Regult Recult - PA Regult Red - NJ / Regult Recult - PA Regult Red - NJ / Regult Recult - PA Regult	Comments. Notes. 3 Comments of 6020 (RCP-MS 6020 for Be cable: Cific Reporting Limits mirant Concentrations piect MBERED items. If notes assessed to be assess	None III	3)Re Turnaround 24 Hours (100%) 48 Hours (50%) 72 Hours (50%) 4 Days (35%; TPH) 10 Days (10%) 2 Weeks Other: Expedited
Please Circle) Electronic D. Hazsite/CSV EQuis 4-File / EZ EQuis EPA Regule Excel - Ny Regule Excel - PA Regule Cother: Other: Base Check with Lab. Cooler Tempera Cooler Tempera Standards in NJ or PA: Cooler Tempera	Estate Requirements. Special Required to meet current dis required to meet current est current est completed your analyte fatorage should sample not be		porting Requirements (Report Type Data Summary Waste Red - NJ / NY / PA CLP Full / Category B Category A Other: Other:
	HAZARDS t standards in NJ or PA: Cooler Tempera		age

PROJECT MODIFICATIONS

Client: WESTON-NJ
Project: 9213 Gowanus

HCV Project #: 3102821

sherree192.168.1.52 10/29/2013 5:22:08 PM

Per Dyna Krumich-Ogonowski, the project name is 9213 Gowanus. SB 10/29/13

CONDITION UPON RECEIPT

Batch Number AC75411

Entered By: VINCENT

Date E	ntered	10/28/2013	6:57:00	PM
--------	--------	------------	---------	----

		Date Entered 10/26/2013 6:57:00 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	Yes .	Are the COC seals intact?
4	Yes	Please specify the Temperature inside the container (in degC) 2.0
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 commentsSpecify
14	NA	Corrective actions (Specify item number and corrective action taken).

Internal Chain of Custody

		Loc						Loc	D-4	
	DeteTiese	or	Bot		Anchoic	Lab#:	DateTime:	or	Bot	A/ M Analysis
Lab#:	DateTime:	User			Analysis	Laun.	Date time:	User	INU	IVI Alialysis
AC75411-001	10/28/13 16:50	VINCE		М	Received					
AC75411-001	10/28/13 18:57	VINCE	1	M	Login					
AC75411-001 AC75411-001	10/28/13 22:28 10/28/13 22:29	PA R12	1	A	mixing NONE					
AC75411-001 AC75411-001	10/29/13 09:39	HS	1	Ā	%solids					
AC75411-001	10/29/13 15:06	R12	1	A	NONE	1				
AC75411-001	10/28/13 15:00	R30	2	Â	NONE					
AC75411-001	10/30/13 17:00	WP	2	м	VOA					
AC75411-001	10/30/13 17:24	R30	2	A	NONE					
AC75411-001	11/01/13 10:53	WP	4	A	VOA					
AC75411-001	11/01/13 10:53	WP	5	A	VOA					
AC75411-002	10/28/13 16:50	VINCE		м	Received					
AC75411-002	10/28/13 18:57	VINCE		м	Login	İ				
AC75411-002	10/28/13 22:28	PA	1	Α	mixing					
AC75411-002	10/28/13 22:29	R12	1	Α	NONE]				
AC75411-002	10/29/13 09:39	HS	1	Α	%solids	İ				
AC75411-002	10/29/13 15:06	R12	1	Α	NONE					
AC75411-002	10/30/13 10:00	AM	1	Α	tdsi/hg					
AC75411-002	10/30/13 10:01	AM	1	A,	r12					
AC75411-002	10/31/13 14:33	JESSI	1	Α	bna		•			
AC75411-002	10/31/13 18:05	R12	1	Α	NONE .					
AC75411-002	11/01/13 08:33	BINIT	:	Α	S,P/P	İ				
AC75411-002	11/01/13 09:05	R12	1	Α	NONE			,		
AC75411-003	10/28/13 16:50	VINCE	1	М	Received					
AC75411-003	10/28/13 18:57	VINCE		M	Login	1				
AC75411-003	10/28/13 22:28	PA	1	A	mixing	1				
AC75411-003	10/28/13 22:29	R12	1	A	NONE					
AC75411-003	10/29/13 09:39	HS R12	1	A	%solids NONE					
AC75411-003 AC75411-003	10/29/13 15:06 10/28/13 20:58	R30	1	A	NONE	1				
AC75411-003 AC75411-003	10/30/13 17:00	WP	2	M	VOA	-				
AC75411-003	10/30/13 17:24	R30	2	Α	NONE	: 1				
AC75411-004	10/28/13 16:50	VINC	1	м	Received					
AC75411-004	10/28/13 18:57	VINC		М	Login					
AC75411-004	10/28/13 22:28	PA	1	A	mixing					
AC75411-004	10/28/13 22:29	R12	1	A	NONE					•
AC75411-004	10/29/13 09:39	HS	1	Α	%solids					
AC75411-004	10/29/13 15:06	R12	1	Α	NONE					
AC75411-004	10/30/13 10:00	AM	1	Α	tdsi/hg .					
AC75411-004	10/30/13 10:01	AM	1	Α	r12	_	-			
AC75411-004	10/31/13 14:33	JESS	1 1	Α	bna					
AC75411-004	10/31/13 18:05	R12	1	A	NONE					
AC75411-004	11/01/13 08:33	BINIT	1	A	S,P/P					
AC75411-004	11/01/13 09:05	R12	1	A	NONE					

Laboratory Chronicle

Client: Weston Solutions Inc.

Project: 9213 Gowanus

HCV Project #: 3102821

Lab#: AC75411-001	Sample ID: 9213-SB-04-9.5	

Test Code	Prep Method	Prep Date	Ву	Analytical Method	Analysis Date	Ву
% Solids SM2540G				SM 2540G	10/29/13 00:00	hossain
Volatile Organics (no search) 8260	EPA5030/5035			EPA 8260C	10/30/13 17:05	SG

Lab#: AC75411-002 Sample ID: 9213-SB-04

	Prep	Prep		Analytical	Analysis	
Test Code	Method	Date	Ву	Method	Date	Ву
% Solids SM2540G				SM 2540G	10/29/13 00:00	hossain
Mercury (Soil/Waste) 7471 A	EPA 7471B	10/30/13	aadewusi	EPA 7471B	11/1/13 14:18	OA
Organochlorine Pesticides 8081	3510C/3550C	11/01/13	binit	EPA 8081B	11/4/13 13:00	MAS
PCB 8082	3510C/3550C	11/01/13	binit	EPA 8082A	11/2/13 04:04	MAS
Semivolatile Organics (no search) 8270	3510C/3550C	. 10/31/13	jessica	EPA 8270D	11/1/13 14:38	AHD/JB
ΓAL Metals 6010	3005&10/3050	10/30/13	aadewusi	EPA 6010C	11/1/13 15:29	OA
ΓAL Metals 6010	3005&10/3050	10/30/13	aadewusi	EPA 6010C	10/31/13 15:24	OA
TAL Metals 6020	3005&10/3050	- 10/30/13	aadewusi	EPA 6020A	10/31/13 14:08	PC

Lab#: AC75411-003 Sample ID: 9213-SB-01-6

Test Code	Prep Method	Prep Date	Ву	Analytical Method	Analysis Date	Ву
% Solids SM2540G Volatile Organics (no search) 8260	EPA5030/5035		•	SM 2540G EPA 8260C	10/29/13 00:00 10/30/13 17:21	hossain SG

Lab#: AC75411-004 Sample ID: 9213-SB-01

	Prep	Prep		Analytical	Analysis	
Test Code	Method	Date	Ву	Method	Date	Ву
% Solids SM2540G				SM 2540G	10/29/13 00:00	hossain
Mercury (Soil/Waste) 7471 A	EPA 7471B	10/30/13	aadewusi	EPA 7471B	11/1/13 14:19	OA
Organochlorine Pesticides 8081	3510C/3550C	11/01/13	binit	EPA 8081B	11/4/13 13:18	MAS
PCB 8082	3510C/3550C	11/01/13	binit	EPA 8082A	11/2/13 04:19	MAS
Semivolatile Organics (no search) 8270	3510C/3550C	10/31/13	jessica	EPA 8270D	11/1/13 15:24	AHD/JB
FAL Metals 6010	3005&10/3050	10/30/13	aadewusi	EPA 6010C	10/31/13 15:28	OA
TAL Metals 6010	3005&10/3050	10/30/13	aadewusi	EPA 6010C	11/1/13 15:32	OA
ΓAL Metals 6020	3005&10/3050	10/30/13	aadewusi	EPA 6020A	10/31/13 14:14	PC

HCV 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

DATA QUALIFIERS

- 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.

^{*}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.

HCV Report Of Analysis

Client: Weston Solutions Inc.

HCV Project #: 3102821

Project: 9213 Gowanus

Sample ID: 9213-SB-04-9.5

Lab#: AC75411-001

Matrix: Soil

Collection Date: 10/25/2013

Receipt Date: 10/28/2013

% Solids SM2540G

Analyte	DF	Units	RL	Result	
% Solids	, 1	percent		87	

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1.01	mg/kg	0.0023	ND
1,1,2,2-Tetrachioroethane	1.01	mg/kg	0.0023	, ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1.01	mg/kg	0.0023	ND
1,1,2-Trichloroethane	1.01	mg/kg	0.0023	ND
1,1-Dichloroethane	1.01	mg/kg	0.0023	ND
1,1-Dichloroethene	1.01	mg/kg	0.0023	ND
1,2,3-Trichlorobenzene	1.01	mg/kg	0.0023	ND
1,2,4-Trichlorobenzene	1.01	mg/kg	0.0023	ND
1,2-Dibromo-3-chloropropane	1.01	mg/kg	0.0023	ND
1,2-Dibromoethane	1.01	mg/kg	0.0023	ND
1,2-Dichlorobenzene	1.01	mg/kg	0.0023	ND
1,2-Dichloroethane	1.01	mg/kg	0.0012	ND
1,2-Dichloropropane	1.01	mg/kg	0.0023	ND
1,3-Dichlorobenzene	1.01	mg/kg	0.0023	ND
1,4-Dichlorobenzene	1.01	mg/kg	0.0023	ND
1,4-Dioxane	1.01	mg/kg	0.12	ND
2-Butanone	1.01	mg/kg	0.0023	ND
2-Hexanone	1.01	mg/kg	0.0023	ND
4-Methyl-2-pentanone	1.01	mg/kg	0.0023	ND
Acetone	1.01	mg/kg	0.012	ND
Benzene	1.01	mg/kg	0.0012	ND
Bromochloromethane	1.01	mg/kg	0.0023	. ND
Bromodichloromethane	1.01	mg/kg	0.0023	ND
Bromoform	1.01	mg/kg	0.0023	ND
Bromomethane	1.01	mg/kg	0.0023	ND
Carbon disulfide	1.01	mg/kg	0.0023	ND
Carbon tetrachtoride	1.01	mg/kg	0.0023	ND
Chlorobenzene	1.01	mg/kg	0.0023	ND
Chloroethane	1.01	mg/kg	0.0023	ND
Chloroform	1.01	mg/kg	0.0023	ND
Chloromethane	1.01	mg/kg	0.0023	ND
cis-1,2-Dichloroethene	1.01	mg/kg	0.0023	, ND
cis-1,3-Dichloropropene	1.01	mg/kg	0.0023	ND
Cyclohexane	1.01	mg/kg	0.0023	ND
Dibromochloromethane	1.01	mg/kg	0.0023	ND
Dichlorodifluoromethane	1.01	mg/kg	0.0023	ND
Ethylbenzene	1.01	mg/kg	0.0012	ND
Isopropylbenzene	1.01	mg/kg	0.0012	ND
m&p-Xylenes	1.01	mg/kg	0.0012	ND
Methyl Acetate	1.01	mg/kg	0.0023	ND
Methylcyclohexane	1.01	mg/kg	0.0023	ND
Methylene chloride	1.01	mg/kg	0.0023	ND
Methyl-t-butyl ether	1.01	mg/kg	0.0012	ND
o-Xylene	HAZ.1-0239	mg/kg	0.0012	ND

Sample ID: 9213-SB-04-9.5 Lab#: AC75411-001 Matrix: Soil				Collection Date: 10/25/2013 Receipt Date: 10/28/2013		
Styrene	1.01	mg/kg	0.0023	ND .		
Tetrachloroethene	1.01	mg/kg	0.0023	ND		
Toluene	1.01	mg/kg	0.0012	ND		
trans-1,2-Dichloroethene	1.01	mg/kg	0.0023	ND		
trans-1,3-Dichloropropene	1.01	mg/kg	0.0023	ND		
Trichloroethene	1.01	mg/kg	0.0023	ND		
Trichtorofluoromethane	1.01	mg/kg	0.0023	ND		
Vinyl chloride	1.01	mg/kg	0.0023	ND		
Xylenes (Total)	1.01	ma/ka	0.0012	ND		

Sample ID: 9213-SB-04

Lab#: AC75411-002

Matrix: Soil

Collection Date: 10/25/2013

Receipt Date: 10/28/2013

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Analyte	DF	Units	RL	Result
% Solids	. 1	percent		73
Mercury (Soil/Waste) 7471A				

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
Aldrin	1	mg/kg	0.0068	ND
Alpha-BHC	1	mg/kg	0.0014	ND
beta-BHC	1	mg/kg	0.0014	ND ·
Chlordane	1	mg/kg	0.034	ND
delta-BHC	1	mg/kg	0.0068	ND
Dieldrin	. 1	mg/kg	0.0014	ND
Endosulfan I	1	mg/kg	0.0068	ND
Endosulfan II	1	mg/kg	0.0068	ND
Endosulfan Sulfate	1	mg/kg	0.0068	ND
Endrin	1	mg/kg	0.0068	ND
Endrin Aldehyde	1 .	mg/kg	0.0068	ND
Endrin Ketone	. 1	mg/kg	0.0068	ND
gamma-BHC	. 1	mg/kg	0.0014	ND
Heptachlor	1	mg/kg	0.0068	. ND
Heptachlor Epoxide	· 1	mg/kg	0.0068	ND
Methoxychtor	1 .	mg/kg	0.0068	ND
p,p'-DDD	1	mg/kg	0.0034	ND
p,p'-DDE	1	mg/kg	0.0034	ND
p,p'-DDT	1	mg/kg	0.0034	ND
Toxaphene	1	mg/kg	0.034	ND

PCB 8082

Analyte	:	DF	Units	RL	Result
Arocior (Total)		1	mg/kg	0.034	ND
Aroclor-1016	*	1	mg/kg	0.034	ND
Aroclor-1221		1	mg/kg	0.034	ND
Aroclor-1232		1	mg/kg	0.034	ND
Aroclor-1242	3	1	mg/kg	0.034	ND
Aroctor-1248		1	mg/kg	0.034	ND
Aroclor-1254		1	mg/kg	0.034	ND
Aroclor-1260		1	mg/kg	0.034	ND
Aroclor-1262		1	mg/kg	0.034	ND ·
Aroclar-1268		1 .	mg/kg	0.034	ND

Semivolatile Organics (no search) 8270

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.046	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.046	ND
2,3,4,6-Tetrachiorophenol	1	mg/kg	0.046	ND
2,4,5-Trichlorophenol	1	mg/kg	0.046	ND
2,4,6-Trichlorophenol	1	mg/kg	0.046	ND
2,4-Dichlorophenol	1	mg/kg	0.011	ND
2,4-Dimethylphenol	. 1	mg/kg	0.011	ND
2,4-Dinitrophenol	1	mg/kg	0.23	ND
2,4-Dinitrotoluene	1	mg/kg	0.046	ND
2,6-Dinitrotoluene	1	mg/kg	0.046	ND
2-Chloronaphthalene	HAZ. ¹ 241	mg/kg	0.046	ND

Lab#:	9213-SB-04 AC75411-002			Collection Date: Receipt Date:	
Matrix:	2-Chlorophenol	1	 mg/kg	0.046	ND
	•	1		0.046	ND
	2-Methylnaphthalene	1	mg/kg	0.040	ND
	2-Methylphenol		mg/kg	0.046	ND
	2-Nitroaniline	<u>1</u> 1	mg/kg	0.046	ND
	2-Nitrophenol		mg/kg		
	3&4-Methylphenol	1	mg/kg	0.011	ND
	3,3'-Dichlorobenzidine	1	mg/kg	0.046	ND
	3-Nitroanlline	1	mg/kg	0.046	ND
	4.6-Dinitro-2-methylphenol	1	mg/kg	0.23	ND
	4-Bromophenyl-phenylether	1	mg/kg	0.046	ND
	4-Chloro-3-methylphenol	. 1	mg/kg	0.046	ND
	4-Chloroaniline	1	mg/kg	0.022	ND
	4-Chlorophenyl-phenylether	1	mg/kg	0.046	ND
	4-Nitroaniline	. 1	mg/kg	0.046	ND
	4-Nitrophenol	1	mg/kg	0.046	ND
	Acenaphthene	<u> </u>	mg/kg	0.046	ND
	Acenaphthylene	1	mg/kg	0.046	ND
	Acetophenone	1	mg/kg	0.046	ND
	Anthracene	: 1	mg/kg	0.046	ND
	Atrazine	, 1	mg/kg	0.046	ND
	Benzaldehyde	1	mg/kg	0.046	ND
	Benzo[a]anthracene	1	mg/kg	0.046	ND
	Benzo[a]pyrene	. 1	mg/kg	0.046	ND
	Benzo[b]fluoranthene	1 1	mg/kg	0.046	0.049
	Benzo[g,h,i]perylene	<u> </u>	mg/kg	0.046	ND
	Benzo[k]fluoranthene	. 1	mg/kg	0.046	ND
	bis(2-Chloroethoxy)methane	1	mg/kg	0.046	ND
	bis(2-Chloroethyl)ether	1	mg/kg	0.011	ND
	bis(2-Chloroisopropyl)ether	1	mg/kg	0.046	ND
		1	mg/kg	0.046	0.049
	bis(2-Ethylhexyl)phthalate	1	mg/kg	0.046	ND
	Butylbenzylphthalate	. 1		0.046	ND
	Caprolactam		mg/kg	0.046	ND .
	Carbazole		mg/kg		
	Chrysene	1	mg/kg	0.046	ND
	Dibenzo[a,h]anthracene	1	mg/kg	0.046	ND
	Dibenzofuran	1	mg/kg	0.011	ND
	Diethylphthalate	. 1	mg/kg	0.046	ND
	Dimethylphthalate	1	mg/kg	0.046	ND
•	DI-n-butylphthalate	1	rng/kg	0.023	ND
	Di-n-octylphthalate	1	mg/kg	0.046	ND
	Fluoranthene	1	mg/kg	0.046	ND
	Fluorene	1	mg/kg	0.046	ND
	Hexachlorobenzene	1	mg/kg	0.046	ND
	Hexachlorobutadiene	1	mg/kg	0.046	ND
	Hexachlorocyclopentadiene	. 1	mg/kg	0.046	ND
	Hexachloroethane	1	mg/kg	0.046	ND
	Indeno[1,2,3-cd]pyrene	1	mg/kg	0.046	ND
	Isophorone	1	mg/kg	0.046	ND
	Naphthalene	1	mg/kg	0.011	ND
	Nitrobenzene	1	mg/kg	0.046	ND
	N-Nitroso-di-n-propylamine	1	mg/kg	0.011	ND
	N-Nitrosodiphenylamine	1	mg/kg	0.046	ND
	Pentachlorophenol	1	mg/kg	0.23	ND
	Phenanthrene	1	mg/kg	0.046	ND
	Phenol	1	mg/kg	0.046	ND .
	Pyrene	•		0.046	0.050

Sample ID: 9213-SB-04

Lab#: AC75411-002

Matrix: Soil

Collection Date: 10/25/2013

Receipt Date: 10/28/2013

TAL Metals 6010

Analyte	DF.	Units	RL	Result
Aluminum	1	mg/kg	270	7900
Arsenic	1	mg/kg	5.5	ND
Barium	1	mg/kg	14	58
Calcium	1	mg/kg	1400	3200
Chromium	1	mg/kg	6.8	16
Cobalt	1	mg/kg	3.4	. 12
Copper	1	mg/kg	6.8	20
Iron	1	mg/kg	270	17000
Lead	. 1	mg/kg	6.8	55
Magnesium	. 1	mg/kg	680	3000
Manganese	1	mg/kg	14	580
Nickel	1	mg/kg	8.8	25
Potassium	. 1	mg/kg	680	1300
Sodium	. 1	mg/kg	340	660
Thallium	1	mg/kg	2.1	ND ND
Vanadium	1	mg/kg	14	25
Zinc	1	mg/kg	14	87

TAL Metals 6020

•						
Analyte	<u> </u>	DF	Units	RL	Result	
Antimony	:	1	mg/kg	0.27	ND	• •
Beryilium	:	1	mg/kg	0.27	0.34	
Cadmium	,	1	mg/kg	0.55	, ND	
Selenium		1	mg/kg	2.7	ND	
Silver		4	malka	0.27	ND	

Sample ID: 9213-SB-01-6 Lab#: AC75411-003

Matrix: Soil

Collection Date: 10/25/2013

Receipt Date: 10/28/2013

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		81 .

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1.01	mg/kg	0.0025	ND
1,1,2,2-Tetrachloroethane	1.01	mg/kg	0.0025	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1.01	mg/kg	0.0025	ND
1,1,2-Trichloroethane	1.01	mg/kg	0.0025	ND
1,1-Dichloroethane	1.01	mg/kg	0.0025	ND
1,1-Dichloroethene	1.01	mg/kg	0.0025	ND
1,2,3-Trichlorobenzene	1.01	mg/kg	0.0025	ND
1,2,4-Trichlorobenzene	1.01	mg/kg	0.0025	ND
1,2-Dibromo-3-chloropropane	1.01	mg/kg	0.0025	ND
1,2-Dibromoethane	1.01	mg/kg	0.0025	ND
1,2-Dichlorobenzene	1.01	mg/kg	0.0025	ND
1,2-Dichloroethane	, 1.01	mg/kg	0.0012	ND
1,2-Dichloropropane	· 1.01	mg/kg	0.0025	ND
1,3-Dichlorobenzene	1.01	mg/kg	0.0025	ND
1,4-Dichlorobenzene	1.01	mg/kg	0.0025	ND
1,4-Dioxane	1.01	mg/kg	0.12	ND
2-Butanone	1.01	mg/kg	0.0025	ND
2-Hexanone	· 1.01	mg/kg	0.0025	ND
4-Methyl-2-pentanone	1.01	mg/kg	0.0025	ND .
Acetone	1.01	mg/kg	0.012	ND
Benzene	1.01	mg/kg	0.0012	ND
Bromochioromethane	1.01	mg/kg	0.0025	ND
Bromodichloromethane	1.01	mg/kg	0.0025	ND
Bromoform	1.01	mg/kg	0.0025	ND
Bromomethane	1.01	mg/kg	0.0025	ND
Carbon disulfide	1.01	mg/kg	0.0025	ND
Carbon tetrachloride	ž 1.01	mg/kg	0.0025	ND
Chlorobenzene	1.01	mg/kg	0.0025	ND
Chloroethane	1.01	mg/kg	0.0025	ND
Chloroform	1.01	mg/kg	0.0025	ND
Chloromethane	1.01	mg/kg	0.0025	ND
cis-1,2-Dichloroethene	1.01	mg/kg	0.0025	ND
cis-1,3-Dichloropropene	1.01	mg/kg	0.0025	ND
Cyclohexane	1.01	mg/kg	0.0025	ND
Dibromochloromethane	1.01	mg/kg	0.0025	ND
Dichlorodifluoromethane	1.01	mg/kg	0.0025	ND
Ethylbenzene	1.01	mg/kg	0.0012	ND
Isopropyibenzene	1.01	mg/kg	0.0012	ND
m&p-Xylenes	1.01	mg/kg	0.0012	0.0031
Methyl Acetate	1.01	mg/kg	0.0025	ND
Methylcyclohexane	1.01	mg/kg	0.0025	ND
Methylene chloride	1.01	mg/kg	0.0025	ND .
Methyl-t-butyl ether	1.01	mg/kg	0.0012	ND
o-Xylene	1.01	mg/kg	0.0012	0.0018
Styrene	1.01	mg/kg	0.0025	ND ND
Tetrachtoroethene	1.01	mg/kg	0.0025	ND
Toluene	1.01	mg/kg	0.0012	0.0015
trans-1,2-Dichloroethene	1.01	mg/kg	0.0025	ND
trans-1,3-Dichloropropene	1.01	mg/kg	0.0025	ND
Trichloroethene	1.01 HAZ 244	mg/kg	0.0025	ND

Sample ID: 9213-SB-01-6 Lab#: AC75411-003 Matrix: Soil			Collection Date: 10/25/201 Receipt Date: 10/28/201				
	Trichlorofluoromethane	1.01	mg/kg	0.0025	ND		
	Vinyl chloride	1.01	mg/kg	0.0025	ND		
	Xylenes (Total)	1.01	mg/kg	0.0012	0.0049		

Sample ID: 9213-SB-01 Lab#: AC75411-004

Matrix: Soil

Collection Date: 10/25/2013 Receipt Date: 10/28/2013

olids SM2540G				
Analyte	DF	Units	RL	Result
% Solids	1	percent		81
(CallOM-ata) 7474 A	TOTAL PARTY.			

Mercury (Soil/Waste) 7471A

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	ND .

Organochlorine Pesticides 8081

Analyte		DF	Units	RL.	Result
Aldrin		1	mg/kg	0.0062	ND
Alpha-BHC		1	mg/kg	0.0012	ND
beta-BHC	·	1	mg/kg	0.0012	ND
Chlordane		1	mg/kg	0.031	ND
delta-BHC		1	mg/kg	0.0062	ND
Dieldrin		1	mg/kg	0.0012	ND
Endosulfan I	•	1	mg/kg	0.0062	ND
Endosulfan II		1	mg/kg	0.0062	ND
Endosulfan Sulfate		1	mg/kg	0.0062	ND
Endrin	•	1	mg/kg	0.0062	ND
Endrin Aldehyde		1 .	mg/kg	0.0062	ND
Endrin Ketone		1	mg/kg	0.0062	ND
gamma-BHC		1	mg/kg	0.0012	ND
Heptachlor		1	mg/kg	0.0062	ND
Heptachlor Epoxide		1	mg/kg	0.0062	ND
Methoxychlor		1	mg/kg	0.0062	ND
p,p'-DDD		1	mg/kg	0.0031	, ND
p,p'-DDE		1	mg/kg	0.0031	ND
p,p'-DDT		1	mg/kg	0.0031	ND
Toxaphene	•	1	mg/kg	0.031	ND

PCB 8082

Analyte		DF	Units	RL	Result
Aroclor (Total)		1	mg/kg	0.031	ND .
Aroclor-1016		1	mg/kg	0.031	ND
Aroclor-1221	:	1	mg/kg	0.031	ND
Arocior-1232	:	1	mg/kg	0.031	ND
Aroclor-1242		1	mg/kg	0.031	ND
Arocior-1248		1	mg/kg	0.031	ND
Aroclor-1254		1	mg/kg	0.031	ND
Aroclor-1260		1	mg/kg	0.031	ND
Arocior-1262		1	mg/kg	0.031	ND
Aroclor-1268		1	mg/kg	0.031	ND

Semivolatile Organics (no search) 8270

Analyte	DF	Units	RL	Result
1,1'-Biphenyi	1	mg/kg	0.041	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.041	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.041	ND
2,4,5-Trichlorophenol	1	mg/kg	0.041	ND
2,4,6-Trichlorophenol	1	mg/kg	0.041	ND
2,4-Dichlorophenol	1	mg/kg	0.010	ND
2,4-Dimethylphenol	1	mg/kg	0.010	ND
2,4-Dinitrophenol	1	mg/kg	0.21	ND
2,4-Dinitrotoluene	1	mg/kg	0.041	ND
2,6-Dinitrotoluene	1	mg/kg	0.041	ND
2-Chloronaphthalene	HAZ. ¹ 246	mg/kg	0.041	ND

-	9213-SB-01 AC75411-004 Soil				Collection Date: Receipt Date:	
	2-Chlorophenol		1	mg/kg	0.041	ND
	2-Methylnaphthalene		1	mg/kg	0.041	ND
	2-Methylphenol		1	mg/kg	0.010	ND
	2-Nitroaniline		1	mg/kg	0.041	ND
	2-Nitrophenol		1	mg/kg	0.041	ND
	3&4-Methylphenol		1	mg/kg	0.010	ND
	3,3'-Dichlorobenzidine		1	mg/kg	0.041	ND
	3-Nitroaniline		1	mg/kg	0.041	ND ·
	4,6-Dinitro-2-methylphenol		1	mg/kg	0.21	ND
	4-Bromophenyl-phenylether		1	mg/kg	0.041	ND
	4-Chloro-3-methylphenal		1	mg/kg	0.041	ND
	4-Chloroaniline		1	mg/kg	0.020	ND
	4-Chlorophenyl-phenylether		1	mg/kg	0.041	ND
	4-Nitroantline	•	1	mg/kg	0.041	ND
	4-Nitrophenol		1	mg/kg	0.041	ND
	Acenaphthene	•	1	mg/kg	0.041	ND
	Acenaphthylene	·	1	mg/kg	0.041	ND
	Acetophenone		, 1	mg/kg	0.041	ND .
	Anthracene	j.	1		0.041	ND
	Atrazine		1	mg/kg		ND
	Benzaldehyde		·	mg/kg	0.041	
			1	mg/kg	0.041	ND
	Benzo[a]anthracene	•	1	mg/kg	0.041	ND
	Benzo(a]pyrene		1	mg/kg	0.041	ND
	Benzo[b]fluoranthene		1	mg/kg	0.041	ND
	Benzo[g,h,i]perylene		1	mg/kg	0.041	ND
	Benzo[k]fluoranthene	;	1	mg/kg	0.041	ND
	bis(2-Chloroethoxy)methane		1	mg/kg	0.041	ND
	bis(2-Chloroethyl)ether		1 .	mg/kg	0.010	ND
	bis(2-Chloroisopropyl)ether	•	1	mg/kg	0.041	ND
	bis(2-Ethylhexyl)phthalate	•	1	mg/kg	0.041	ND
	Butylbenzylphthalate	•	1	mg/kg	0.041	ND
	Caprolactam		1	mg/kg	0.041	ND
	Carbazole		1	mg/kg	0.041	ND
	Chrysene		1	mg/kg	0.041	ND
	Dibenzo[a,h]anthracene		1	mg/kg	0.041	ND
	Dibenzofuran		1	mg/kg	0.010	ND
	Diethylphthalate		1	mg/kg	· 0.041	ND
	Dimethylphthalate	•	1 .	mg/kg	0.041	ND
	Di-n-butylphthalate	•	1	mg/kg	0.021	ND
	Di-n-octylphthalate	•	1	mg/kg	0.041	ND .
	Fluoranthene		1	mg/kg	0.041	ND
	Fluorene		1	mg/kg	0.041	ND
	Hexachlorobenzene	•	•	mg/kg	0.041	ND
	Hexachlorobutadiene	1	t	mg/kg	0.041	ND
	Hexachlorocyclopentadiene		1	mg/kg	0.041	ND
	Hexachloroethane	1	1	mg/kg	0.041	ND
	Indeno[1,2,3-cd]pyrene	1	ı. İ	mg/kg	0.041	ND
	Isophorone	1	I	mg/kg	0.041	ND
	Naphthalene		i	mg/kg	0.010	ND
	Nitrobenzene	1		mg/kg	0.041	ND
	N-Nitroso-di-n-propylamine	1		mg/kg	0.010	ND
	N-Nitrosodiphenylamine	1		mg/kg	0.041	ND
	Pentachlorophenol	1		mg/kg	0.21	ND
	Phenanthrene	1		mg/kg	0.041	
	Phenol Phenol	1				ND ND
				mg/kg	0.041	ND
	Pyrene	1	ı	mg/kg	0.041	ND ·

Sample ID: 9213-SB-01 Lab#: AC75411-004

Matrix: Soil

Collection Date: 10/25/2013

Receipt Date: 10/28/2013

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	. 1	mg/kg	250	5700
Arsenic	1	mg/kg	4.9	ND
Barlum	1	mg/kg	12	· 37
Calcium	1	mg/kg	1200	2000
Chromium	1	mg/kg	6.2	12
Cobalt	1	mg/kg	3.1	5.8
Copper	1	mg/kg	6,2	14
Iron	1	mg/kg	250	13000
Lead	1	mg/kg	6.2	22
Magnesium	, 1	mg/kg	620	3000
Manganese	1	mg/kg	12 -	260
Nickel	1	mg/kg	6.2	22
Potassium	1	mg/kg	620	1100
Sodium	1	mg/kg	310	• ND
Thallium	1	mg/kg	1.9	ND
Vanadium	. 1	mg/kg	12	18
Zinc	1	mg/kg	12	38

TAL Metals 6020

Analyte		DF	Units	RL.	Result	
Antimony		1	mg/kg	0.25	ND	
Beryllium	:	1	mg/kg	0.25	ND	
Cadmium	•	1	mg/kg	0.49	ND	
Selenium	•	1	mg/kg	2.5	ND	
Ollins		4	maka	0.25	MD	

ORGANICS VOLATILE REPORT

Sample Number: AC75411-001

Client Id: 9213-SB-04-9.5

Data File: 6M03561.D Analysis Date: 10/30/13 17:05

Date Rec/Extracted: 10/28/13-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Soil

Initial Vol: 4.96g

Final Vol: NA

Dilution: 1.01

Solids: 87

Units: ma/Ka

	1		Ollita. II	ig/rvg			
Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0023	U	56-23-5	Carbon Tetrachloride	0.0023	Ú
79-34-5	1,1,2,2-Tetrachloroethane	0.0023	υ	108-90-7	Chlorobenzene	0.0023	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0023	U	75-00-3	Chloroethane	0.0023	· · U
79-00-5	1,1,2-Trichloroethane	0.0023	U	67-66-3	Chloroform	0.0023	U
75-34-3	1,1-Dichloroethane	0.0023	U	74-87-3	Chloromethane	0.0023	U
75-35-4	1,1-Dichloroethene	0.0023	U	156-59-2	cis-1,2-Dichloroethene	0.0023	U
87-61-6	1,2,3-Trichlorobenzene	0.0023	U	10061-01-5	cis-1,3-Dichloropropene	0.0023	U
120-82-1	1,2,4-Trichlorobenzene	0.0023	U	110-82-7	Cyclohexane	0.0023	υ
96-12-8	1,2-Dibromo-3-Chloropropa	0.0023	· U	124-48-1	Dibromochloromethane	0.0023	บ
106-93-4	1,2-Dibromoethane	0.0023	U	75-71-8	Dichlorodifluoromethane	0.0023	· U
95-50-1	1,2-Dichlorobenzene	0.0023	U	100-41-4	Ethylbenzene	0.0012	U
107-06-2	1,2-Dichloroethane	0.0012	U	98-82-8	Isopropylbenzene	0.0012	บ
78-87-5	1,2-Dichloropropane	0.0023	U	136777612	m&p-Xylenes	0.0012	U
541-73-1	1,3-Dichlorobenzene	0.0023	U	79-20-9	Methyl Acetate	0.0023	Ü
106-46-7	1,4-Dichlorobenzene	0.0023	· U	108-87-2	Methylcyclohexane	0.0023	U
123-91-1	1,4-Dioxane	0.12	U	75-09-2	Methylene Chloride	0.0023	U
78-93-3	2-Butanone	0.0023	U	1634-04-4	Methyl-t-butyl ether	0.0012	U
591-78-6	2-Hexanone	0.0023	U	95-47-6	o-Xylene	0.0012	U
108-10-1	4-Methyl-2-Pentanone	0.0023	U	100-42-5	Styrene	0.0023	U
67-64-1	Acetone	0.012	U	127-18-4	Tetrachloroethene	0.0023	Ņ
71-43-2	Benzene	0.0012	U	108-88-3	Toluene	0.0012	U
74-97-5	Bromochloromethane	0.0023	U	156-60-5	trans-1,2-Dichloroethene	0.0023	U
75-27-4	Bromodichloromethane	0.0023	υ	10061-02-6	trans-1,3-Dichloropropene	0.0023	U
75-25-2	Bromoform	0.0023	U	79-01-6	Trichloroethene	0.0023	Ü
74-83-9	Bromomethane	0.0023	· U	75-69-4	Trichlorofluoromethane	0.0023	U
75-15-0	Carbon Disulfide	0.0023	Ù	75-01-4	Vinyl Chloride	0.0023	Ú
1330-20-7	Xylenes (Total)	0.0012	U	•			

Worksheet #: 282625

Total Target Concentration

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 usea

ORGANICS VOLATILE REPORT

Sample Number: AC75411-003

Client Id: 9213-SB-01-6 Data File: 6M03562.D

Analysis Date: 10/30/13 17:21 Date Rec/Extracted: 10/28/13-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C

Matrix: Soil Initial Vol: 4.97g Final Vol: NA Dilution: 1.01

Solids: 81

Units: mg/Kg

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Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0025	U	56-23-5	Carbon Tetrachloride	0.0025	U
7 9 -34-5	1,1,2,2-Tetrachloroethane	0.0025	U	108-90-7	Chlorobenzene	0.0025	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0025	U	75-00-3	Chloroethane	0.0025	U
79-00-5	1,1,2-Trichloroethane	0.0025	U	67-66-3	Chloroform	0.0025	υ
75-34-3	1,1-Dichloroethane	0.0025	U	74-87-3	Chloromethane	0.0025	υ
75-35-4	1,1-Dichloroethene	0.0025	U	156-59-2	cis-1,2-Dichloroethene	0.0025	U ·
87-61-6	1,2,3-Trichlorobenzene	0.0025	U	10061-01-5	cis-1,3-Dichloropropene	0.0025	U
120-82-1	1,2,4-Trichlorobenzene	0.0025	U	110-82-7	Cyclohexane	0.0025	Ū
96-12-8	1,2-Dibromo-3-Chloropropa	0.0025	U	124-48-1	Dibromochloromethane	0.0025	U
106-93-4	1,2-Dibromoethane	0.0025	U	75-71-8	Dichlorodifluoromethane	0.0025	U
95-50-1	1,2-Dichlorobenzene	0.0025	U,	100-41-4	Ethylbenzene	0.0012	υ
107-06-2	1,2-Dichloroethane	0.0012	ΰ	98-82-8	Isopropylbenzene	0.0012	U
78-87-5	1,2-Dichloropropane	0.0025	U	136777612	m&p-Xylenes	0.0012	0.0031
541-73-1	1;3-Dichlorobenzene	0.0025	U	79-20-9	Methyl Acetate	0.0025	U
106-46-7	1,4-Dichlorobenzene	0.0025	U	108-87-2	Methylcyclohexane	0.0025	U
123-91-1	1,4-Dioxane	0.12	U	75-09-2	Methylene Chloride	0.0025	U
78-93-3	2-Butanone	0.0025	U	1634-04-4	Methyl-t-butyl ether	0.0012	υ
591-78-6	2-Hexanone	0.0025	U	95-47-6	o-Xylene	0.0012	0.0018
108-10-1	4-Methyl-2-Pentanone	0.0025	U	100-42-5	Styrene	0.0025	U
67-64-1	Acetone	· 0.012	. U	127-18-4	Tetrachloroethene	0.0025	U
71-43-2	Benzene	0.0012	U	108-88-3	Toluene	0.0012	0.0015
74-97-5	Bromochloromethane	0.0025	U	156-60-5	trans-1,2-Dichloroethene	0.0025	U
75-27-4	Bromodichloromethane	0.0025	U	10061-02-6	trans-1,3-Dichloropropene	0.0025	U
75-25-2	Bromoform	0.0025	Ü	79-01-6	Trichloroethene	0.0025	U
74-83-9	Bromomethane	0.0025	U	75-69-4	Trichlorofluoromethane	0.0025	U
75-15-0	Carbon Disulfide	0.0025	U	75-01-4	Vinyl Chloride	0.0025	U
1330-20-7	Xylenes (Total)	0.0012	0.0049				

Worksheet #: 282625

Total Target Concentration

0.0064

R - Retention Time Out

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.

 $^{{\}it J-Indicates}$ 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 usea

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK

Client Id:

Data File: 6M03540.D Analysis Date: 10/30/13 11:25

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
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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	Ų
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	Ų	10061-01-5	cis-1,3-Dichloropropene	0.0020	U
120-82-1	1,2,4-Trichlorobenzene	0.0020	υ	110-82-7	Cyclohexane	0.0020	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0020	υ	124-48-1	Dibromochloromethane	0.0020	U
106-93-4	1,2-Dibromoethane	0.0020	υ	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	0.0010	U	98-82-8	Isopropylbenzene	0.0010	U
78-87-5	1,2-Dichloropropane	0.0020	U	136777612	m&p-Xylenes	0.0010	U
541-73-1	1,3-Dichlorobenzene	0.0020	υ	79-20-9	Methyl Acetate	0.0020	Ų
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	υ	95-47-6	o-Xylene	0.0010	U
108-10-1	4-Methyl-2-Pentanone	0.0020	υ	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	υ	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 #: 282625

Total Target Concentration

0

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 unalyte 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 usea

Form3 **Recovery Data** QC Batch: MBS31300

Data File

Sample ID:

Analysis Date

Spike or Dup: 6M03563.D

AC75269-013(MS) AC75269-013

10/30/2013 5:37:00 PM 10/24/2013 1:20:00 PM

Non Spike(If applicable): 6M03344.D Inst Blank(If applicable):

Method: 8260C

Matrix: Soil

QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	38.0431	0	50	76	20	130
1,1-Dichloroethene	1	35.9513	0	50	72	50	130
1,1-Dichloroethane	1	35.8985	0	50	72	50	130
Chloroform	· 1	37.5998	0	50	. 75	50	130
1,2-Dichloroethane	1	39.3993	0	50	. 79	50	130
2-Butanone	1	37.1492	0	50	74	20	130
Carbon Tetrachloride	1	32.9123	0	50	66	50	130
Trichloroethene	1	30.1615	0	50	60	50	130
Benzene	. 1	36.6871	0	50	73	50	130
Tetrachioroethene	1	28.0684	0	50	56	50	130
Toluene	1	35.8223	0	50	72	50	130
Chlorobenzene	1	32.8623	0	50	66	50	130
1,4-Dichlorobenzene	1	21.4276	0	50	43*	50	130
1,2-Dichlorobenzene	1	22.0892	0	50	44*	50	130
n-Propylbenzene	. 1	26.6077	0	50	53	50	130
sec-Butylbenzene	1	18.651	0	50	37*	50	130

Data File

Sample ID:

Analysis Date

Spike or Dup: 6M03564.D Non Spike(If applicable): 6M03344.D

AC75269-013

AC75269-013(MSD)

10/30/2013 5:53:00 PM

10/24/2013 1:20:00 PM

Inst Blank(If applicable):

Method: 8260C

Matrix: Soil

QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Vinyl Chloride	1	36.8399	0	50	74	20	130
1.1-Dichloroethene	1 .	34.5378	0	50	69	50	130
1,1-Dichloroethane	1	33.8609	0	50	68	50	130
Chloroform	1	31.8421	0	50	64	50	130
1,2-Dichloroethane	1	34.7031	0	50	69	50	130
2-Butanone	. 1	38.446	0	50	77	20	130
Carbon Tetrachloride	1	29.4282	0	50	59	50	130
Trichloroethene	1	29.1429	0	50	58	50	130
Benzene	1	32.6235	0	50	65	50	130
Tetrachloroethene	1	30.5064	0	50	61	50	130
Toluene	. 1	33.7731	0	50	68	50	130
Chlorobenzene	1	29.5521	0	50	59	50	130
1,4-Dichlorobenzene	1	15.0204	0	50	30*	50	130
1,2-Dichlorobenzene	1	17.138	0	50	34 *	50	130
n-Propylbenzene	1	20.2397	0	50	40*	50	130
sec-Butylbenzene	1	15.7905	0	50	32*	50	130

ORGANICS SEMIVOLATILE REPORT

Sample Number: AC75411-002

Client Id: 9213-SB-04 Data File: 7M60776.D

Analysis Date: 11/01/13 14:38

Date Rec/Extracted: 10/28/13-10/31/13

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: 73

Units: mg/Kg

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Cas#	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.046	U	205-99-2	Benzo[b]fluoranthene	0.046	0.049
95-94-3	1,2,4,5-Tetrachlorobenzene	0.046	U	191-24-2	Benzo[g,h,i]perylene	0.046	, U
58-90-2	2,3,4,6-Tetrachlorophenol	0.046	U	207-08-9	Benzo[k]fluoranthene	0.046	U
95-95-4	2,4,5-Trichlorophenol	0.046	U	111-91-1	bis(2-Chloroethoxy)methan	0.046	U
88-06-2	2,4,6-Trichlorophenol	0.046	Ü	111-44-4	bis(2-Chloroethyl)ether	0.011	υ
120-83-2	2,4-Dichlorophenol	0.011	U	108-60-1	bis(2-chloroisopropyl)ether	0.046	υ
105-67-9	2,4-Dimethylphenol	0.011	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.046	0.049
51-28-5	2,4-Dinitrophenol	0.23	U	85-68-7	Butyibenzylphthalate	0.046	. U
121-14-2	2,4-Dinitrotoluene	0.046	υ	105-60-2	Caprolactam	0.046	U
606-20-2	2,6-Dinitrotoluene	0.046	U	86-74-8	Carbazole	0.046	· U
91-58-7	2-Chloronaphthalene	0.046	U.	218-01-9	Chrysene	0.046	U
95-57-8	2-Chlorophenol	0.046	U	53-70-3	Dibenzo[a,h]anthracene	0.046	υ
91-57-6	2-Methylnaphthalene	0.046	U	132-64-9	Dibenzofuran	0.011	U
95-48-7	2-Methylphenol	0.011	U	84-66-2	Diethylphthalate	0.046	Ų
88-74-4	2-Nitroaniline	0.046	U	131-11-3	Dimethylphthalate	0.046	U
88-75-5	2-Nitrophenol	.0.046	U	84-74-2	Di-n-butylphthalate	0.023	U
106-44-5	3&4-Methylphenol	0.011	U	117-84-0	Di-n-octylphthalate	0.046	U
91-94-1	3,3'-Dichlorobenzidine	0.046	U	206-44-0	Fluoranthene	0.046	U
99-09-2	3-Nitroaniline	0.046	U	86-73-7	Fluorene	0.046	U
534-52-1	4,6-Dinitro-2-methylphenol	0.23	U	118-74-1	Hexachlorobenzene	0.046	U
101-55-3	4-Bromophenyl-phenylether	0.046	U.	87-68-3	Hexachlorobutadiene	0.046	U
59-50-7	4-Chloro-3-methylphenol	0.046	U	77-47-4	Hexachlorocyclopentadiene	0.046	, U
106-47-8	4-Chloroaniline	0.022	U	67-72-1	Hexachloroethane	0.046	Ū
7005-72-3	4-Chlorophenyl-phenylether	0.046	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.046	· υ
100-01-6	4-Nitroaniline	0.046	υ	78-5 9- 1	Isophorone	0.046	U
100-02-7	4-Nitrophenol	0.046	U	91-20-3	Naphthalene	0.011	υ
83-32-9	Acenaphthene	0.046	υ	98-95-3	Nitrobenzene	0.046	υ
208-96-8	Acenaphthylene	0.046	υ	621-64-7	N-Nitroso-di-n-propylamine	0.011	U
98-86-2	Acetophenone	0.046	U	86-30 - 6	n-Nitrosodiphenylamine	0.046	U
120-12-7	Anthracene	0.046	U	87-86-5	Pentachlorophenol	0.23	. U
1912-24-9	Atrazine	0.046	υ	85-01-8	Phenanthrene	0.046	U
100-52-7	Benzaldehyde	0.046	υ	108-95-2	Phenol	0.046	U
56-55-3	Benzo[a]anthracene	0.046	υ	129-00-0	Pyrene	0.046	0.050
50-32-8	Benzo[a]pyrene	0.046	Ú		•		

Worksheet #: 282546

Total Target Concentration

0.15

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 usea

ORGANICS SEMIVOLATILE REPORT

Sample Number: AC75411-004

Client Id: 9213-SB-01 Data File: 7M60778.D

Analysis Date: 11/01/13 15:24

Date Rec/Extracted: 10/28/13-10/31/13

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: 81

Units: mg/Kg

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Cas#	Compound	RL	Conc	Cas#	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.041	U	205-99-2	Benzo[b]fluoranthene	0.041	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.041	U	191-24-2	Benzo[g,h,i]perylene	0.041	Ų
58-90-2	2,3,4,6-Tetrachlorophenol	0.041	U	207-08-9	Benzo[k]fluoranthene	0.041	U
95-95-4	2,4,5-Trichlorophenol	0.041	U	111-91-1	bis(2-Chloroethoxy)methan	0.041	Ù
88-06-2	2,4,6-Trichlorophenol	0.041	υ	111-44-4	bis(2-Chloroethyl)ether	0.010	U
120-83-2	2,4-Dichlorophenol	0.010	U	108-60-1	bis(2-chloroisopropyl)ether	0.041	U
105-67-9	2,4-Dimethylphenol	0.010	U	. 117-81-7	bis(2-Ethylhexyl)phthalate	0.041	U
51-28-5	2,4-Dinitrophenol	0.21	U	85-68-7	Butylbenzylphthalate	0.041	U
121-14-2	2,4-Dinitrotoluene	0.041	·U	105-60-2	Caprolactam	0.041	U
606-20-2	2,6-Dinitrotoluene	0.041	υ	86-74-8	Carbazole	0.041	U
91-58-7	2-Chloronaphthalene	0.041	Ų	218-01-9	Chrysene	0.041	U
95-57-8	2-Chlorophenol	0.041	ΰ	53-70-3	Dibenzo[a,h]anthracene	0.041	U
91-57-6	2-Methylnaphthalene	0.041	U	132-64-9	Dibenzofuran	0.010	U
95-48-7	2-Methylphenol	0.010	U	84-66-2	Diethylphthalate	0.041	U
88-74-4	2-Nitroaniline	0.041	U	131-11-3	Dimethylphthalate	0.041	U
88-75-5	2-Nitrophenol	0.041	U	84-74-2	Di-n-butylphthalate	0.021	U
106-44-5	3&4-Methylphenol	0.010	U	117-84-0	Di-n-octylphthalate	0.041	U
91-94-1	3,3'-Dichlorobenzidine	0.041	U	206-44-0	Fluoranthene	0.041	. U
99-09-2	3-Nitroaniline	0.041	U	86-73-7	Fluorene	0.041	U
534-52-1	4.6-Dinitro-2-methylphenol	0.21	U	118-74-1	Hexachlorobenzene	0.041	Ū
101-55-3	4-Bromophenyi-phenylether	0.041	U	87-68-3	Hexachlorobutadiene	0.041	U
59-50-7	4-Chloro-3-methylphenol	0.041	U	77-47-4	Hexachlorocyclopentadiene	0.041	U
106-47-8	4-Chloroaniline	0.020	U	67-72-1	Hexachloroethane	0.041	U
7005-72-3	4-Chlorophenyl-phenylether	0.041	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.041	· U
100-01-6	4-Nitroaniline	0.041	U	78-59-1	Isophorone	0.041	U
100-02-7	4-Nitrophenol	0.041	U	91-20-3	Naphthalene	0.010	U
83-32-9	Acenaphthene	0.041	U	98-95-3	Nitrobenzene	0.041	U
208-96-8	Acenaphthylene	0.041	U	621-64-7	N-Nitroso-di-n-propylamine	0.010	U
98-86-2	Acetophenone	0.041	U	86-30-6	п-Nitrosodiphenylamine	0.041	U
120-12-7	Anthracene	0.041	U	87-86-5	Pentachlorophenol	0.21	U
1912-24-9	Atrazine	0.041	Ú	85-01-8	Phenanthrene	0.041	U
100-52-7	Benzaldehyde	0.041	U .	108-95-2	Phenol	0.041	U
56-55-3	Benzo[a]anthracene	0.041	υ	129-00-0	Pyrene	0.041	U
50-32-8	Benzo[a]pyrene	0.041	U				

Worksheet #: 282546

Total Target Concentration

U

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 usea

ORGANICS SEMIVOLATILE REPORT

Sample Number: SMB29099

Client Id:

Data File: 7M60765.D Analysis Date: 11/01/13 10:26

Date Rec/Extracted: NA-10/31/13

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: 100

Units: mg/Kg

Cas#	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.033	U	205-99-2	Benzo[b]fluoranthene	0.033	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.033	U	191-24-2	Benzo[g,h,i]perylene	0.033	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.033	υ	207-08-9	Benzo[k]fluoranthene	0.033	U
95-95-4	2,4,5-Trichlorophenol	0.033	υ	111-91-1	bis(2-Chloroethoxy)methan	0.033	U
88-06-2	2,4,6-Trichlorophenol	0.033	U	111-44-4	bis(2-Chloroethyl)ether	0.0083	U
120-83-2	2,4-Dichlorophenol	0.0083	υ	108-60-1	bis(2-chloroisopropyl)ether	0.033	U
105-67-9	2,4-Dimethylphenol	0.0083	υ	117-81-7	bis(2-Ethylhexyl)phthalate	0.033	U
51-28-5	2,4-Dinitrophenol	0.17	U	85-68-7	Butylbenzylphthalate	0.033	U
121-14-2	2,4-Dinitrotoluene	0.033	U	105-60-2	Caprolactam	0.033	U
606-20-2	2,6-Dinitrotoluene	0.033	U	86-74-8	Carbazole	0.033	U
91-58-7	2-Chloronaphthalene	0.033	U	218-01-9	Chrysene	0.033	U
95-57-8	2-Chiorophenol	0.033	U	53-70-3	Dibenzo[a,h]anthracene	0.033	U
91-57 - 6	2-Methylnaphthalene	0.033	U U	132-64-9	Dibenzofuran	0.0083	U
95-48-7	2-Methylphenol	0.0083	υ	84-66-2	Diethylphthalate	0.033	υ
88-74-4	2-Nitroaniline	0.033	υ	131-11-3	Dimethylphthalate.	0.033	U
88-75-5	2-Nitrophenol	0.033	U	84-74-2	Di _r n-butylphthalate	0.017	U
106-44-5	3&4-Methylphenol	0.0083	U	117-84-0	Di-n-octylphthalate	0.033	U
91-94-1	3,3'-Dichlorobenzidine	0.033	U	206-44-0	Fluoranthene	0.033	U
99-09-2	3-Nitroaniline	0.033	U	86-73-7	Fluorene	0.033	U
534-52-1	4,6-Dinitro-2-methylphenoi	0.17	U	118-74-1	Hexachlorobenzene	0.033	U
101-55-3	4-Bromophenyl-phenylether	0.033	U	87-68-3	Hexachlorobutadiene	0.033	U
59-50-7	4-Chloro-3-methylphenol	0.033	U	77-47-4	Hexachlorocyclopentadiene	0.033	Ū
106-47-8	4-Chloroaniline	0.016	U	67-72-1	Hexachloroethane	0.033	U
7005-72-3	4-Chlorophenyl-phenylether	0.033	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.033	U
100-01-6	4-Nitroaniline	0.033	υ	78-59-1	Isophorone	0.033	U
100-02-7	4-Nitrophenol	0.033	υ	91-20-3	Naphthalene	0.0083	U
83-32-9	Acenaphthene	0.033	υ	98-95-3	Nitrobenzene	0.033	U
208-96-8	Acenaphthylene	0.033	υ	621-64-7	N-Nitroso-di-n-propylamine	0.0083	U
98-86-2	Acetophenone	0.033	υ	86-30-6	n-Nitrosodiphenylamine	0.033	υ
120-12-7	Anthracene	0.033	υ	87-86-5	Pentachlorophenol	0.17	U
1912-24-9	Atrazine	0.033	υ	85-01-8	Phenanthrene	0.033	U
100-52-7	Benzaldehyde	0.033	U	108-95-2	Phenol	0.033	Ù
56-55-3	Benzo[a]anthracene	0.033	υ	129-00-0	Pyrene	0.033	U
50-32-8	Benzo[a]pyrene	0.033	U				

Worksheet #: 282546

Total Target Concentration

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 usea

ORGANICS PCB REPORT

Sample Number: AC75411-002

Client Id: 9213-SB-04

Data File: 3G80362.D

Analysis Date: 11/02/13 04:04 Date Rec/Extracted: 10/28/13-11/01/13

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: 73

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc	
12674-11-2	Aroclor-1016	0.034	U	11097-69-1	Aroclor-1254	0.034	U	
11104-28-2	Aroclor-1221	. 0.034	U	11096-82-5	Aroclor-1260	0.034	U	
11141-16-5	Aroclor-1232	0.034	U	37324-23-5	Aroclor-1262	0.034	U	
53469-21-9	Aroclor-1242	0.034	U	11100-14-4	Aroclor-1268	0.034	U	
12672-29-6	Aroclor-1248	0.034	U	1336-36-3	Aroclor (Total)	0.034	U	

R - Retention Time Out

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.

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 usea

ORGANICS PCB REPORT

Sample Number: AC75411-004

Client Id: 9213-SB-01 Data File: 3G80363.D

Analysis Date: 11/02/13 04:19

Date Rec/Extracted: 10/28/13-11/01/13

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: 81

Units: mg/Kg

Cas # Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2 Aroclor-1016	0.031	U	11097-69-1	Aroclor-1254	0.031	U.
11104-28-2 Aroclor-1221	0.031	U	11096-82-5	Aroclor-1260	0.031	U
11141-16-5 Aroclor-1232	0.031	U	37324-23-5	Aroclor-1262	0.031	U
53469-21-9 Aroclor-1242	0.031	U	11100-14-4	Aroclor-1268	0.031	U
12672-29-6 Aroclor-1248	0.031	U	1336-36-3	Aroclor (Total)	0.031	U

Worksheet #: 282611

Total Target Concentration

R - Retention Time Out

ColumnID: (^) Indicates results from 2nd column

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

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.

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

ORGANICS PCB REPORT

Sample Number: SMB29113

Client Id:

Data File: 3G80332.D

Analysis Date: 11/01/13 20:28 Date Rec/Extracted: NA-11/01/13

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	υ	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 #: 282611

Total Target Concentration

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 usea

ORGANICS PESTICIDE REPORT

Sample Number: AC75411-002

Client Id: 9213-SB-04 Data File: 5G49137.D

Analysis Date: 11/04/13 13:00 Date Rec/Extracted: 10/28/13-11/01/13

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081B

Matrix: Soil Initial Vol: 20g Final Vol: 10ml

> Dilution: 1 Solids: 73

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
309-00-2	Aldrin	0.0068	U	7421-93-4	Endrin Aldehyde	0.0068	U
319-84-6	alpha-BHC	0.0014	U	53494-70-5	Endrin Ketone	0.0068	. U
319-85-7	beta-BHC	0.0014	U ·	58-89-9	gamma-BHC	0.0014	U
57-74 - 9	Chlordane	0.034	U	76-44-8	Heptachlor	0.0068	U
319-86-8	delta-BHC	0.0068	U	1024-57-3	Heptachlor Epoxide	0.0068	U .
60-57-1	Dieldrin	0.0014	U	72-43-5	Methoxychlor	0.0068	U
959-98-8	Endosulfan I	0.0068	U	72-54-8	p,p'-DDD	0.0034	U
33213-65-9	Endosulfan II	0.0068	U	72-55-9	p,p'-DDE	0.0034	U
1031-07-8	Endosulfan Sulfate	0.0068	U	50-29-3	p,p'-DDT	0.0034	U
72-20-8	Endrin	0.0068	U	8001-35-2	Toxaphene	0.034	U

Worksheet #: 282637

Total Target Concentration

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

 $^{{\}it J}$ - 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 usea

ORGANICS PESTICIDE REPORT

Sample Number: AC75411-004

Client Id: 9213-SB-01

Data File: 5G49138.D Analysis Date: 11/04/13 13:18

Date Rec/Extracted: 10/28/13-11/01/13

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081B

Matrix: Soil

Initial Vol: 20g

Final Vol: 10ml

Dilution: 1

Solids: 81

Units: ma/Ka

Cas#	Compound	RL	Conc	Cas#	Compound	RL	Conc				
309-00-2	Aldrin	0.0062	U	7421-93-4	Endrin Aldehyde	0.0062	U				
319-84-6	alpha-BHC	0.0012	υ	53494-70-5	Endrin Ketone	0.0062	U				
319-85-7	beta-BHC	0.0012	U	58-89-9	gamma-BHC	0.0012	Ú				
57-74 - 9	Chlordane	0.031	U	76-44-8	Heptachlor	0.0062	U				
319-86-8	delta-BHC	0.0062	U	1024-57-3	Heptachlor Epoxide	0.0062	U				
60-57-1	Dieldrin	0:0012	. U	72-43-5	Methoxychlor	0.0062	U				
959-98-8	Endosulfan I	0.0062	· U	72-54-8	p,p'-DDD	0.0031	U				
33213-65-9	Endosulfan II	0.0062	U	72-55-9	p,p'-DDE	0.0031	U				
1031-07-8	Endosulfan Sulfate	0.0062	U	50-29-3	p,p'-DDT	0.0031	U				
72-20-8	Endrin	0.0062	U	8001-35-2	Toxaphene	0.031	U				

Worksheet #: 282637

Total Target Concentration

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 usea

ORGANICS PESTICIDE REPORT

Sample Number: SMB29112

Client Id:

Data File: 5G49127.D

Analysis Date: 11/01/13 20:11

Date Rec/Extracted: NA-11/01/13

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081B

Matrix: Soil Initial Vol: 20g

Final Vol: 10ml

Dilution: 1

Solids: 100

Units: ma/Ka

	onitor ingrity											
Cas#	Compound	RL	Conc	Cas #	Compound	RL	Conc	_				
309-00-2	Aldrin	0.0050	U	7421-93-4	Endrin Aldehyde	0.0050	บ					
319-84-6	alpha-BHC	0.0010	υ	53494-70-5	Endrin Ketone	0.0050	· U					
319-85-7	beta-BHC	0.0010	υ	58-89-9	gamma-BHC	0.0010	U					
57-74-9	Chlordane	0.025	υ	76-44-8	Heptachlor	0.0050	U					
319-86-8	delta-BHC	0.0050	U	1024-57-3	Heptachlor Epoxide	0.0050	U					
60-57-1	Dieldrin	0.0010	U	72-43-5	Methoxychlor	0.0050	U					
959-98-8	Endosulfan I	0.0050	U	72-54-8	p,p'-DDD	0.0025	U					
33213-65-9	Endosulfan II	0.0050	U	72-55-9	p,p'-DDE	0.0025	U					
1031-07-8	Endosulfan Sulfate	0.0050	U	50-29-3	p,p'-DDT	0.0025	υ					
72-20-8	Endrin	0.0050	. υ	8001-35-2	Toxaphene	0.025	U					

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 usea

FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 10/31/13

Data File: S15644C3

Lab Name:

Lab Code:

Prep Batch: 27357

Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Contract:

Instrument: PEICP3A

Nras No:

Sdg No:

Units: All units in ppm except Hg and icp-ms in ppb

Case No:

Project Number: 3102821

Veritech

Analyte	ICB V-174666- 9	CCB V-174666- 22	CCB V-174666- 34	CCB V-174666- 45	CCB V-174666- 57	MB 27357 (100)-12	
Arsenic	.04 U	.04 U	.04 U	.04 U	.04 U	4U	
Barlum	.1 U	.1 U	.1 บ	.1 U	.1 ป	10 U	
Chromium	.05 U	.05 U	.05 U	.05 U	.05 U	5υ	
Cobalt	.025 U	.025 U	.025 U	.025 U	.025 U	2.5 U	
Copper	.05 U	.05 U	.05 U	.05 U	.05 U	5U	
Lead	.05 U	.05 U	.05 U	.05 U	.05 ป	5U	
Nickel	.05 U	.05 U	.05 U	.05 U	.05 บ	5 U	
Thallium	.015 U	.015 ปั	.015 U	.015 U	.015 U	1.5 U	
Vanadium	.1 U	.1 U	.1 U	.1 U	.1 U	10 U	
Zinc	.1 U	.1 U	.1 บ	.1 U	.1 U	10 U	

Notes: .a-indicates absolute value of result found above the reporting limits in CCB/(CB or result found above reporting limit in the MB u-indicates result below reporting limit

FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 10/31/13

Data File: S103113B

Lab Name:

Prep Batch: 27358

Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Lab Code: Contract:

Instrument: MS2_7500SWA

Nras No:

Units: All units in ppm except Hg and icp-ms in ppb

Sdg No:

Project Number: 3102821

Case No:

				,				, — , — , — , — , — , — , — , — , — , —
Analyte	ICB V-175871- 10	CCB V-175871- 15	CCB V-175871- 28	CCB V-175871- 41	CCB V-175871- 54	CCB V-175871- 59	MB 27358-16	
Antimony	1 U	1 U	1 U	1 U	1 U	10	200 U	I
Beryllium	1 U	1 U	1 U	1 U	1 U	10	200 U	
Cadmium	2 U	2 U	2 U	.20	2 U	2 U	400 U	ĺ
Selenium	10 U	10 U	10 U	10 U	10 U	10 U	2000 U	
Silver	1 U	1 U	1 U	10	1 U	, 1U	200 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: 11/01/13

Data File: \$15644D3

Lab Name:

Veritech

Prep Batch: 27357

Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Lab Code: Contract:

Instrument: PEICPRAD3A

Nras No:

Sdg No:

Units: All units in ppm except Hg and icp-ms in ppb

Case No:

Project Number: 3102821

Analyte	ICB V-174666- 8	CCB V-174666- 21	CCB V-174666- 34	CCB V-174666- 46	MB 27357 (100)-11			
Aluminum	2 U	2 U	· 2 U	2 U	200 U			
Calcium	10 U	10 U	10 U	10 U	1000 U			
Iron	2 U	2 U	2 U	2 U	200 U		1	ļ
Magnesium	5 U	5 U	5 U	5 U	500 U			
Manganese	.1 U	.1 U	່ .1 ປ	.1 U	10 U			j
Potassium	5 U	5 U	5 U	5 U	500 U	ļ		
Sodium	2.5 U	2.5 U	2.5 U	2.5 U	250 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: 11/01/13

Data File: H15644S

Prep Batch: 27357 Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Instrument: HGCV1A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 3102821

Lab Name:

Lab Code:

Contract: Nras No:

Sdg No:

Case No:

		and the state of the property of the property of the pro-	M: 1414 - 141-1-1-1-1-1-1-1-1-1-1-1-1-1-1-				
							;
	ICB-10	CCB-22	CCB-34	CCB-43	MB 27357		,
Analyte					(167)-11		
Mercury	.5 U	.5 U	.5 U	.5 U	83 U	1.	
· · · · · · · · · · · · · · · · · · ·							

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

PREP BATCH: 27357

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

0.976

1.61

93

93

77

81

123

119

TxtQcType: I	LCSMR	Matri	x: SOIL		SampleID: LCS MR 27357				
Analyte	Batchid	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual Lo Lim	·Hi Lim
Aluminum	27357	1	S15644D3	13	78.6119	88.4	89	54	146
Arsenic	27357	1	S15644C3	14	0.8946	0.996	90	81	119
Barium	27357	1	S15644C3	14	2.8555	3.10	92	83	117
Calcium	27357	1	S15644D3	13	68.5188	67.9	101	83	118
Chromium	27357	1	S15644C3	1.4	1.2867	1.36	95	80	121
Cobalt	27357	1	S15644C3	14	1.2456	1.28	97	83	116
Copper	27357	1	S15644C3	14	0.9938	1.02	97	81	119
Iron	27357	1	S15644D3	13	128.1410	126	102	41	158
Lead	27357	1	S15644C3	14	1.0603	1.15	92	82	119
Magnesium	27357	1	S15644D3	13	29.9319	30.1	99	77	123
Manganese	27357	1	S15644D3	13	3.1941	3.23	99	82	117
Mercury	27357	. 10	H15644S	15	11.9114	119.2	100	69	130
Nickel	27357	1	S15644C3	14	1.4920	1.53	98	82	118
Potassium	27357	1	S15644D3	13	27.5851	28.4	97	71	129
Sodium	27357	1	S15644D3	13	27.1571	27.6	98	71	129
Thallium	27357	1	S15644C3	14	1.6367	1.74	94	79	122
Vanadium	27357	1	S15644C3	14	0.8966	0.976	92	77	123
Zinc	27357	1	S15644C3	14	1.4806	1.61	92	81	119
T.40-T	1.00				Sample D. I CS 27257				
TxtQcType:		Matri		South	SampleID: LCS 27357	Snk Adda	Pecov	Qual Lo Lim	Hilim
Analyte	Batchld	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde			Hi Lin
Analyte Aluminum	Batchld 27357	DF 1	Data Fil S15644D3	12	Spk Conc: 77.6904	88.4	88	54	146
Analyte Aluminum Arsenic	Batchid 27357 27357	DF 1 1	Data Fil S15644D3 S15644C3	12 13	Spk Conc: 77.6904 0.9306	88.4 0.996	88 93	54 81	146 119
Analyte Aluminum Arsenic Barium	Batchld 27357 27357 27357	DF 1 1	Data Fil S15644D3 S15644C3 S15644C3	12 13 13	Spk Conc: 77.6904 0.9306 2.9725	88.4 0.996 3.10	88 93 96	54 81 83	146 119 117
Analyte Aluminum Arsenic Barium Calcium	Batchid 27357 27357 27357 27357	DF 1 1 1 1	Data Fil S15644D3 S15644C3 S15644C3 S15644D3	12 13 13 12	Spk Conc: 77.6904 0.9306 2.9725 67.0486	88.4 0.996 3.10 67.9	88 93 96 99	54 81 83 83	146 119 117 118
Analyte Aluminum Arsenic Barium Calcium Chromium	Batchld 27357 27357 27357 27357 27357	DF 1 1 1 1	Data Fil S15644D3 S15644C3 S15644C3 S15644D3 S15644C3	12 13 13 12 12	Spk Conc: 77.6904 0.9306 2.9725 67.0486 1.3036	88.4 0.996 3.10 67.9 1.36	88 93 96 99	54 81 83 83 80	146 119 117 118
Analyte Aluminum Arsenic Barium Calcium Chromium Cobalt	Batchld 27357 27357 27357 27357 27357 27357	DF 1 1 1 1 1 1 1	Data Fil S15644D3 S15644C3 S15644D3 S15644D3 S15644C3 S15644C3	12 13 13 12 13 13	Spk Conc: 77.6904 0.9306 2.9725 67.0486 1.3036 1.2639	88.4 0.996 3.10 67.9 1.36 1.28	88 93 96 99 96 99	54 81 83 83 80 83	146 119 117 118 121 116
Analyte Aluminum Arsenic Barium Calcium Chromium Cobalt Copper	Batchid 27357 27357 27357 27357 27357 27357 27357 27357	DF 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Data Fil S15644D3 S15644C3 S15644C3 S15644C3 S15644C3 S15644C3 S15644C3	12 13 13 12 13 13 13	Spk Conc: 77.6904 0.9306 2.9725 67.0486 1.3036 1.2639 0.9935	88.4 0.996 3.10 67.9 1.36 1.28 1.02	88 93 96 99 96 99 97	54 81 83 83 80 83 81	146 119 117 118 121 116 119
Analyte Aluminum Arsenic Barium Calcium Chromium Cobalt Copper	Batchid 27357 27357 27357 27357 27357 27357 27357 27357 27357	DF 1 1 1 1 1 1 1 1 1 1 1 1 1	Data Fil S15644D3 S15644C3 S15644C3 S15644C3 S15644C3 S15644C3 S15644C3 S15644D3	12 13 13 12 13 13 13	Spk Conc: 77.6904 0.9306 2.9725 67.0486 1.3036 1.2639 0.9935 128.4620	88.4 0.996 3.10 67.9 1.36 1.28 1.02	88 93 96 99 96 99 97 102	54 81 83 83 80 83 81 41	146 119 117 118 121 116 119
Analyte Aluminum Arsenic Barium Calcium Chromium Cobalt Copper	Batchid 27357 27357 27357 27357 27357 27357 27357 27357 27357	DF 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Data Fil S15644D3 S15644C3 S15644C3 S15644C3 S15644C3 S15644C3 S15644C3 S15644C3	12 13 13 12 13 13 13 13 12	Spk Conc: 77.6904 0.9306 2.9725 67.0486 1.3036 1.2639 0.9935 128.4620 1.0881	88.4 0.996 3.10 67.9 1.36 1.28 1.02 126	88 93 96 99 96 99 97 102	54 81 83 83 80 83 81 41	146 119 117 118 121 116 119 158
Analyte Aluminum Arsenic Barium Calcium Chromium Cobalt Copper Iron Lead Magnesium	Batchid 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357	DF 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Data Fil S15644D3 S15644C3 S15644C3 S15644C3 S15644C3 S15644C3 S15644D3 S15644C3 S15644C3 S15644C3	12 13 13 12 13 13 13 13 12 13	Spk Conc: 77.6904 0.9306 2.9725 67.0486 1.3036 1.2639 0.9935 128.4620 1.0881 29.9254	88.4 0.996 3.10 67.9 1.36 1.28 1.02 126 1.15 30.1	88 93 96 99 96 99 97 102 95	54 81 83 83 80 83 81 41 82	146 119 117 118 121 116 119 158 119 123
Analyte Aluminum Arsenic Barium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese	Batchid 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357	DF 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Data Fil S15644D3 S15644C3 S15644C3 S15644C3 S15644C3 S15644C3 S15644C3 S15644C3 S15644D3 S15644D3	12 13 13 12 13 13 13 13 12 13	Spk Conc: 77.6904 0.9306 2.9725 67.0486 1.3036 1.2639 0.9935 128.4620 1.0881 29.9254 3.1856	88.4 0.996 3.10 67.9 1.36 1.28 1.02 126 1.15 30.1 3.23	88 93 96 99 96 99 97 102 95 99	54 81 83 83 80 83 81 41 82 77 82	146 119 117 118 121 116 119 158 119 123 117
Analyte Aluminum Arsenic Barium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury	Batchid 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357	DF 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Data Fil S15644D3 S15644C3 S15644C3 S15644C3 S15644C3 S15644C3 S15644D3 S15644D3 S15644D3 S15644D3 S15644D3	12 13 13 12 13 13 13 12 12 13 12 12 14	Spk Conc: 77.6904 0.9306 2.9725 67.0486 1.3036 1.2639 0.9935 128.4620 1.0881 29.9254 3.1856 12.6926	88.4 0.996 3.10 67.9 1.36 1.28 1.02 126 1.15 30.1 3.23 119.2	88 93 96 99 96 99 97 102 95 99 99 106	54 81 83 83 80 83 81 41 82 77 82 69	146 119 117 118 121 116 119 158 119 123 117
Analyte Aluminum Arsenic Barium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel	Batchid 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357	DF 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Data Fil S15644D3 S15644C3 S15644C3 S15644C3 S15644C3 S15644C3 S15644D3 S15644D3 S15644D3 S15644D3 S15644D3 S15644D3	12 13 13 12 13 13 13 12 13 12 12 14	Spk Conc: 77.6904 0.9306 2.9725 67.0486 1.3036 1.2639 0.9935 128.4620 1.0881 29.9254 3.1856 12.6926 1.4901	88.4 0.996 3.10 67.9 1.36 1.28 1.02 126 1.15 30.1 3.23 119.2	88 93 96 99 96 99 97 102 95 99 90 106 97	54 81 83 83 80 83 81 41 82 77 82 69	146 119 117 118 121 116 119 158 119 123 117 130
Analyte Aluminum Arsenic Barium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury	Batchid 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357	DF 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Data Fil S15644D3 S15644C3 S15644C3 S15644C3 S15644C3 S15644C3 S15644D3 S15644D3 S15644D3 S15644D3 S15644D3	12 13 13 12 13 13 13 12 12 13 12 12 14	Spk Conc: 77.6904 0.9306 2.9725 67.0486 1.3036 1.2639 0.9935 128.4620 1.0881 29.9254 3.1856 12.6926	88.4 0.996 3.10 67.9 1.36 1.28 1.02 126 1.15 30.1 3.23 119.2	88 93 96 99 96 99 97 102 95 99 99 106	54 81 83 83 80 83 81 41 82 77 82 69	146 119 117 118 121 116 119 158 119 123 117

0.9052

1.5013

27357

27357

1

S15644C3

S15644C3

13

13

Zinc

Vanadium

75

125

102

FORM5/FORM7 SPIKE RECOVERY DATA

PREP BATCH: 27357

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

Analytical Me	thod(s):601	0/200.7/	7470A/7471A/2	245.1				ICP units in pp	m, ICPMS ar	nd Hgin	ppb		
TxtQcType:	MSD	Ма	trix: SOIL	- //// - 1044497	Sample	eID: AC	75388-001		-				,
Analyte	Batchid	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	27357	1	S15644D3	17	S15644D3	14	80.5369	63.5472	5.0	340	ь	75	125
Arsenic	27357	1	S15644C3	18	S15644C3	15	0.4718	0.04U	0.5	94		75	125
Barium	27357	1	S15644C3	18	S15644C3	15	0.8972	0.3785	0.5	104		75	125
Calcium	27357	1 .	S15644D3	17	S15644D3	14	79.7165	26.4295	50	107		75	125
Chromium	27357	1	S15644C3	18	S15644C3	15	0.5711	0.1071	0.5	93		75	125
Cobalt	27357	1	S15644C3	18	S15644C3	15	0.5284	0.0546	0.5	95		75	125
Copper	27357	1	S15644C3	18	S15644C3	15	0.6301	0.1532	0.5	95		75	125
iron	27357	1	S15644D3	17	S15644D3	14	133.8190	129.1140	5.0 ·	94		75	125
_ead	27357	1	S15644C3	18	S15644C3	15	1.0608	0.3383	0.5	145	а	75	125
Magnesium	27357	1	S15644D3		S15644D3	14	75.5522	26.2494	50	99		75	125
Manganese	27357	1	S15644D3	17	S15644D3	14	3.0805	2.1108	0.5	194	b	75	125
Mercury	27357	1	H15644S	19	H15644S	16	11.4785	0.9570	10	105		75	125
Nickel	27357	1	S15644C3	18	S15644C3	15	0.5994	0.1373	0.5	92		75	125
Potassium	27357	1	S15644D3		S15644D3	14	59.1921	9.0879	50	100		75	125
Sodium	27357	1	S15644D3	17	S15644D3	14	50.7805	2.5U	50	102		75	125
Thallium	27357	1	S15644C3	18	S15644C3	15	0.4757	0.015U	0.5	95		75	125
Vanadium	27357	1	S15644C3		S15644C3	15	0.6060	0.1411	0.5	93		75	125
Zinc	27357	1	S15644C3	18	S15644C3	15	0.8222	0.3538	0.5	94		75	125
TxtQcType:	MS	Ma	trix: SOIL		Sample	eID: AC	75388-001						
Analyte	Batchid	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	27357	1	S15644D3	16	S15644D3	14	77.5140	63.5472	5.0	279	b	75	125
Arsenic	27357	1	S15644C3	17	S15644C3	15	0.4780	0.04U	0.5	96		75	125
Barium	27357	1	S15644C3	17	S15644C3	15	0.9230	0.3785	0.5	109		75	125
Calcium	27357	1	S15644D3	16	S15644D3	14	83.3205	26.4295	50	114		75	125
Chromium	27357	1	S15644C3	17	S15644C3	15	0.5903	0.1071	0.5	97		75	125
Cobalt	27357	1	S15644C3	17	S15644C3	15	0.5455	0.0546	0.5	98		75	125
Copper	27357	1	S15644C3	17	S15644C3	15	0.6557	0.1532	0.5	101		75	125
ron	27357	1	S15644D3	16	S15644D3	14	135.5440	129.1140	5.0	129	b	75	125
_ead	27357	1	S15644C3	17	S15644C3	15	0.9230	0.3383	0.5	117		75	125
Magnesium	27357	1	S15644D3	16	S15644D3	14	76.0659	26.2494	50	100		75	125
Manganese	27357	1	S15644D3	16	S15644D3	14	2.7360	2.1108	0.5	125		75	125
Mercury	27357	1	H15644S	18	H15644S	16	10.8118	0.9570	10	99		75	125
vickel	27357	1	S15644C3	17	S15644C3	15	0.6133	0.1373	0.5	95		75	125
otassium	27357	1	S15644D3	16	S15644D3	14	58.7352	9.0879	50	99		75	125
Sodium	27357	1	S15644D3	16	S15644D3	14	50.6497	2.5U	50	101		75	125
Thallium	27357	1	S15644C3	17	S15644C3	15	0.4804	0.015U	0.5	96		75	125
√anadium	27357	1	S15644C3	17	S15644C3	15	0.6178	0.1411	0.5	95		75	125
	501	:	2.504400		2.00-1-00		2.0170						0

15 0.8633

0.3538

0.5

27357

1

S15644C3

17

S15644C3

Zinc

PREP BATCH: 27357

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

TxtQcType: PS	Ma	trix: SOIL		Sample	ID: AC	75388-001					
Analyte	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual Lo Lim	Hi Lim
Aluminum	1	S15644D3	18	S15644D3	14	68.4550	63.5472	5.0	98	80	120
Arsenic	1	S15644C3	19	S15644C3	15	0.4729	0.04U	0.50	95	80	120
Barium	1	S15644C3	19	S15644C3	15	0.8418	0.3785	0.50	93	80	120
Calcium	1	S15644D3	18	\$15644D3	14	76.5144	26.4295	50	100	80	120
Chromium	1	S15644C3	19	S15644C3	15	0.5667	0.1071	0.50	92	80	120
Cobalt	1	S15644C3	19	S15644C3	15	0.5292	0.0546	0.50	95	80	120
Copper	1	S15644C3	19	S15644C3	15	0.6209	0.1532	0.50	94	80	120
Iron	1	S15644D3	18	S15644D3	14	134.2430	129.1140	5.0	103	80	120
Lead	1	S15644C3	19	S15644C3	15	0.7972	0.3383	0.50	92	80	120
Magnesium	1 *	S15644D3	18	S15644D3	14	76.8957	26.2494	50	101	80	120
Manganese	1	S15644D3	18	S15644D3	14	2.5915	2.1108	0.50	96	80	120
Nickel	1	S15644C3	19	S15644C3	15	0.5954	0.1373	0.50	92	80	120
Potassium	1	\$15644D3	18	S15644D3	14	58.9665	9.0879	50	100	80	120
Sodium	1	S15644D3	18	S15644D3	14	50.7185	. 2.5U	50	101	80	120
Thallium	1	S15644C3	19	S15644C3	15	0.4788	0.015U	0.50	96	80	120
Vanadium	1	S15644C3	19	S15644C3	15	0.5937	0.1411	0.50	91	80	120
Zinc	1	S15644C3	19	S15644C3	15	0.7988	0.3538	0.50	89	80	120

PREP BATCH: 27358

Instrument Type: ICPMS Analytical Method(s):6020/200.8

TxtQcType:	LCSMR	Mat	trix: SOIL		Sample	ID: LC	S MR 27358					
Analyte	Batchid	DF	Data Fil	Seq#:			Spk Conc:	<u></u>	Spk Adde	Recov	Qual Lo Lim	HI Lim
Antimony	27358	1	S103113B	18			27.6700		88.2	31	0.023	231
Beryllium	27358	1	S103113B	18			81.7900		72.3	113	82	118
Cadmium	27358	1	S103113B	18			212.9000		182	117	82	118
Selenium	27358	1	S103113B	18		•	171.3000		150	114	77	123
Silver	27358	1	S103113B	18			45.6500		40.4	113	75	125
TxtQcType:	LCS	Mat	trix: SOIL		Sample	ID: LC	S 27358					
Analyte	Batchld	DF	Data Fil	Seq#:			Spk Conc:		Spk Adde	Recov	Qual Lo Lim	Hi Lim
Antimony	27358	1	S103113B	17			22.2800		88.2	25	0.023	231
Beryllium	27358	1	S103113B	17			76.8500		72.3	106	82	118
Cadmium	27358	1	S103113B	17			199.7000		182	110	82	118
Selenium	27358	1	S103113B	17			170.0000		150	113	77	123
Silver	27358	1	S103113B	17			41.7700		40.4	103	75	125
TxtQcType:	MSD	Mat	trix: SOIL		Sample	ID: AC	75388-001		-			
Analyte_	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual Lo Lim	Hi Lin
Antimony	27358	1	S103113B	23	S103113B	19	68.0600	1U	250	27	a 75	125
Beryllium	27358	1	S103113B	23	S103113B	19	190.8000	1.0790	250	76	75	125
Cadmium	27358	1	S103113B	23	S103113B	19	231.8000	2 U	250	93	75	125
Selenium	27358	_1	S103113B	23	S103113B	19	230.7000	10U	250	92	75	125
Silver	27358	1	S103113B	23	S103113B	19	44.2100	1U	50	88	75	125
TxtQcType:	MS	Mat	rix: SOIL		Sample	ID: AC	75388-001					
Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual Lo Lim	Hi Lim
Antimony	27358	1	S103113B	22	S103113B	19	60.9500	1U	250	24	a 75	125
3eryllium	27358	1	S103113B	22	S103113B	19	195.7000	1.0790	250	78	75	125
Cadmium	27358	1	S103113B	22	S103113B	19	224.8000	2U	250	90	75	125
Selenium	27358	_1	S103113B	22	S103113B	19	218.4000	10U	250	87	75	125
Silver	27358	1	S103113B	22	S103113B	19	43.1700	1U	50	86	75	125

PREP BATCH: 27358

Instrument Type: ICPMS

Analytical Method(s):6020/200.8

TxtQcType: PS	Ma	trix: SOIL		Sample	eID: AC	75388-001					
Analyte	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual Lo Lim	Hi Lim
Antimony	1	S103113B	24	S103113B	19	47.8900	1U	50	96	80	120
Beryllium	1	S103113B	24	S103113B	19	39.8400	1.0790	50	78	a 80	120
Cadmium	1	S103113B	24	S103113B	19	47.7300	2U	50	95	80	120
Selenium	1	S103113B	24	S103113B	19	232.9000	10U	250	93	80	120
Silver	1	S103113B	24	S103113B	19	46.8900	10	50	94	80	120

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 27357

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

TxtQcType: L	.CSMR	Matrix: S	SOIL	Sam	pleID: LCS	MR 27357			•
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limi
Aluminum	27357	S15644D3	13	S15644D3	12	78.6119	77.6904	1.2	20
Arsenic	27357	S15644C3	14	S15644C3	13	0.8946	0.9306	3.9	20
Barium	27357	S15644C3	14	S15644C3	13	2.8555	2.9725	4	20
Calcium	27357	S15644D3	13	S15644D3	12	68.5188	67.0486	2.2	20
Chromium	27357	S15644C3	14	S15644C3	13	1.2867	1.3036	1.3	20
Cobalt	27357	S15644C3	14	S15644C3	13	1.2456	1.2639	1.5	20
Copper	27357	S15644C3	14	S15644C3	13	0.9938	0.9935	.023	20
Iron	27357	S15644D3	13	S15644D3	12	128.1410	128.4620	.25	20
Lead	27357	S15644C3	14	S15644C3	13	1.0603	1.0881	2.6	20
Magnesium	27357	S15644D3	13	S15644D3	12	29.9319	29.9254	.022	20
Manganese	27357	S15644D3	13	S15644D3	12	3.1941	3.1856	.27	20
Mercury	27357	H15644S	15	H15644S	14	11.9114	12.6926	6.4	20
Nickel	27357	S15644C3	14	S15644C3	13	1.4920	1.4901	.13	20
Potassium	27357	S15644D3	13	S15644D3	12	27.5851	27.8807	1.1	20
Sodium	27357	S15644D3	13	S15644D3	12	27.1571	27.0373	.44	20
Thailium	27357	S15644C3	14	S15644C3	. 13	1.6367	1.6981	3.7	20
Vanadium	27357	S15644C3	14	\$15644C3	13	0.8966	0.9052	.96	20
Zinc	27357	S15644C3	14	S15644C3	13	1.4806	1.5013	1.4	20
TxtQcType: N	AR .	Matrix: S	OIL	Sam	pleID: AC7	5388-001			
Analyte	Batchld	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Lim
	Batchld 27357	Data Fil S15644D3	Seq#: 15	NS File S15644D3	Seq# 14	Result 1 61.8505	Result 2 63.5472	RPD 2.7	Lim 20
Aluminum									
Aluminum Arsenic	27357	S15644D3	15	S15644D3	14	61.8505	63.5472	2.7	20
Analyte Aluminum Arsenic Barium Calcium	27357 27357	S15644D3 S15644C3	15 16	S15644D3 S15644C3	14 15	61.8505 0.04U	63.5472 0.04U	2.7	20 20
Aluminum Arsenic Barium Calcium	27357 27357 27357	S15644D3 S15644C3 S15644C3	15 16 16	S15644D3 S15644C3 S15644C3	14 15 15	61.8505 0.04U 0.3429	63.5472 0.04U 0.3785	2.7 9.9	20 20 20
Aluminum Arsenic Barium	27357 27357 27357 27357	S15644D3 S15644C3 S15644C3 S15644D3	15 16 16 15	S15644D3 S15644C3 S15644C3 S15644D3	14 15 15 14	61.8505 0.04U 0.3429 23.5714	63.5472 0.04U 0.3785 26.4295	2.7 9.9 11	20 20 20 20
Aluminum Arsenic Barium Calcium Chromium Cobalt	27357 27357 27357 27357 27357	\$15644D3 \$15644C3 \$15644C3 \$15644D3 \$15644C3	15 16 16 15	\$15644D3 \$15644C3 \$15644C3 \$15644D3 \$15644C3	14 15 15 14 15	61.8505 0.04U 0.3429 23.5714 0.1007	63.5472 0.04U 0.3785 26.4295 0.1071	2.7 9.9 11 6.1	20 20 20 20 20
Aluminum Arsenic Barium Calcium Chromium Cobalt Copper	27357 27357 27357 27357 27357 27357	\$15644D3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3	15 16 16 15 16 16	\$15644D3 \$15644C3 \$15644C3 \$15644D3 \$15644C3 \$15644C3	14 15 15 14 15 15	61.8505 0.04U 0.3429 23.5714 0.1007 0.0536	63.5472 0.04U 0.3785 26.4295 0.1071 0.0546	2.7 9.9 11 6.1 1.8	20 20 20 20 20 20
Aluminum Arsenic Barium Calcium Chromium Cobalt Copper	27357 27357 27357 27357 27357 27357 27357 27357	\$15644D3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3	15 16 16 15 16 16	\$15644D3 \$15644C3 \$15644C3 \$15644D3 \$15644C3 \$15644C3 \$15644C3	14 15 15 14 15 15	61.8505 0.04U 0.3429 23.5714 0.1007 0.0536 0.1573	63.5472 0.04U 0.3785 26.4295 0.1071 0.0546 0.1532	2.7 9.9 11 6.1 1.8 2.6	20 20 20 20 20 20 20 20 20
Aluminum Arsenic Barium Calcium Chromium Cobalt Copper Iron Lead	27357 27357 27357 27357 27357 27357 27357 27357 27357	\$15644D3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3	15 16 16 15 16 16 16	\$15644D3 \$15644C3 \$15644C3 \$15644D3 \$15644C3 \$15644C3 \$15644C3 \$15644D3	14 15 15 14 15 15 15	61.8505 0.04U 0.3429 23.5714 0.1007 0.0536 0.1573 127.2540	63.5472 0.04U 0.3785 26.4295 0.1071 0.0546 0.1532 129.1140	2.7 9.9 11 6.1 1.8 2.6 1.5	20 20 20 20 20 20 20 20 20
Aluminum Arsenic Barium Calcium Chromium Cobalt Copper Iron Lead Magnesium	27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357	\$15644D3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3	15 16 16 15 16 16 16 15	\$15644D3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3	14 15 15 14 15 15 15 15	61.8505 0.04U 0.3429 23.5714 0.1007 0.0536 0.1573 127.2540	63.5472 0.04U 0.3785 26.4295 0.1071 0.0546 0.1532 129.1140 0.3383	2.7 9.9 11 6.1 1.8 2.6 1.5	20 20 20 20 20 20 20 20 20 20 20
Aluminum Arsenic Barium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese	27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357	\$15644D3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3	15 16 16 15 16 16 16 15 16 15	\$15644D3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3	14 15 15 14 15 15 15 14 15 14	61.8505 0.04U 0.3429 23.5714 0.1007 0.0536 0.1573 127.2540 0.5377 25.2319	63.5472 0.04U 0.3785 26.4295 0.1071 0.0546 0.1532 129.1140 0.3383 26.2494	2.7 9.9 11 6.1 1.8 2.6 1.5	20 20 20 20 20 20 20 20 20 20 20 20 20 2
Aluminum Arsenic Barium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury	27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357	\$15644D3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644D3 \$15644D3 \$15644D3	15 16 16 15 16 16 16 15 16 15 17	\$15644D3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644D3 \$15644D3 \$15644D3	14 15 15 14 15 15 15 14 15 14	61.8505 0.04U 0.3429 23.5714 0.1007 0.0536 0.1573 127.2540 0.5377 25.2319 2.4267	63.5472 0.04U 0.3785 26.4295 0.1071 0.0546 0.1532 129.1140 0.3383 26.2494 2.1108	2.7 9.9 11 6.1 1.8 2.6 1.5 46 4	20 20 20 20 20 20 20 20 20 20 20 20 20 2
Aluminum Arsenic Barium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel	27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357	\$15644D3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644D3 \$15644D3 \$15644D3 \$15644D3	15 16 16 15 16 16 16 15 16 15	\$15644D3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644D3 \$15644D3 \$15644D3 \$15644D3	14 15 15 14 15 15 15 14 15 14	61.8505 0.04U 0.3429 23.5714 0.1007 0.0536 0.1573 127.2540 0.5377 25.2319 2.4267 1.1961	63.5472 0.04U 0.3785 26.4295 0.1071 0.0546 0.1532 129.1140 0.3383 26.2494 2.1108 0.9570	2.7 9.9 11 6.1 1.8 2.6 1.5 46 4 14 22	20 20 20 20 20 20 20 20 20 20 20 20 20 2
Aluminum Arsenic Barium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium	27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357	\$15644D3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644D3 \$15644D3 \$15644C3 \$15644C3	15 16 16 15 16 16 16 15 16 15 17	\$15644D3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644D3 \$15644D3 \$15644D3 \$15644D3 \$15644C3	14 15 15 14 15 15 15 14 15 14 14 16	61.8505 0.04U 0.3429 23.5714 0.1007 0.0536 0.1573 127.2540 0.5377 25.2319 2.4267 1.1961 0.1291	63.5472 0.04U 0.3785 26.4295 0.1071 0.0546 0.1532 129.1140 0.3383 26.2494 2.1108 0.9570	2.7 9.9 11 6.1 1.8 2.6 1.5 46 4 14 22	20 20 20 20 20 20 20 20 20 20 20 20 20 2
Aluminum Arsenic Barium Calcium Chromium	27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357	\$15644D3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644D3 \$15644D3 \$15644D3 H15644C3 \$15644C3 \$15644C3	15 16 16 15 16 16 16 15 16 15 17 16	\$15644D3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644D3 \$15644D3 \$15644D3 \$15644D3 \$15644C3 \$15644C3 \$15644C3	14 15 15 14 15 15 15 14 15 14 16 15	61.8505 0.04U 0.3429 23.5714 0.1007 0.0536 0.1573 127.2540 0.5377 25.2319 2.4267 1.1961 0.1291 8.3981	63.5472 0.04U 0.3785 26.4295 0.1071 0.0546 0.1532 129.1140 0.3383 26.2494 2.1108 0.9570 0.1373 9.0879	2.7 9.9 11 6.1 1.8 2.6 1.5 46 4 14 22 6.1 7.9	20 20 20 20 20 20 20 20 20 20 20 20 20 2
Aluminum Arsenic Barium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Sodium	27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357 27357	\$15644D3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644D3 \$15644D3 \$15644D3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644D3 \$15644D3	15 16 16 15 16 16 15 16 15 17 16 15 17	\$15644D3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644C3 \$15644D3 \$15644D3 \$15644D3 \$15644D3 \$15644C3 \$15644C3 \$15644D3 \$15644D3	14 15 15 14 15 15 15 14 15 14 16 15 14	61.8505 0.04U 0.3429 23.5714 0.1007 0.0536 0.1573 127.2540 0.5377 25.2319 2.4267 1.1961 0.1291 8.3981 2.5U	63.5472 0.04U 0.3785 26.4295 0.1071 0.0546 0.1532 129.1140 0.3383 26.2494 2.1108 0.9570 0.1373 9.0879 2.5U	2.7 9.9 11 6.1 1.8 2.6 1.5 46 4 14 22 6.1 7.9	20 20 20 20 20 20 20 20 20 20 20 20 20 2

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 27357

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

TxtQcType: N	ISD	Matrix: SOIL	. Sar	npleID: AC753	88-001			
Analyte	BatchId	Data Fil Seq	q#: MS File	Seq#	Result 1	Result 2	RPD .	Limi
Aluminum	27357	S15644D3 1	17 \$15644D3	16	80.5369	77.5140	3.8	20
Arsenic	27357	S15644C3 1	18 S15644C3	17	0.4718	0.4780	1.3	20
Barium	27357	S15644C3 1	18 \$15644C3	17	0.8972	0.9230	2.8	20
Calcium	27357	S15644D3 1	17 S15644D3	16	79.7165	83.3205	4.4	20
Chromium	27357	S15644C3 1	18 \$15644C3	17	0.5711	0.5903	3,3	20
Cobalt	27357	S15644C3 1	18 \$15644C3	17	0.5284	0.5455	3.2	20
Copper	27357	S15644C3 1	18 \$15644C3	17	0.6301	0.6557	4 .	20
Iron	27357	S15644D3 1	17 S15644D3	16	133.8190	135.5440	1.3	20
Lead	27357	S15644C3 1	18 S15644C3	17	1.0608	0.9230	14	20
Magnesium	27357	S15644D3 1	17 S15644D3	16	75.5522	76.0659	.68	20
Manganese	27357	S15644D3 1	17 S15644D3	16	3.0805	2.7360	12	20
Mercury	27357	H15644S 1	19 H15644S	18	11.4785	10.8118	6	.20
Nickel	27357	S15644C3 1	18 S15644C3	17	0.5994	0.6133	2.3	20
Potassium	27357	S15644D3 1	17 S15644D3	16	59.1921	58.7352	.77	20
Sodium	27357	S15644D3	17 S15644D3	16	50.7805	50.6497	.26	20
Thallium	27357	S15644C3	18 S15644C3	17	0.4757	0.4804	.98	20
Vanadium	27357	S15644C3	18 \$15644C3	17	0.6060	0.6178	1.9	20
Zinc	27357	S15644C3	18 S15644C3	17	0.8222	0.8633	4.9	20
TxtQcType: §	SD	Matrix: SOIL	- Sar	mpleID: AC75	388-001			
Analyte	Batchld	Data Fil Sec	g#: NS File	Seq# DF	Result 1	Result 2	%Diff	Limi
Aluminum	27357	S15644D3	22 S15644D3	14 5	12.9872	63.5472	2.2	10
Arsenic	27357	S15644C3	23 S15644C3	15 5	-0.0001	0.0158		10
Barium	27357	S15644C3	23 \$15644C3	15 5	0.0783	0.3785	3.4	10
Calcium	27357	S15644D3	22 \$15644D3	14 5	5.1507	26.4295	2.6	10
Chromium	27357	S15644C3	23 \$15644C3	15 5	0.0224	0.1071	4.6	10
Cobalt	27357	S15644C3	23 \$15644C3	15 5	0.0119	0.0546	8.9	10
Copper	27357	S15644C3	23 S15644C3	15 5	0.0306	0.1532	0.11	10
lron	27357	S15644D3 2	22 \$15644D3	14 5	26.6156	129.1140	3.1	10
Lead	27357	S15644C3	23 \$15644C3	15 5	0.0676	0.3383	0.069	10
Magnesium	27357	S15644D3	22 \$1 56 44D3	14 5	4.9934	26.2494	4.9	10
Manganese	27357		22 \$15644D3	14 5	0.4328	2.1108	2.5	10
Nickel	27357	S15644C3 2	23 S15644C3	15 5	0.0271	0.1373	1.4	10
Potassium	27357		22 S15644D3	14 5	1.5677	9.0879	14	a 10
Sodium	27357	S15644D3 2	22 \$15644D3	14 5	-0.3725	1.0261		10
Thallium	27357	S15644C3 2	23 S15644C3		0.0018	0.0062		10
		0.001100	00 04504400	45 5	0.0296	0.1411	5	10
Vanadium	27357	S15644C3 2	23 \$15644C3	15 5	0.0296	0.1411	3	10

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 27358

Instrument Type: ICPMS
Analytical Method(s):6020/200.8

TxtQcType:	LCSMR	Matrix: SOIL	Sam	pleID: LCS M	IR 27358			
Analyte	Batchid	Data Fil Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limi
Antimony	27358	S103113B 18	S103113B	17	27.6700	22.2800	22 a	20
Beryllium	27358	S103113B 18	S103113B	17	81.7900	76.8500	6.2	20
Cadmium	27358	S103113B 18	S103113B	17	212.9000	199.7000	6.4	20
Selenium	27358	S103113B 18	S103113B	17	171.3000	170.0000	.76	20
Silver	27358	S103113B 18	S103113B	17	45.6500	41.7700	8.9	20
TxtQcType:	MR	Matrix: SOIL	Sam	pleID: AC753	388-001			
Analyte	Batchld	Data Fil Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limi
Antimony	27358	S103113B 20	S103113B	19	10	1U	***	20
Beryllium	27358	S103113B 20	S103113B	19	1.2100	1.0790	11	20
Cadmium	27358	S103113B 20	S103113B	19	2U	2U		20
Selenium	27358	S103113B 20	S103113B	19	10U	10U		20
Silver	27358	S103113B 20	S103113B	19	1U	1U		20
TxtQcType:	MSD	Matrix: SOIL	Sam	pleID: AC753	388-001		. 1.05.00 %	
Analyte	Batchid	Data Fil Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limi
Antimony	27358	S103113B 23	S103113B	22	68.0600	60.9500	11	20
Beryllium	27358	S103113B 23	S103113B	22	190.8000	195.7000	2.5	20
Cadmium	27358	S103113B 23	\$103113B	22	231.8000	224.8000	3.1	20
Selenium	27358	S103113B 23	S103113B	22	230.7000	218.4000	5.5	20
Silver	27358	\$103113B 23	S103113B	22	44.2100	43.1700	2.4	20
TxtQcType:	SD	Matrix: SOIL	Sam	pleID: AC753	388-001			
Analyte	Batchid	Data Fil Seq#:	NS File	Seq# DF	Result 1	Result 2	%Diff	Limi
Antimony	27358	S103113B 21	\$103113B	19 5	0.0242	0.0793	53 a	10
Beryllium	27358	S103113B 21	\$103113B	19 5	0.2425	1.0790	12 a	10
Cadmium	27358	S103113B 21	S103113B	19 5	0.0570	0.2695	5.8	10
	27358	S103113B 21	S103113B	19 5	1.1370	4.0690	40 a	10
Selenium	2/300	31031135 21	31031130	13 0	1.1070	4.0000	70 a	10

% Solids Report

Analysis Type: SOLIDS-SS BatchID: SOLIDS-SS-2422

QcType	SampleID:	Rounded Result	Raw Result	Units	Tare Weight	Wet Weight	Dry Weight	Analysis Date	Analyzed By	QC RPD	Rpd Limit
DUP	AC75394-001	93	93.25946	Percent	1.09	11.92	11.18	10/29/13	hossain	0.4	5
Sample	AC75394-001	93	92.88355	Percent	1.10	11.92	11.15	10/29/13	hossain		
Sample	AC75409-001	82	82.37548	Percent	1.09	11.53	9.69	10/29/13	hossain		
Sample	AC75411-001	87	87.34770	Percent	1.09	11.76	10.41	10/29/13	hossain		
Sample	AC75411-002	73	72.89448	Percent	1.08	11.41	8.61	10/29/13	hossain		
Sample	AC75411-003	81	80.58252	Percent	1.10	12.43	10.22	10/29/13	hossain		
Sample	AC75411-004	81	81.46067	Percent	1.08	11.76	9.78	10/29/13	hossain		
Sample Sample	AC75411-002 AC75411-003	73 81	72.89448 80.58252	Percent Percent	1.08 1.10	11.41 12.43	8.61 10.22	10/29/13 10/29/13	hossain hossain		

^{* -} Indicates Failed Rpd Criteria



Last Page of Report

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SPECIFICATIONS FOR CONSTRUCTION OF BEST MANAGEMENT PRACTICE (BMP) AND MITIGATION AREA

NOTICE

THE PAGES CONTAINED IN THIS SECTION ARE ISSUED FOR THE PURPOSE OF SPECIFYING THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND HEREBY MADE PART OF SAID CONTRACT DOCUMENTS.

(NO TEXT ON THIS PAGE)

CONSTRUCTION OF STORM AND COMBINED SEWERS, WATER MAINS AND APPURTENANCES IN W. 9^{TH} STREET BROOKLYN, NY

SPECIFICATIONS FOR

CONTRACT SEK20068

SPECIFICATIONS FOR SEDIMENT AND EROSION CONTROL FOR THE CONSTRUCTION SITE

April 2018
Prepared for the NYC Department of Design and Construction

By Hazen and Sawyer, D.P.C./AKRF Engineering, P.C. A Joint Venture

<u>DIVISION VII - DETAILED SPECIFICATIONS - CONTRACT SEK 20068</u>

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SEK20068

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SEK20068

<u>DIVISION VII - DETAILED SPECIFICATIONS - CONTRACT SEK20068</u>

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OUTFALL CONSTRUCTION DIVISION VII

SPECIFIC PROVISIONS

7.01 LOCATION OF WORK

The project includes the construction of a 42-inch storm sewer outfall and an 18-inch storm sewer outfall to discharge to the Gowanus Canal in Brooklyn, New York. One outfall would be located underneath the east side of the 9th Street Bridge and the other would be located northwest of the bridge. The Gowanus Canal is a Federal Superfund site.

7.02 WORK INCLUDED

The work under this Contract includes the erosion and sediment control measures during the construction of new outfalls. The following descriptions of work included under this Contract are general descriptions only and shall not be construed as a complete description of the work to be performed.

A. <u>The principal items of work include:</u>

1. Erosion and sediment control measures during construction:

This shall entail the erosion and sediment control measures during the construction of the storm sewer outfalls. Specifications and plans for this work are included in this document.

2. Outfall Construction for Storm Sewer Networks

This entails excavation of trenches and layout of storm sewer outfall pipelines. The specifications and plans for this work are included elsewhere in these Contract Documents, not in this document.

3. Site Restoration

The entire Project site will be restored upon project completion as per the Contract Drawings. Specifications and plans for this work are included in this set and elsewhere in these Contract Documents.

B. Involved Agencies and Firms

Before bidding, the contractor must become familiar with the following involved agencies and firms and their respective responsibilities in the project:

1. New York City Department of Design and Construction (NYCDDC)

The NYCDDC will administer and inspect the Contractor's work with regard to all aspects of the Contract, including managing the overall project schedule, sequencing of the project and construction. The NYCDDC will handle permit compliance in relation to the sewer outfall construction. Whenever reference is made in these specifications to "the Engineer", it means the Engineer on site, hired by NYCDDC.

2. New York City Department of Environmental Protection (DEP)

This City agency will maintain the facilities where the outfalls are to be re-constructed under this project.

3. New York State Department of Environmental Conservation (NYSDEC)

This State Agency will be issuing a tidal wetland permit authorizing work in regulated areas to be performed under this Contract. This Agency has the regulatory authority to inspect the work site in order to ensure that permit requirements are not violated.

4. Environmental Protection Agency (EPA)

This agency is overseeing the Federal Superfund site. Any construction within the canal would be coordinated with the EPA, prior to construction as described in section 7.10.D.

5. United States Army Corp of Engineers

This Federal Agency issues permits for all work within Federal jurisdiction wetlands. This agency has the regulatory authority to inspect the work site in order to ensure that permit requirements are not violated.

C. Qualifications of Contractor/Subcontractor

1. The Contractor shall have performed at least three (3) contracts that involved the installation and maintenance of soil erosion and sediment control devices for the construction of a project.

To support the Contractor's contention that he/she is qualified, the Contractor shall be able to provide the following information in a Statement of Qualifications, as detailed in the paragraph below.

Provide specific details on the projects (i.e., location, size cost, client, etc.). Provide client contact person's name and telephone number. Describe regulatory requirements of the erosion control devices. Describe any problems encountered during construction and operation of the devices. Discuss corrective actions taken to remedy the problem. Describe any violations issued by regulatory agencies. How were the violations resolved? Provide chronological photos recording the progress of construction and operation of the erosion control devices, including preconstruction through operation during site construction and restoration after construction.

2. The Contractor must be able to complete and submit to NYCDDC the Statement of Qualifications described in this Section within three (3) calendar days after requested to do so by NYCDDC.

7.04 STANDARD SPECIFICATIONS

a. Roadway Repair and Resurfacing

Unless otherwise specified, all work, materials, and equipment shall conform to the applicable sections of the City of New York Department of Transportation Standard Highway Specifications.

b. Sewer Work

Unless otherwise specified, all work, materials, and equipment shall conform to the applicable sections of the New York City Department of Environmental Protection Bureau of Water and Sewer Operations Standard Sewer and Water Main Specifications.

7.05 <u>INSPECTION BY THE CITY, STATE AND FEDERAL</u> <u>GOVERNMENT</u>

The Contractor shall provide proper facilities for inspection and access to the work at all times, whenever it is in preparation and progress, for authorized representatives of the City, State and Federal Governments, the latter two in the presence of the Engineer.

7.06 <u>EXISTING UTILITIES</u>

All subsurface utility and structure information shown on the Contract Drawings were obtained from various plans and maps and field investigations, however, it is not guaranteed to be complete or accurate. It shall be the Contractor's responsibility to locate all such necessary utilities or structures by the digging of test pits prior to the start of construction and/or by contracting the Joint Underground Locating Service (JULS). No separate payment will be made for test pits or any other work related to locating existing utilities. During the progress of the work, the Contractor shall protect from damage any existing utilities or services within the work areas until, if required, they have been re-routed, disconnected or capped off.

7.07 PERMITS REQUIRED

The Contractor is advised that NYCDDC has filed a joint application for permit with the New York State Department of Environmental Conservation (NYSDEC), the United States Army Corps of Engineers (USACE), the New York State Department of State (NYSDOS) and the New York City Department of City Planning. No work shall commence until the above-mentioned permit has been obtained for this project. As the application is being processed, it shall be the Contractor's responsibility to obtain and update the said permit.

The Contractor shall also become familiar with the following permits approvals which will be obtained by NYCDDC:

- New York State Department of Environmental Conservation Excavation and Fill in Navigable Waters;
- New York State Department of Environmental Conservation 401 Water Quality Certification;
- New York State Department of Environmental Conservation Tidal Wetlands;

- New York State Department of Environmental Conservation SPDES General Permit GP-0-15-002;
- U.S. Army Corps of Engineers Nationwide Permit 7 Outfall Structures and Associated Intake Structures;
- New York State Department of State Coastal Consistency Concurrence;
- New York City Planning Commission Waterfront Revitalization (Coastal Zone) Consistency Determination.

The Contractor shall obtain all necessary permits as outlined in NYCDOT Standard Specifications, Section 1.06.23.

The Contractor is responsible for performing all work in compliance with all permit requirements. No separate or additional payment shall be made to the Contractor for complying with the above requirements, and obtaining and updating of said permits. The cost of such work shall be deemed included in the prices bid for all contract items of work.

7.08 LAND FOR CONTRACTOR'S USE

It is the responsibility of the Contractor to acquire land for staging area and/or use as a construction equipment and material storage yard. Staging area, stock pile sites, and other storage locations shall be protected from erosion and stormwater runoff.

7.09 LICENSED SURVEYOR FOR ENGINEER'S USE

A. Work Included

The Contractor shall engage the services of a New York State licensed surveyor as approved by the Engineer and reporting directly to the Engineer to make such surveys, as-builts, soundings, cross sections or other measurements as may be required by the Engineer for wetland mitigation construction. Surveying services included in the item are for the sole use of the Engineer.

The Contractor for this Contract shall include in his total bid a per diem cost for the services performed by the Licensed Surveyor. This cost shall be shown on the Bid Schedule of Prices as Item No. BMP-7.09.

The cost proposals shall include unit prices on a per diem basis and shall include all necessary equipment, including vehicles for the Surveyors.

The cost proposals shall be submitted to the Engineer for evaluation and selection.

B. Measurement and Payment

Measurement for payment shall be on a per diem basis. One day shall consist of any eight (8) hour time period from 7:00 AM to 6:00 PM Monday through Friday plus travel time, not including holidays. The per diem rate shall include the services of a three man surveying crew. The Engineer shall be present during the progress of Work and the Engineer shall deem as to whether a full eight hour period had been employed in completing the Work, and as to whether the Contractor has utilized his crew at the productivity output required to complete the Work as anticipated. The surveyor will submit invoices to the Engineer, which will be forwarded to the Contractor for prompt payment. Payments shall be made for invoiced costs only, with no payment for overhead and profit.

7.10 CONSTRUCTION - SPECIAL REQUIREMENTS

A. Field Measurements

The Contractor shall take all necessary measurements in the field to determine the exact dimensions for all work and verify all pertinent data and dimensions shown on the Contract Drawings.

B. Excavated Material

Unsuitable excavated material shall be removed from the site together with all debris encountered in the excavations and the costs of such removal and disposal shall be included in the unit price bid for the applicable items in this Contract.

C. <u>Access Requirements</u>

The Contractor is advised that he shall provide access to the sites of the work for all other Contractors and that access to the sites of the work performed under all contracts shall be closely coordinated and scheduled with all other Contractors at the various sites during the life of this Contract.

D. Work Restrictions

The EPA is planning remedial dredging associated with the Superfund Remedial Action Plan in Remedial Target Area 2 (RTA 2) for 2019-2020. NYCDDC and NYCDEP will coordinate with the EPA on the planned Remedial Target Area 2 (RTA2) in the Gowanus Canal, which intersects the in-water portion of the project area. No interference with the EPA work associated with RTA2 is permitted during construction.

E. <u>Connections to Existing Piping</u>

Connections to existing piping shall be made to permit ready disconnection of equipment with minimum disturbance of adjoining piping and equipment. The Contractor shall be responsible for the exact alignment of all piping with the existing piping and associated equipment and under no circumstances will pipe springing be allowed.

F. Noise Control

The Contractor shall implement noise control measures during construction including limits on the hours of operation and compliance with sound level standards. Those measures will comply with NYC and Federal noise requirements. The Contractor shall comply with the NYC Noise Code and NYC Council Introduction 1653-2017. No separate payment shall be made for this work; the cost thereof shall be included in the bid price for other items.

G. Dust Control

During construction, all appropriate fugitive dust control, including watering of exposed areas and using dust covers for trucks shall be employed. These measures include satisfying Section 1402.2-9.11 of the New York City Air Pollution Code. To prevent fugitive dust from construction activities from becoming airborne, the following measures are proposed:

- Use of water or surfactant to control dust in the construction operations and during the clearing and grading of land;
- Application of water to dirt paths, materials, stockpiles, and other surfaces that can generate airborne dust over extended periods.
 Construction of access ways would be built with properly sized stone or concrete equivalent over filtering material;

- Covering open-body trucks transporting materials likely to generate airborne dust at all times when in motion; and
- Prompt removal of earth or other material from paved streets where earth or other material has been deposited by trucking or earthmoving equipment, erosion by water, or other means.

No separate payment shall be made for this work; the cost thereof shall be included in the bid price for other items.

H. Sequence of Construction

All work shall be completed in accordance with the Contract Drawings, and upon approval of the Engineer. All work shall be done in a manner to minimize disturbance to the natural area and existing vegetation. Stake out and receive approval from the Engineer for the limits of work before beginning any clearing.

- 1. Install perimeter erosion control measures around the work areas. If clearing is required for installation of a particular measure, all measures not requiring clearing shall be installed first. Clearing of the necessary land for installation of the particular measure may then proceed. Perimeter erosion control measures surrounding Outfall #2, on the east side of the Gowanus Canal shall include a construction limit fence to be installed surrounding the work area in coordination with the storm and sanitary sewer work. If the staging of the sewer work requires impacts to the sidewalk as well, silt fences shall be installed at the perimeter to prevent uncontrolled stormwater flow out of the work area. Construction fencing shall be constructed, placed, maintained, measured and payment made for in accordance with Section 70.31 of the New York City Department of Environmental Protection Standard Sewer and Water Main Specifications. A construction entrance per detail on Dwg. C2 shall be installed at the entrance to the construction area, between 2nd Avenue and the Gowanus Canal. Additionally, storm drain inlet protection shall be installed in all catch basins within the work area, on both sides of the canal per NYCDOT Specification Section 1.06.
- 2. Perform site clearing, and debris removal.
- 3. Install cofferdam and approved dewatering measures to discharge below the mean lower low water line. A portable sediment tank, or approved equal, shall be used to treat dewatering effluent prior to discharge. Discharge location shall be in a location that will not

cause erosion and must be approved by the Engineer. The Engineer may direct the contractor to install an approved erosion control measure such as a rip rap apron for dewatering effluent if necessary to prevent erosion. Installation of such a measure will be at no additional cost and included in the price bid for all work. The cost of the cofferdam and dewatering is included in the price of the outfalls.

- 4. Install turbidity curtain as shown or as approved by the Engineer. Install cofferdam, or other approved method, following turbidity curtain installation. Top of cofferdam shall be at least 2 feet above the mean higher high water line to isolate the work area from tidal influence. The work area shall contain no standing water and all work below the mean higher high water line shall be conducted within the confines of a cofferdam or other approved method. Construction materials including but not limited to debris, sediment, and fresh concrete shall be prevented from entering the waterways.
- 5. Install the proposed sewer pipe, and outfall structures.
- 6. Perform site clearing and site restoration. All disturbed areas shall be restored to existing conditions unless otherwise shown on the Outfall Plan and Profile drawing, and as directed by the Engineer.
- 7. Once all areas have been stabilized, remove temporary perimeter erosion and sediment control measures. Stabilize areas within the footprint of the temporary perimeter erosion and sediment control measures.

7.11 TRANSPORTATION AND HANDLING OF MATERIALS AND EQUIPMENT

A. General

- 1. Contractor shall make all arrangements for transportation, delivery, handling and rigging of equipment and materials required for prosecution and completion of the work.
- 2. Working space on the site is limited. Equipment shall not be delivered to the site until it can be moved directly to the area where it will be utilized.

- 3. If necessary to move stored materials and equipment during construction, the Contractor shall move or cause to be moved materials and equipment without any additional compensation.
- 4. The Contractor shall take all necessary provisions to prevent inadvertent deposition and spillage of excavated soils or other materials that are being transported from the project site. The Contractor must employ the use of the truck tracing pad, wheel washing stations or other equipment deemed necessary to prevent spillage and deposition from vehicles from other construction equipment.

B. <u>Delivery</u>

- 1. The Contractor shall arrange deliveries of products in accordance with construction schedules and in ample time to facilitate inspection prior to installation.
- 2. Coordinate deliveries to avoid conflict with work and conditions at the site and to accommodate the following:
 - a. Work of other Contractors.
 - b. Limitations of storage space.
 - c. Availability of equipment and personnel for handling products.
- 3. Do not have products delivered to project site until related Working Drawings have been approved by the Engineer.
- 4. Do not have products delivered to site until required storage facilities have been provided.
- 5. Do not have products delivered to site until the manufacturer's recommended storage instructions have been submitted and approved.
- 6. Have products delivered to site in manufacturer's original, unopened, labeled containers. Keep Engineer informed of delivery of all equipment to be incorporated in the work.
- 7. Partial deliveries of component parts of equipment shall be clearly marked to identify the equipment, to permit easy accumulation of parts and to facilitate assembly.

- 8. Immediately upon delivery, inspect shipments to assure:
 - a. Product complies with requirements of Contract Documents and approved submittals.
 - b. Quantities are correct.
 - c. Containers and packages are intact, labels are legible.
 - d. Products are properly protected and undamaged.

C. <u>Product Handling</u>

- 1. The Contractor shall provide equipment and personnel necessary to handle products by methods to prevent soiling or damage to products or packaging.
- 2. Provide additional protection during handling as necessary to prevent scraping, marring or otherwise damaging products or surrounding surfaces.
- 3. Handle products by methods to prevent bending or overstressing.
- 4. Lift heavy components only at designated lifting points.
- 5. Materials and equipment shall at all times be handled in a safe manner and as recommended by manufacturer or supplier so that no damage will occur to them. Do not drop, roll or skid products off delivery vehicles. Hand carry or use suitable materials handling equipment.

D. Removing and Hauling Equipment and Materials

- 1. The Contractor shall inspect all items including all boxes, crates and packages containing equipment and materials for damage that may have occurred during shipment prior to its removal from the truck or other conveyance. Any damage shall be reported immediately to the Engineer.
- 2. The Contractor shall then carefully remove the equipment and materials from the truck or trucks on which it is shipped. The equipment and materials shall then be transported to the place of installation at the job site. The Contractor shall be liable for loss or

damage to the equipment and materials that may occur while being unloaded, transported, stored or installed.

3. All equipment that arrives at the job site during normal working hours shall be unloaded as soon as practicable.

7.12 PROTECTION OF MATERIALS AND EQUIPMENT AT THE SITE

The Contractor shall make every effort to minimize extended storage periods of materials and equipment at the Site by judiciously scheduling deliveries to coincide with construction needs.

Storage of any mechanical or electrical equipment out of doors at any time is absolutely prohibited regardless of the protection furnished. Storage of mechanical and electrical equipment within structures at the Site will not be permitted unless the structures are enclosed.

All mechanical equipment shall be coated, wrapped and otherwise protected from snow, rain, drippings of any sort, dust, mud, condensed water vapor, etc. during shipment, storage, and installation and until placed in service.

Should storage of mechanical equipment become necessary before it can be stored at the Site, the Contractor shall provide storage in a weatherproof warehouse.

Materials may be stored out of doors if supported above ground surface on wood runners and protected with approved, effective and durable covers.

All storage and protection of materials and equipment at the Site shall be subjected to the approval of the Engineer.

All costs for equipment protection including warehousing or other work to meet the scheduled completion date shall be deemed to be included under the Contract and no additional payment will be made.

7.13 FINAL CLEANING

A. Final Cleaning Under This Contract

1. At the completion of the work, the Contractor for this Contract shall remove all rubbish from and about the site of the work, and all temporary structures, construction signs, tools, scaffolding, materials, supplies and equipment which he or any of his subcontractors may have used in the performance of the work. The

Contractor shall broom clean paved surfaces and rake clean other surfaces of grounds.

- 2. The Contractor shall thoroughly clean all materials, equipment and structures installed under this Contract; all marred surfaces shall be touched up to match adjacent surfaces.
- 3. The Contractor shall clean all landscaped areas of all debris and any objectionable material, as determined by the Engineer, and shall remove all such debris off-site.
- 4. The Contractor shall remove all temporary erosion control measures and replace with final features as shown on the plans and other Contract Documents contained herein, as directed by the Engineer.

B. <u>Cleaning Materials and Methods</u>

The Contractor shall:

- 1. Use only cleaning materials recommended by manufacturer of surface to be cleaned.
- 2. Use each type of cleaning material on only those surfaces recommended by the cleaning material manufacturer.
- 3. Use only materials which will not create hazards to health or property.
- 4. Only use cleaning methods approved by the Engineer.

C. <u>Payment for Final Cleaning</u>

No separate payment will be made for the aforementioned work, the cost thereof shall be included in the price bid for other items of this Contract.

7.14 OSHA REQUIREMENTS

The Contractor shall comply with all applicable OSHA rules and regulations regarding hazardous materials. The Contractor's specific attention is called to OSHA Regulation 29 CFR, Part 1910.120.

7.15 NO SEPARATE PAYMENT

No separate payment shall be made for the work specified in the Specific Provisions. All costs shall be included in the various Contract items unless otherwise specified.

7.16 BID BREAKDOWN

The Contractor shall submit a breakdown of the bid prices of this Contract within 15 days after the commencement date specified in the Notice to Proceed. The bid breakdown shall be by reference to every detailed specification section listed for the Contract Item, including physical quantities, material costs, unit costs, and installation costs, where applicable. In addition, separate amounts for the following shall be included in the bid breakdown:

Bond, Insurance and Mobilization Final Working Drawings, Record Drawings

7.17 DETAILED WORK DESCRIPTION

Storm Sewer Outfalls

This shall entail the construction of stormwater outfalls that would replace existing outfalls in the vicinity of the 9th Street Bridge in Brooklyn, New York.

Specification Section

Specific Provisions

7.09 Licensed Surveyor

Structures and Misc. Equipment

7.101	Work Included
7.102	Dewatering

Erosion and Sedimentation Control Measures

7.500	Soil Erosion and Sedimentation Control Measures
7.504-A	Silt Fence
7.509-A	Stabilized Construction Entrance
7.510	Portable Sediment Tanks
7.516	Turbidity Curtain

* * * *

STRUCTURES AND EQUIPMENT

7.101 WORK INCLUDED

Under structures and equipment work, Contractor shall furnish all labor, materials and equipment and shall do all work as specified herein and as shown on the Contract Drawings, including all incidental and appurtenant work required for a complete job.

The work shall include items of work specified under the following sections:

Section No.

<u>Title</u>

7.102

Dewatering

* * * * *

7.102 DEWATERING

A. Description of Work

The Contractor shall furnish, install, operate and maintain dewatering equipment as required, for construction work as specified herein. The dewatering equipment shall include, but not be limited to, the following equipment items:

- 1. Pumps
- 2. Piping
- 3. Accessories
- 4. Wells.

B. General Requirements

- 1. <u>General Specifications</u> Work performed under this Section shall be in conformance with the Standard Sewer and Water Main Specifications.
- 2. <u>Examination of the Sites</u> The Contractor shall take all steps that he considers necessary to familiarize himself with the surface and subsurface conditions at the site, and shall obtain the data that is required to analyze the water and soil conditions at the site.
- 3. <u>Shop Drawings</u> The Contractor shall submit to the Engineer for approval shop drawings and any other material required to substantiate conformance with the requirements set forth in the specifications. Shop drawings shall include a detailed plan of operations.

C. Dewatering

1. <u>General Information</u> - The Contractor shall perform dewatering activities to insure that all construction is performed under dry conditions. If a well point system is proposed, the Contractor shall utilize a licensed well driller. The Contractor shall always drill down to sand or gravel layer when available and when it is below the lowest excavated invert.

The Contractor shall operate the dewatering pumps continuously, a day before and during construction until all associated work within the influence zone of the well point have been completed.

2. <u>Care and Disposal of Water</u> - Care of water shall be in accordance with Section 15 - 15.25 of the Environmental Conservation Law.

Water from open cut and/or sheeted excavations, manholes, structures, trenches, or from whatever source, shall be disposed of strictly in accordance with methods approved by the Engineer.

The Contractor shall submit proposed dewatering methods to the New York State Department of Environmental Conservation for the required permits. If a well point dewatering system is proposed, the Contractor shall utilize a licensed well driller. Contractor shall contact NYSDEC a minimum of two (2) weeks in advance of dewatering system startup.

When required by the Engineer, such water shall be passed through a settling basin and tank of acceptable size and shape and equipped with an overflow. Each settling basin shall be cleaned as required and as ordered by the Engineer.

Sufficient water to flush all sewers and drains shall be provided by the Contractor when necessary. If any sewer, drain, catch basin, inlet or gutter, that receives dirty water attributable to the Site, should become filled or partially filled with sediment or debris, the Contractor shall promptly and satisfactorily remove such deposits.

D. Design Criteria

- 1. Provide dewatering system which will effectively reduce hydrostatic pressure and lower groundwater levels below excavation levels as necessary for safe and proper prosecution of the work and which will result in obtaining stable, substantially dry subgrade for prosecution of subsequent operations.
- 2. Design dewatering methods so that the effluent discharge from the sediment control measures (sump pit, sediment tank) does not impact surface water using the following protocol which was developed to monitor dewatering effluent discharge:
 - a. Monitoring of Dewatering Operations

Prior to the start of dewatering operations, a visual inspection of the installation of the sediment control measure(s) such as a dewatering sump pit and/or a portable sediment tank shall be made by the Engineer. Upon commencement of dewatering effluent discharge from the sediment control measures, at least three turbidity measurements of the effluent shall be conducted over a 15 minute-period using the following methodology. If the arithmetic mean of these three turbidity measurements is greater than the ambient turbidity level, all dewatering operations shall be discontinued until the Engineer is consulted regarding additional control measures.

b. Determination of Ambient Turbidity

Ambient turbidity levels of surface waters shall be determined using a Hanna Instruments HI 93703 Portable Microprocessor Turbidity Meter available from Hanna Instruments, Inc., Woonsocket, RI or Orbeco Hellige Portable Turbidity or LaMotee Portable Turbidimeter or equivalent approved by the Engineer. Ambient turbidity measurements shall be collected under dry weather conditions. Dry weather conditions are defined as no precipitation in the preceding 48 hours. A minimum of three turbidity measurements shall be collected using as follows:

- Water samples shall be collected a minimum of 20 feet upstream of the work area prior to commencement of any construction activity.
- Water samples shall be collected without disturbing stream bank or stream bed sediments.
- The turbidity measurements shall be conducted according to the instructions provided in the unit's Operational Guide which are summarized below.
- After the meter has been turned on, fill a clean cuvet up to one quarter inch from its rim with thoroughly agitated sample.
- Allow sufficient time for bubbles to escape before securing the cap.

- Wipe the outside of the cuvette thoroughly with a lint-free tissue.
- Place the cuvette into the cell of the meter.
- Press the Read key and the LCD will display a blinking "SIP" (Sampling in Process). The turbidity value will appear after approximately 25 second.

The arithmetic means of the three dry weather upstream turbidity measurements shall be the ambient turbidity level. Turbidity shall be measured in Nephelometric Turbidity Units (NTUs).

E. Submittals

Submit the following for approval:

1. Working Drawings

- a. Type of dewatering system proposed, showing arrangement, location and depths of proposed system, complete description of equipment and materials to be used, procedure to be followed, standby equipment, standby power supply and proposed location(s) of points of discharge of water.
- b. Obtain approval from the Engineer and appropriate regulatory agencies prior to installation of system.

F. <u>Job Conditions</u>

1. Subsurface Conditions

a. Subsurface investigations and groundwater level determinations shall be conducted by the Contractor prior to implementation as specified herein.

2. Responsibilities

- a. Select and install dewatering system to accomplish groundwater control as specified.
- b. Monitor quality of discharge from dewatering system to determine if soil particles are being removed by system.

- c. Measure to ascertain if movement is caused in adjacent areas by dewatering operations; take approved measures to minimize such movement.
- d. Take measures to prevent damage to property.
- e. Repair as approved damage, disruption or interference resulting directly or indirectly from dewatering operations.
- f. Remove sediments from all intercepted groundwater or surface water as specified herein and approved by the Engineer and the jurisdictional agency concerned. Under no circumstances shall the Contractor directly discharge, without treatment, into the drainage channel or creek.

G. Sump Pit

The Contractor, at the direction of the Engineer shall provide a stone filled pit with perforated standpipe/nozzle wrapped with filter fabric in which intercepted groundwater is pumped to an approved location.

The size and shape of the sump pit will vary due to site conditions. The size of pump should be determined from manufacturer's specifications.

- 1. The standpipe shall be a perforated 12"-24" diameter corrugated metal or PVC pipe.
- 2. A base of 2" aggregate shall be placed in the pit to a depth of 12". After installing the standpipe, the pit surrounding the standpipe shall then be backfilled with 2" clean aggregate.
- 3. The standpipe shall extend 12"-18" above the lip of the pit.
- 4. The standpipe shall be wrapped with filter cloth before installation. If desired, 1/2" x 1/2" hardware cloth may be placed around the standpipe, prior to attaching the filter fabric. This will increase the rate of water seepage into the pipe.

H. Surface Drainage

1. Intercept and divert surface drainage away from BMP or other excavations, wells by use of dikes, ditches, swales, open stone lined channel, temporary diversion pipes which could be either on the surface or buried, sumps or other means. To properly install buried diversion pipe the contractor may be required to excavate.

- 2. Design surface drainage systems to prevent erosion on or off the site or unwanted water flow.
- 3. Remove surface drainage system when no longer required.
- 4. Remove debris and restore site(s) to original conditions.

I. <u>Drainage Of Excavated Areas</u>

- 1. Provide and maintain ditches of adequate size to collect surface and subsurface water and seepage which may enter excavations and divert water into sump so that it can be drained or pumped into drainage channels as approved by the Engineer and the jurisdictional agency concerned.
- 2. Install settling basins or other approved apparatus as necessary to reduce amount of fine particles carried by water diverted away from excavation.
- 3. When no longer necessary, backfill and seal drainage ditches, sumps and settling basins with approved material.

J. Execution

- 1. Install dewatering system as specified and with the approval of the Engineer.
- 2. Demonstrate by approved methods that no soil particles are present in water after 12 hours of initial pumping or draining and additionally as directed.
- 3. Dispose of precipitation and subsurface water away and clear of the work area. Keep excavation dry.
- 4. Maintain continuous and complete effectiveness of the installation.
- 5. Maintain water level at such elevation that no damage to structure or plant material can occur because of excessive hydrostatic pressure. In any event, maintain water level two feet minimum below bottom of subgrade until sufficient concentrate work or backfilling or both has been completed to adequately offset uplift pressures.

K. **Dewatering System Removal**

- 1. Remove and dispose of all stone, filter fabric and piping that comprise curtain drains and/or sump pits used in dewatering in accordance with Federal, State and local regulations at a permitted site.
- 2. Backfill remaining space as necessary to restore surface and subsurface to its original or proposed condition in accordance with the Engineer's approval.

L. No Separate Payment

4/20/18

Dewatering work shall be performed by the Contractor only as directed by the Engineer. The cost for all labor, materials and equipment required for the Dewatering shall be deemed included in the bid price for other Contract Items. No separate payment shall be made for Dewatering.

7.500 SOIL EROSION AND SEDIMENTATION CONTROL MEASURES

Under soil erosion and sedimentation control work, the Contractor shall provide all labor, materials, tools and equipment necessary to complete the execution of the work in complete accordance with the Specifications and all Contract Drawings. All Soil Erosion and Sedimentation Control work shall be done in conformance with and subject to any applicable State Pollutant Discharge Elimination System (SPDES) General Permits for Discharges Stormwater from Construction Activity, GP-0-15-002, the latest edition of the "New York State Standards and Specifications for Erosion and Sediment Control", 2016, published by the Empire State Chapter of the Soil and Water Conservation Society, and the New York State Department of Transportation Standard Specification Part 107-12 -Soil, Erosion and Air Pollution Statement, including, but not limited to, the following methods of erosion and sedimentation control.

- 1. Slopes left exposed will, within 30 working days of completion of any phase of grading, be planted or otherwise provided with ground cover device, or structures sufficient to restrain erosion.
- 2. A ground cover sufficient to restrain erosion must be planted or otherwise provided within 15 working days on that portion of the tract (disturbed area) upon which further active construction is not being undertaken.

The Contractor shall implement the requirements of the Erosion and Sedimentation Control Plan, provided in the Contract Document.

The work shall include items of work specified under the following sections:

Section Number	<u>Title</u>
7.504-A 7.509A 7.510 7.516	Silt Fence Stabilized Construction Entrance Portable Sediment Tank Turbidity Curtain

7.504-A SILT FENCE

A. Description of Work

The Contractor shall furnish all materials, labor, and equipment necessary to construct silt fence specified herein and as shown on the Contract Drawings, including all incidental and appurtenant work required for a complete job.

Upon furnishing and installing the approved silt fence but prior to commencing any other work on-site, the Contractor shall notify the Engineer and arrange for an on-site inspection.

The silt fence shall be maintained in good condition and repaired as necessary by the Contractor during the construction and post-construction/site stabilization phases as directed by the Engineer.

B. Materials and Methods

1. Welded Wire Fence: The welded wire fence shall be a welded wire fence with a minimum height of 20 inches. The fence shall be constructed of wire fabric fastened to the middle rails and to vertical line posts.

Wire fabric shall be of No. 14 gauge wire with a mesh of approximately 4 inches. The upper edge of the fabric shall be twisted and barbed. The fabric shall be securely fastened to vertical line posts by means of ties and spaced not more than 12 inches apart on rails and not more than 14 inches apart on line posts.

The silt fence shall be located where indicated on the Contract Drawings. The fence shall be adjusted to avoid interference with trees and to maintain access to houses.

Line posts shall be spaced not more than 6 feet on centers. Posts shall be securely set in the ground. Line posts shall extend at least 16 inches below finished grade. Post locations shall be adjusted to avoid tree roots as appropriate.

2. <u>Filter Fabric:</u> Filter fabric shall be securely attached to the vertical line posts and wire fabric, and shall be situated between the wire fabric and staked straw bales.

The filter fabric shall be purchased and delivered in a continuous roll and cut on-site to the length of the barrier(s) to avoid the use of

joints. Dimensions of the roll shall be thirty-six (36) inches by one hundred (100) feet in length. When joints are necessary, filter cloth shall be spliced together only at a line post, with a minimum 6-inch overlap, and securely sealed. The filter fabric shall meet NYSDOT specifications for geotextile, latest edition, and shall be Ffabric MUTUAL MISF 1776 as manufactured by Mutual Industries Inc., Fabric # GTF190SF as manufactured by Thrace Linq Industrial Fabric, Fabric #Geotex 2130 as manufactured by Propex, or approved equal.

A trench shall be excavated approximately 6 inches wide and 6 inches deep along the line of posts and upslope from the barrier. The filter fabric shall be extending into the trench, the trench backfilled, and the soil compacted over the filter fabric.

Silt fences shall be removed when they have served their useful purpose, but not before the upslope area has been permanently stabilized.

C. <u>Maintenance</u>

The silt fences shall be inspected at least once per week and immediately after each rainfall and at least daily during prolonged rainfall, or as directed by the Engineer. Any required repairs shall be made immediately. Should the filter fabric decompose or become ineffective prior to the end of the expected usable life while the barrier is still necessary, the fabric shall be replaced promptly.

D. Measurement and Payment

The quantity to be measured for payment under this section shall be the total number of linear feet of Silt Fence, installed and maintained in accordance with the plans, specifications and directions of the Engineer. The construction (limiting) fence and filter fabric which together make up the silt fence shall be measured as <u>one</u> erosion and sediment control feature.

The bid price shall constitute full compensation for all labor, materials and equipment and incidental expenses necessary to complete the work in accordance with the plans and specifications and to the satisfaction of the Engineer.

Payment will be made under:

Item No. Item

Pay Unit

BMP-7.504A Silt Fence

LF

* * * * :

7.509-A STABILIZED CONSTRUCTION ENTRANCE

A. Description of Work

The Contractor shall furnish all materials, labor, and equipment necessary to construct the stabilized construction entrance specified herein and within the limits as shown on the Contract Drawings, including all incidental and appurtenant work required for a complete job.

Upon furnishing and installing the stabilized construction entrance but prior to commencing any other work on-site, the Contractor shall notify the Engineer and arrange for an on-site inspection.

The entrance shall be maintained in good condition and repaired as necessary by the Contractor during the construction phases as directed by the Engineer.

B. Materials and Methods

- 1. The entrance areas shall be cleared and stripped of all vegetation, roots and other objectionable material prior to installation of the access way as specified.
- 2. Provide surface drainage and divert excess runoff to stabilized areas as required and as directed by the Engineer.
- 3. Rock use NYSDOT Size No. 3 coarse aggregate.
- 4. Thickness not less than six (6) inches for rock.
- 5. Width shall be fifteen (15) foot minimum.
- 6. Filter cloth shall be placed over the entire area prior to placing of stone. Filter cloth shall be as specified below.

Filter cloth underliner shall be suitable for heavy duty construction traffic and have the following minimum properties:

Grab tensile strength	220 lbs.
Elongation at failure	220%
Mullen Burst Strength	430%
Puncture Strength	1205 lbs.
Equivalent opening size	40-80 mm

Filter cloth shall be TenCate Mirafi 600X, Beltech 315, TerraTexHD or approved equal.

- 7. Surface water All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
- 8. Maintenance the entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
- 9. When truck washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
- 10. Periodic inspection and needed maintenance shall be provided after each rain.
- 11. After completion of the project, the stabilized construction entrance shall be removed and regraded to its original condition. Prior to grading and planting, the area shall be tilled to lessen the compaction of the soils.

C. Maintenance

- 1. Maintenance of the stabilized construction entrance will include periodic inspection of the surface condition. Top dress with new gravel as needed. Any areas producing sediment should be treated immediately.
- 2. After completion of the project, the stabilized construction entrance shall be removed and the areas regraded to their original elevations. Prior to seeding and planting, the areas shall be tilled to lessen the compaction of the soils.
- 3. For those stabilized construction entrances that are in the beds of accessways, the rock can stay in place for use in accessways. (See specification for accessways.)

D. <u>No Separate Payment</u>

The contract price per unit for the Stabilized Construction Entrance shall be as indicated on the BID SCHEDULE OF PRICES, Item No. BMP-7.509-A. The bid price shall constitute full compensation for all labor, materials

and equipment and incidental expenses necessary to complete the work in accordance with the plans and specifications and to the satisfaction of the Engineer.

* * * * *

7.510 PORTABLE SEDIMENT TANK

A. Description of Work

The Contractor shall furnish all materials, labor and equipment necessary to install the portable sediment tank specified herein and as shown on the Contract Drawings. A sediment tank is a compartmented tank container through which sediment laden water is pumped to trap and retain the sediment.

The purpose of the portable sediment tank is to trap and retain sediment prior to discharging the water to wetlands, adjoining properties and rights-of-way below the sediment tank site. The sediment tank shall be located for ease of cleanout and disposal of the trapped sediment and to minimize the interference with construction activities and pedestrian traffic. The temporary relocation of the tank(s) during clean-out shall be included in the cost of this item. Relocating the tank(s) from one work area to another before, during and after construction shall be included in the cost of this item.

B. <u>Design Criteria</u>

The following formula should be used in determining the storage volume of the sediment tank: pump discharge (gpm) \times 16 = cubic foot storage.

Certified pump curves are to be provided to ensure that the pump provided can meet the hydraulic requirements.

C. Tank Specifications

The portable sediment tank shall be an above ground horizontal single-wall UL-142 manufactured by Highland Tank or weir box manufactured by Rain for Rent or equivalent as approved by the Engineer.

The Contractor shall submit proposed sediment tanks for approval.

D. Maintenance

Portable sediment tanks shall be installed and maintained in accordance with Section 5A.47 of the New York Standards and Specifications for Erosion and Sediment Controls to the satisfaction of the Engineer.

The Contractor shall be responsible for cleaning out the sediment tank when it is one-third (1/3) filled with silt. All sediment collected in the tank shall

be disposed of in an approved location in which further sediment transport will not occur or as approved by the Inspector.

E. <u>Measurement and Payment</u>

The quantity to be paid for under this item shall be the number of portable sediment tanks placed in accordance with the plans and specifications to the satisfaction of the Engineer, measured in number of above items at the site of the work.

The Contract price per unit for portable sediment tanks shall be as indicated on the BID SCHEDULE OF PRICES, Item No. BMP-7.510. The bid price shall be a unit price per portable sediment tank and shall include the cost of all labor, materials and equipment necessary to furnish, place and incorporate and all other work incidental thereto, in accordance with the plans and specifications to the satisfaction of the Engineer.

* * * * *

7.516 <u>TURBIDITY CURTAIN</u>

A. Description of Work

- 1. The Contractor shall furnish, deliver and install a turbidity curtain in the water body adjacent to the work area to trap sediment and prevent migration of silt from the work site into the water body. The turbidity curtain is an impenetrable barrier supported at the top through a flotation system and weighted at the bottom to achieve closure.
- 2. The turbidity curtain shall be used when construction activity occurs along the water body shoreline. The turbidity curtain shall be in place prior to any work starting in the work area before any land disturbance activities are initiated. The turbidity curtain shall be removed within a week of completing the work.
- 3. The Turbidity Curtain shall be located beyond the lateral limits of the work area and firmly anchored in place. The alignment shall be set as close to the work area as possible but not so close as to be disturbed by construction equipment. The height of the curtain shall be 20% greater than the depth of the water at Mean Higher High Water, to account for water level fluctuations and tidal range.
- 4. End anchors shall be provided, with intermediate anchor points (for stakes or anchors) such that unanchored spans do not exceed 100 feet, sufficient to maintain the turbidity curtain in place.

B. <u>Materials</u>

- 1. Turbidity Curtain shall be per NYSDOT Sheet 209-06.
- 2. Turbidity Curtain shall be made from monofilament woven polypropylene with the following properties, or approved equal:

Composition: 5. Grab Strength 12

5.8 oz/sq. yd. (ASTM D-4632)

Grab Strength 12 Trap Tear Strength 60

120 lbs (ASTM D-4533)

Burst Strength

600 psi (ASTM 3786) 150 psi (ASTM D-3787)

Elongation

70%, 500 hrs (ASTM D-4632)

UV Resistance

40 (ASTM D-4335)

3. Turbidity Curtain floats shall be 6 inch diameter expanded polystyrene logs providing a minimum of 9 lbs/ft buoyancy.

- 4. Curtain shall have 5/16 inch galvanized steel tension cable and 5/16 inch galvanized ballast chain, or approved equal.
- 5. Seams shall be double sewn with grommets.
- 6. Barrier connection shall be using marine grade quick connects.

C. Method

- 1. The area of proposed installation of the curtain shall be inspected for obstacles and impediments that could damage the curtain or impair its effectiveness to retain sediment.
- 2. All materials shall be removed at the end of construction so they do not enter the water body.
- 3. Shallow installations can be made by securing the curtain by staking rather than using a flotation system. Supplemental anchors of the turbidity curtain toe shall be used, as needed, depending on water surface disturbances such as boats and wave action by winds.

D. Maintenance

- 1. The turbidity curtain shall be inspected daily and repaired or replaced immediately.
- 2. When necessary, or as directed by the Engineer, sediment removal shall be done by hand prior to removal of the barrier.
- 3. All removed silt shall be stabilized away from the water body.
- 4. The barrier shall be removed by carefully pulling it toward the construction site to minimize the release of attached sediment. Any floating construction or natural debris shall be immediately removed to prevent damage to the curtain.
- 5. If the curtain is oriented in a manner that faces the prevailing winds, frequent checks of the anchorage shall be made.

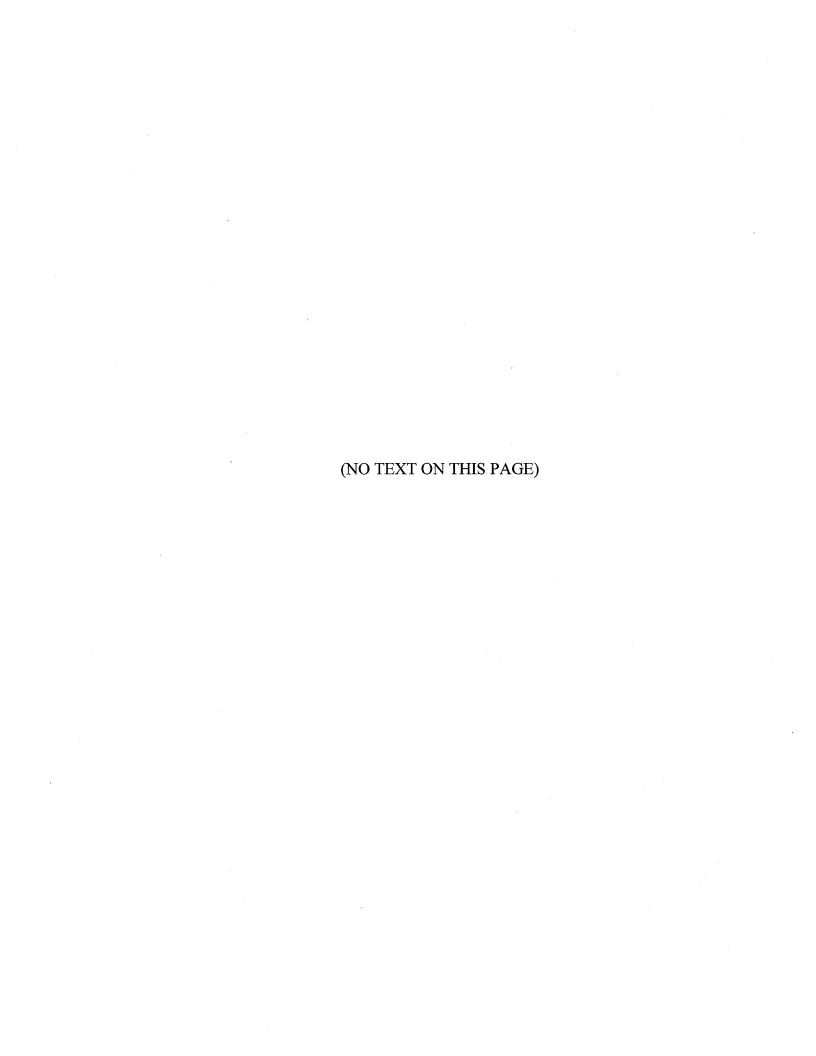
E. Measurement and Payment

The quantity to be measured for payment under this Section shall be the total number of linear feet, provided and placed, and removed upon the

completion of work, as indicated on the Contract Drawings and as directed by the Engineer.

The contract price per linear foot of turbidity curtain shall be as indicated on the BID SCHEDULE OF PRICES Item No. BMP-7.516. The bid price shall constitute full compensation for all labor, materials, equipment and work incidental thereto, necessary to complete the work in accordance with the plans and specifications to the satisfaction of the Engineer.

* * * * *



UI - PAGES UTILITY INTERFERENCES SECTION

NOTICE

THE PAGES CONTAINED IN THIS SECTION (UI - PAGES) REPRESENT ADDITIONAL CONTRACT REQUIREMENTS APPLYING TO WORK PERFORMED IN THE PRESENCE OF PRIVATELY OWNED UTILITY FACILITIES.



UTILITY INTERFERENCES (UI) SECTION

DATED: December 13, 2016

- The Contractor shall be responsible for compliance with all the provisions of the following Sections and Schedules, which are hereby made a part of the original contract documents:
 - A. "UI SECTION: Additional Contract Requirements Applying to Work Performed in the Presence of Privately Owned Utility Facilities" (Pages UI-3 through UI-11).
 - B. Schedule U-1 (Page UI-13).
 - C. Schedule U-2 Con Edison (Pages UI-14 through UI-21)
 Verizon (Pages UI-22 through UI-30)
 Time Warner (Pages UI-31 through UI-32)
 - D. Schedule U-3 Page UI-33 (as per the Private Utilities reference document for UI SECTION called "CET SPECIFICATIONS AND SKETCHES", dated November 2010), and Test Pits (Pages UI-34 through UI-42) in this Section UI-Pages; and,
 - E. Utility drawings (12 Sheets) consisting of:
 - * Con Edison Conduit and Duct Occupancy Plates (4 sheet)
 - * Con Edison Low Tension and Service Plates (4 sheets)
 - * Verizon Conduit Plates (4 sheets)

All Twelve (12) drawings are attached to the Plans.

- 2. Each facility operator shall provide inspectors at the work site to inspect methods of interference work, verify quantities and items of Utility Work, and coordinate all phases of the facility operator operations.
- In addition, the following statements are made to provide clarification of various Paragraphs under UI Section:
 - A. UI Section, Paragraph 4, requires the Contractor to immediately commence negotiations with each Company for an Interference Agreement under which the Company will compensate the Contractor for any Interference Work which the Company does not elect to perform with its own forces or by specialty contractors retained by the Company. Thus the Contractor is on notice that its work under the Contract may be affected by Interference Work performed by (a) the Contractor pursuant to a separate Interference Agreement with the Company, (b) the Company, or (c) partly by each.

- B. UI Section, Paragraph 2, informs the Contractor that the duration of the Contract as shown in Schedule A includes the time which may be necessary for the Contractor to perform the necessary Interference Work.
- C. The Contractor is hereby informed that the duration of the Contract as shown in Schedule A includes the time which may be necessary for the Company to perform whatever portion of the Interference Work which the Company elects to perform with its own forces or by specialty contractors retained by the Company.
- D. UI Section informs the Contractor that the City has entered into an Interference Agreement with the Companies regarding interferences to the City work in this Contract created by the facilities owned and/or operated by such Companies. Pursuant to this Section, a sample of the Utility Agreement letter as executed by the Companies is annexed on page UI-12, as an Exhibit to the Contract. Signed copies of those Utility Agreement letters are on file with New York City Department of Design and Construction (DDC).
- E. The City has no contract with any of the Companies for work on or adjacent to the site of work under this Contract, and the Companies are not "Other Contractors" as defined for the purposes of this Contract. The Contractor is reminded, however, that pursuant to UI Section, Paragraph 4, the City will not compensate the Contractor for any direct and/or indirect costs related to Interference Work, regardless of whether such Interference Work is covered by an Interference Agreement between the Contractor and the Company or is performed by the Company using its own forces or by specialty contractors retained by the Company.
- F. UI Section, Paragraph 14, provides that the provisions of UI Section are material provisions of the Contract and that the Contractor's failure to comply with the procedures set forth in UI Section are sufficient for the Commissioner to declare the Contractor in default pursuant to Article 48 of the Contract.

Pursuant to this Section, the Contractor is informed that the Performance Bond required of the Contractor pursuant to the Contract is not deemed to guarantee performance of any of the Interference Work.

Utility Interferences Section - Additional Contract Requirements Applicable to Work Performed in the Presence of Privately Owned Utility Facilities

The Contractor is hereby notified that pursuant to the law and franchise agreements issued by the City, certain private utility and public service companies named in Schedule U-1 ("the Companies") own and/or operate surface and/or subsurface facilities within the limits of this contract. The existence of these facilities impacts the productivity of the City work called for in the contract. In order to improve coordination of the City construction with the private utility facilities owned and/or operated by the Companies named in Schedule U-1, Article 1.06.30 of the Standard Highway Specifications of the New York City Department of Transportation, Dated August 1, 2015; and/or Articles 10.15 through 10.18 of the Standard Sewer and Water Main Specifications of the New York City Department of Environmental Protection, Dated July 1, 2014; as applicable, are amended and will be implemented as follows:

1. Pre-engineering:

The anticipated scopes of private utility facilities interferences and anticipated work items and specifications are included in this contract. The locations of these interferences are indicated on the plans and/or listed in the specifications for this contract, and a schedule of estimated quantities by type of interference expected to be encountered within the limits of this project area have been listed on Schedule U-2. In addition, in Schedule U-3 the Companies have provided standard details and methods for supporting, protecting, relocating, and/or working around their facilities when they are in interference with City contract work.

2. Means and methods for City work:

- a) The Contractor is hereby notified that the utility interferences identified on the plans and/or listed in the Specifications to be known conditions which may impact the performance of, and/or interferes with, City work. The Contractor will be required to perform such utility work as directed by the Resident Engineer in order to clear all utility interferences from the project site as required for satisfactory completion of City work within specified contract schedule.
- b) In areas serviced by overhead lines on poles carrying electric, telecommunication and cable system, the Contractor understands and by bidding for this contract agrees that he/she has reviewed the schedule of estimated quantities by type of interference expected to be encountered within the limits of this project and that he/she will be required to perform the public work in the presence of these overhead lines and appurtenances located in areas adjacent and/or within the project area. As a consequence he/she will select means and method of construction appropriate to maintain the safety clearances required or as permitted by contract specifications (e.g. "CET 350 Overhead Accommodation Protection of Overhead Facilities, Poles, and Appurtenances") in order to avoid damaging the insulation or shielding of these lines and also to prevent knocking them down. The

duration of the contract as shown in Schedule A thus includes the time which may be necessary for the Contractor to remove, repair, protect, support, shift, temporarily remove and replace, work around and/or work in the presence of the Companies' facilities ("Interference Work") as described on the plans and/or specifications of the contract during the progress of the City work.

3. Field inspection prior to construction:

Prior to the start of any contract work in areas serviced by overhead electric lines, and after the award to the apparent low bidder for this contract, the Contractor must request a field walk of the project area along with the operator of the overhead electrical facilities and the DDC Engineer-In-Charge. At that time the facility operator, pursuant to contract specification (e.g. "CET 350 — Overhead Accommodation Protection of Overhead Facilities, Poles, and Appurtenances") will confirm the type and condition of the overhead electrical lines and the sufficiency of their insulating properties with respect to the means and methods proposed by the Contractor. The Contractor must be prepared to describe in enough details his/her proposed means and methods of construction operations in order to anticipate the likelihood that electric lines insulation would be cut or otherwise compromised. Also such details will allow the facility operator to anticipate the need for added insulation and/or shielding of non-insulated lines.

4. Compensation for interference work:

Compensation for Interference Work is a matter of adjustment between the Contractor and each private utility company located within the limits of the project area and whose utility facilities are affected by City contract work. In particular, the City will not compensate the Contractor for any direct and/or indirect costs related to Interference Work, including, but not limited to, delay, lost profit, increased overhead, or any other impact costs which are deemed to be included in cost agreement between the Contractor and private utility company affected by such work. Upon receipt of a Notice of Award from the City, the Contractor shall immediately commence negotiations with each of the Companies concerning the manner in which and the price for which the Contractor, through its own forces or by others hired by it, will perform and be paid by the Company for all necessary interference Work as defined above that the Company(ies) choose(s) not to perform with its(their) own forces or by specialty Contractors hired by it (them) (as per "Interference Agreement"). Specialty contractors' work is limited to (i) insulation installation and removal, (ii) live gas and steam work, (iii) cleanup and disposal of hazardous materials, (iv) splicing live electrical and telecommunications facilities, and (v) work not within the competence of general construction contractors.

5. Interference Agreement:

- a) The Companies have provided estimate of the quantity of each type of interferences expected to be encountered in the contract in Schedule U-2. The parties may negotiate an Interference Agreement in any format or manner they deem fit based on quantities and types of Interferences expected to be encountered on this Contract as stated in Schedule U-2.
- b) Furthermore, in Schedule U-3, standard unit work measurement and payment provisions are specified and shall apply only if the Contractor and affected Utility companies enters into a unit price based on an Interference Agreement, otherwise the unit of work measurement, and payment provisions set forth in Schedule U-3 shall not apply. The Contractor shall notify the City upon concluding an Interference Agreement with each of the Companies, which shall be binding and final once concluded.

6. City contract work to continue without Interference Agreement:

If, prior to the start of construction, as directed by the City's Order to work / Notice To Proceed (OTW/ NTP) date any of the Companies and the Contractor have not concluded an Interference Agreement as described above, then the City will issue to private utility company (ies) in a written "48 Hours' notice to Public Corporation" in accordance with the Administrative Code of the City of New York. Construction will then proceed as ordered and the Contractor will be directed by the Resident Engineer (RE) to perform the City work on Time, Material and Equipment basis (T&M) as specified in standard City contract agreement Article 26.2. T&M records will include identification of types of utility facilities interfering with City work, utility facility owners, specifying the nature and quantity of any materials, plant and equipment furnished or used in connection with the performance of such work and crew size, such as: name and number of each worker employed on such work. T&M records will also indicate the hours of active time, standby time and idle time. The Company (ies) and the Contractor will maintain separate records of the actual quantity and cost of labor, materials, and equipment expended, and will provide copies of this information to the other party on a daily basis for reconciliation. These T&M records along with cost evaluations will be submitted daily to the Resident Engineer for review and approval. The total cost of City work will be based on quantity of work performed multiplied by unit price contract bid items. The total interference cost will be calculated as the difference between the total T&M cost and total cost for City work. The Resident Engineer will conduct a monthly reconciliation session of the daily T&M records with the affected Company (ies) and the Contractor. If the Contractor and affected utility companies cannot reconcile their T&M records, by the last day of each month, then the Resident Engineer will submit the approved City's T&M records along with total cost evaluations to the DDC Director of Construction who will review these records and recommend approval and validity certification by the DDC Construction Assistant Commissioner.

- a) Copies of the DDC approved and certified T&M records will then be transmitted by the DDC to the Contractor and the utility companies. These certified records may be used by the Contractor for compensation claims against the responsible private facility owners, or may be used by any party as supporting documentation in dispute regarding compensation for performing Interference Work as identified in Schedule U-2. The Contractor will be required to perform City work while invoices are submitted by the Contractor to the utility companies for payment within 30 days, or while compensation disputes between the Contractor and affected company (ies) are submitted to Binding Arbitration process described in Paragraph 10.
- b) All issues related to utility work and/or delays due to compensation disputes or claims against utility companies are not allowable as justification for granting contract time extensions or delay claims against the City. The City may assess liquidated damages specified in the contract for net overall delays suffered by City contract work as a result of utility issues, disputes and claims.
- c) The standard City contract dispute resolution process specified in Article 27 "Presentation of disputes to Commissioner", of the standard City contract agreement is not applicable to any disputes related to utility work and/or compensation for such work or claim against utility companies. Utility work issues, disputes and claims may only be submitted to Binding Arbitration process described in Paragraph 10.
- d) The Contractor will notify the Resident Engineer when utility capital work not specified in Schedule U-2 and/or for utility work that require the intervention of company utility specialty crews causes excessive contractor's labor and equipment standby or idleness and, thereby jeopardizing the City project schedule. The Resident Engineer will submit the facts to the DDC Director of Construction who will recommend to the DDC Deputy Commissioner regarding the issuance of a "48 Hours' notice to Public Corporation" to the concerned utility company as authorized by the New York City Administrative Code Section 19-143 and/or Section 24-521 as applicable.
- e) Utility delays caused by utility capital work not listed in Schedule U-2 and/or by unavailability of utility specialty crews cannot be discounted for earning any contractual bonus when such bonus clause is included in a contract. However, if such specified bonus is not earned or is disallowed by the City or if the City assesses specified liquidated damages as a result of such excessive delays, the Contractor may seek damages from the responsible utility company (ies).

7. Extra utility work with Interference Agreement:

If during construction the Contractor encounters utility facilities interferences or utility scope of work that it believes is not covered by the Interference Agreement as described above, then the Contractor shall immediately notify the Company in writing, with a copy to the City, describing the nature and location of the extra work in question. The Company then has five (5) business days to investigate the conditions and then:

- a) Advise the Contractor and the City in writing that no interference with its facilities exists at the location in question, and hence that the Contractor may proceed with City work without providing for any impact from Company facilities;
- b) Advise the Contractor and the City in writing that the Interference Agreement negotiated pursuant to Paragraph 6, above, provides for the scope of work encountered, specifying the exact unit items and/or terms of the agreement that cover the work;
- c) Advise the Contractor and the City in writing that it intends to perform the necessary utility work with company forces or with its own contractor including, but not limited to, relocating its facility out of the way of the proposed City work. In this case, the Company shall provide a written schedule for the performance of the utility work it proposes to perform, which shall be subject to approval by the City based on its impact to the Contractor's currently approved progress schedule. Upon approval of the Company's schedule by the City, the Contractor shall provide access to the worksite to the Company and/or any contractors hired by it to perform this utility work. If necessary, the City may grant a contract time extension for delays caused by the performance of such utility work by the company.
- d) Reasonably specify in writing the scope of work to be performed by the Contractor on behalf of the Company that is not covered under the Interference Agreement negotiated pursuant to Paragraph 6, including, but not limited to, relocating, supporting, and/or protecting the Company's facilities, and/or shifting the City facility if approved by the Resident Engineer, and/or otherwise changing its operations to work in the presence of the Company's facilities. Should the Company elect this option, it must adequately define and provide an initial price offer for the work required to be performed.

8. Means and Methods for utility work:

Upon receipt of the Company's determination pursuant to Paragraphs 7.b, or 7.d, above, the Contractor shall determine reasonable means and methods of performing the work defined by the Company. These means and methods are subject to approval of the Company, which shall not be unreasonably withheld. If, however, the Company objects to the Contractor's proposed means and methods then it shall define an alternate method of construction. Upon receipt of the Company's approval or its proposed alternate method of construction, the Contractor shall commence

performance of the work defined by the Company as soon as possible, and shall perform the work in a good, workmanlike, and efficient manner, using the means and methods approved by the Company, in order to permit the City work to proceed in the most expeditious manner possible, but without imposing unreasonable and/or unnecessary costs on the Company. It is expressly understood by all parties that the City's rights pursuant to Article 4 of the Contract apply to Utility Work performed pursuant to this Section.

9. Disputed utility work covered by an interference agreement:

The City Work will continue as described in Paragraph 6 above. In the event of any dispute between the Company (ies) and the Contractor regarding any issue related to the performance of, or payment for, utility work, including, but not limited to, any indirect or impact costs incurred by the Contractor due to the Utility Work and/or to the existence of facilities owned or operated by the Company (ies) on the line of the work. The Company (ies) and the Contractor hereby agree to submit to each other a "Final Offer," in writing, by certified mail. Each party shall then have three business days to consider each other's Final Offer. In the event that neither party accepts the other's Final Offer within those three days, the Company (ies) and the Contractor agree to immediately submit the dispute to binding arbitration as described in Paragraph 10. During the pendency of any arbitration, the Company (ies) and the Contractor shall maintain separate records of the actual quantity and cost of labor, materials, and equipment expended, and to provide copies of this information to the other party on a daily basis for reconciliation. Any and all disagreement with the records maintained and provided by the other, must be documented in writing to all parties. However, these records are solely for the benefit of presentation to the arbitrator, whose decision may not necessarily be based on these records and in any event is final. Both parties should be aware that the City will not confirm or deny the accuracy of any records that is not certified by DDC. While the arbitration is pending, the Company shall pay the Contractor on a monthly basis, based on the price offered by the Company to the Contractor for the performance of the work.

10. Arbitration of utility work:

The arbitration of the issues described above shall be conducted pursuant to the Construction Industry Arbitration Rules of the American Arbitration Association (hereinafter "the Rules" and "AAA") in effect on the date the arbitration is initiated except as set forth herein. The arbitration award shall be final and binding upon the parties to the arbitration and judgment upon the award may be entered in a court having jurisdiction.

- a) Once an arbitrator(s) has been appointed by the AAA, the arbitration shall be scheduled as promptly as possible given the arbitrator(s) and the parties' schedules.
- b) No later than seven days prior to the first arbitration hearing, Company and the Contractor shall submit to the arbitrator(s), and to each other, a summary of each

party's respective position and such other information as is deemed appropriate, along with a copy of each party's Final Offer as specified in Paragraph 9.

- c) The arbitration shall be conducted and concluded in two days.
- d) On the morning of the first day of the arbitration, the Contractor and/or representatives shall have 3 ½ hrs to make a presentation of its claim to the arbitrator. During its presentation, the Contractor shall not be permitted to produce any documents or cost records which have not already been provided to the Company. The Contractor shall be permitted to produce any analysis or description of its claim which has been prepared for the purpose of its presentation.
- e) Company and/or its representatives shall have two hours to ask the Contractor questions about its claim and its presentation. Thereafter the arbitrator(s) shall have two hours to ask the Contractor questions about its claim and its presentation.
- f) On the morning of the second day of the arbitration, Company and/or its representatives shall have 3 ½ hours to make a presentation of its claim to the arbitrator. During its presentation, the Company shall not be permitted to produce any documents or cost records which have not already been provided to the Contractor. The Company shall be permitted to produce any analysis or description of its claim which has been prepared for the purpose of its presentation.
- g) The Contractor and/or its representatives shall have two hours to ask Company questions about its claim and its presentation. Thereafter the arbitrator(s) shall have two hours to ask Company questions about its claim and its presentation.
- h) Subject to the above time limitations, the arbitrator(s) may conduct the arbitration in such manner as the arbitrator(s) deems reasonable.
- i) The arbitrator(s) shall then have one week to select in writing, as the arbitrator ('s) award, that party's Final Offer which appears to be more reasonable, based on the presentations at the arbitration hearings.
- j) The arbitrator shall have no discretion to grant an award other than one of the two Final Offers submitted by the parties.
- k) Any award for work that has already been performed shall be paid on the 7th day after receipt of the arbitrator's decision, or on the 30th day after completion of the work, whichever is later. Payment for work not yet completed at the time of the arbitrator's decision shall be paid within 30 days of completion of work. Interest shall accrue from the date payment is due at the rate of 9% per annum. Either party may cause judgment to be entered in accordance with the arbitrator(s) decision in a court in the State of New York, County of New York.
- I) The arbitrator's fees and any other costs of the arbitration shall be initially shared equally by Company and the Contractor. The non-prevailing party shall then pay all

arbitrator's fees and costs of the arbitration and shall reimburse the prevailing party for its share of such fees and costs theretofore paid.

m) The parties may, at any time, settle any matter submitted to arbitration.

11. Order-out waiver:

The Contractor and all subcontractors hired by it, if an Interference Agreement is executed as specified between the concerned parties, agree to waive any rights they may have, if any, under law, contract or otherwise to compel the City to assert any right the City may have, including the issuance of any directives required under the New York City Administrative Code, Section 19-143 and Section 24-521, to require any or all of the Companies to maintain, repair, replace, protect, support, shift, alter, relocate, and/or remove utility facilities in connection with the work to be performed under this contract. However, nothing in this Section shall preclude the City from exercising its rights under the Law to issue such a directive to the Company.

12. Cost of insurance:

Each of the named Companies, at their option and if an Interference Agreement is executed as specified between the concerned parties, may be named as an additional insured on all insurance policies required to be maintained under this contract. In the event that a Company opts to be so named as an additional insured, the actual incremental cost, if any, to the Contractor of providing such insurance coverage shall be borne by that Company. The Contractor shall provide a written statement from its insurance provider documenting the actual cost of this added coverage to the Company. Under no circumstances shall the cost of insurance coverage on behalf of any Company be borne by the City. Nothing in this paragraph shall be interpreted to imply the City's acceptance of any additional responsibility or liability for any matter related to the performance of Utility Work. In particular, the Company and the Contractor bear joint and full responsibility to ensure that any Utility Work performed by the Contractor is in compliance with all applicable government and Company regulations.

13. Cost of utility interference work:

The Companies, by virtue of participating in design alignment meetings and submitting their scope of Utility Interferences Work to the City, have agreed to perform their obligations described in this Section. It is expressly understood that the cost of Utility Work or any delays caused by such Utility Work shall not be a charge against the City, but shall be a matter for adjustment between the Contractor and the Company or Companies concerned. The City and the Contractor agree that the Companies are third party beneficiaries of this Section of the contract, if an Interference Agreement is executed between the Contractor and utility company (ies). The provisions of this Section shall govern in all cases where Company property interferes with or is about to be disturbed by the City work, notwithstanding any other provision of the Contract,

except for Natural Gas transmission/distribution facilities covered subject to the Gas Facility Cost Allocation Act (GFCAA) and covered separately in this contract.

14. Default declaration:

The Contractor agrees that the provisions of this Section are material provisions of the contract, and that the Contractor's failure to comply with the procedures set forth above are sufficient for the Commissioner to declare the Contractor in default pursuant to Article 48 of the Contract.

15. NYS Labor Law:

The Contractor is hereby advised that New York State Labor Law and/or, Davis-Bacon Act if federally funded, applies to public work. The work described in this Utility Interferences Section of the contract performed by utility company (ies) with their own forces or vendors hired by such company (ies) is not public work.

16. Facility operators:

The insurance requirements in Paragraph 12 of this UI Section apply to: (i) additional Companies, if any, who were not named in Schedule "A" but which have executed an Interference Agreement with the Contractor for utility work; and (ii) additional coverage, if any, paid for by Utility Companies whose utility facilities are located within the project limits, that they may require for the utility work pursuant to an Interference Agreement between the Contractor and such utility company (ies).

(End of Section)

"STANDARD UTILITY LETTER OF AGREEMENT"

(Name)
Deputy Commissioner, Infrastructure Division
Department of Design and Construction
30-30 Thomson Avenue
Long Island City, NY 11101

Project No:
Dear (Name):
This letter is to certify that, has requested the inclusion of the attached "Utility Interferences (UI) Section: Additional contract requirements applying to work performed in the presence of privately owned utility." The company agrees to abide by the terms of this UI Section at the company's own expenses due to their facilities interferences with the Public work.
Sincerely,
By: Authorized Company Representative
Title
NOTARY PUBLIC
CERTIFIED AS TO FORM AND LEGAL AUTHORITY:
Ву:

SCHEDULE U-1

LISTING OF COMPANY (IES) NAMED FOR THIS CONTRACT

COMPANY NAME	CONTACT NAME	CONTACT TELEPHONE
CON EDISON	THERESA KONG	212-460-4834
VERIZON	AUBREY MAKHANLLAL	718-977-8165
TIME WARNER	JOHN PIAZZA	718-888-4261

SCHEDULE U-2

UTILITY INTERFERENCE FOR INFORMATION ONLY ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE FOR CONSOLIDATED EDISON

SEK20068

CONSTRUCTION OF STORM & COMBINED SEWERS AND WATER MAINS IN W. 9TH STREET

CET ITEM	DESCRIPTION	UNITS	ESTIMATED QUANTITY
CET 100.1	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT, AND/OR TESTPIT (TYPE .1)	EA	6
CET 100.2	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TESTPIT (TYPE .2)	EA	1
CET 100.3	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TESTPIT (1YPE .3)	EA	4
CET 100.4	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TESTPIT (TYPE .4)	EA	2
CET 101.1	UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCL. 24" DIAMETER (TYPE .1)	EA	27
CET 101.2	UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCL. 24" DIAMETER (TYPE .2)	EA	3
CET 101.3	UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCL. 24" DIAMETER (TYPE .3)	EA	1
CET 101.4	UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCL. 24" DIAMETER (TYPE.4)	EA	í
CET 101.5	UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCL. 24" DIAMETER (TYPE .5)	EA	1
CET 102.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE ,1)	EA	. 8
CET 102.2	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .2)	EA	1
CET 200.1	EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTIONS (INVERT DEPTH 4'-6" TO 5' FOR TYPE 2 OR UP TO 5'-6 FOR TYPE 3)	LF	52
CET 225.1A -	INSTALLATION AND REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	EA	8
CET 225.1B	INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES	EA	5
CET 225.1C	REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	EA	4
CET 300	SPECIAL CARE EXCAVATION AND BACKFILING	CY	16
CET 304 A	FURNISH, DELIVER AND INSTALL CONCRETE ROAD BASE	CY	104

UTILITY INTERFERENCE FOR INFORMATION ONLY ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE FOR CONSOLIDATED EDISON

SEK20068

CONSTRUCTION OF STORM & COMBINED SEWERS AND WATER MAINS IN W. 9TH STREET

CET ITEM	DESCRIPTION	UNITS	ESTIMATED QUANTITY
CET 400 ·	TEST PITS FOR UTILITY FACILITIES	CY	40
CET 401	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITIES	CY	329
CET 402.1	EXISTING OCCUPIED CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION W/O CONCRETE ENCASEMENT	LF	280
CET 402.V1	EXISTING VACANT CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION W/O CONCRETE ENCASEMENT	LF	80
CET 402.V2	EXISTING VACANT NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION W/O CONCRETE ENCASEMENT	LF	40
CET 450,1	CONSTRUCTION FIELD SUPPORT REQUIRING AVERAGE SIZE SURVEY CREW PERFORMING TYPICAL SURVEY FUNCTIONS (TYPE .i)	CRHRS	1
CET 450.2	CONSTRUCTION FIELD SUPPORT REQUIRING AVERAGE SMALL SIZE CREW CAPABLE OF PERFORMING VARIOUS TASKS (TYPE .2)	CRHRS	1
CET 450.3	CONSTRUCTION FIELD SUPPORT REQUIRING AVERAGE MEDIUM SIZE CREW CAPABLE OF PERFORMING VARIOUS TASKS (TYPE .3)	CRHRS	I
CET 500	REMOVAL OF ABANDONED UTILITY CONDUITS (NON-CONCRETE ENCASED)	1.F	50
CET 636 ED RD	ADJUSTMENT OF UTILITY HARDWARE IN ROADWAY (30" TO UNDER 34" WIDTH)	EA	23

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CONSTRUCTION OF STORM & COMBINED SEWERS AND WATER MAINS IN W. 9TH STREET

CET 100.1	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TESTPIT (TYPE .1)	EA
	At the following locations:	
	W9th Str Btw Smith Str and Gowanus Canal W9th Str Btw Gowanus Canal and 2nd Ave. W7th Str and 2nd Ave.	
	Total Quantity for CET 100.1 = 6	
CET 100.2	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TESTPIT (TYPE .2)	E A
•	At the following locations:	
	W9th Str Btw Gowanus Canal and 2nd Ave.	
	Total Quantity for CET 100.2 = 1	
CET 100.3	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TESTPIT (TYPE .3)	EA
	At the following locations:	
	2nd Ave, Btw W8th Str and W9th Str W8th Str and 2nd Ave. 2nd Ave. Btw W7th Str and W8th Str W7th Str and 2nd Ave.	
	Total Quantity for CET 100.3 = 4	
CET 100.4	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TESTPIT (TYPE .4)	EA
	At the following locations:	
	W9th Str Btw Gowanus Canal and 2nd Ave.	
	Total Quantity for CET 100.4 = 2	
CET 101.1	UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCL. 24" DIAMETER (TYPE .1)	EA.
	At the following locations:	
	W9th Str Btw Smith Str and Gowanus Canal W9th Str Btw Gowanus Canal and 2nd Ave. W9th Str and 2nd Ave. 2nd Ave. Btw W8th Str and W9th Str	
	Total Quantity for CET 101.1 = 27	

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CONSTRUCTION OF STORM & COMBINED SEWERS AND WATER MAINS IN W. 9TH STREET

CET 101.2	UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCL. 24" DIAMETER (TYPE .2)	EA
	At the following locations:	
	W9th Str Btw Gowanus Canal and 2nd Ave.	
	Total Quantity for CET 101.2 = 3	
CET 101.3	UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCL. 24" DIAMETER (TYPE .3)	EA
	At the following locations:	
-	W8th Str and 2nd Ave.	
	Total Quantity for CET 101.3 = 1	
CET 101.4	UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCL. 24" DIAMETER (TYPE .4)	EA
	At the following locations:	
•	W7th Str and 2nd Aye.	
	Total Quantity for CET 101.4 = 1	
CET 101.5	UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCL. 24" DIAMETER (TYPE .5)	EA
	At the following locations:	
	W9th Str and 2nd Ave.	
	Total Quantity for CET 101.5 = 1	
CET 102.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .1)	EA
	At the following locations:	
	W9th Str Btw Gowanus Canal and 2nd Ave.	
	2nd Ave. Btw W7th Str and W8th Str W7th Str and 2nd Ave.	
	Total Quantity for CET 102.1 = 8	
CET 102.2	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .2)	EA
	At the following locations:	
	2nd Ave. Btw W8th Str and W9th Str	
	Total Quantity for CET 102.2 = 1	

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CONSTRUCTION OF STORM & COMBINED SEWERS AND WATER MAINS IN W. STH STREET

CET 200.1	EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTIONS (INVERT DEPTH 4'-6" TO 5' FOR TYPE 2 OR UP TO 5'-6 FOR TYPE 3)	LF
	At the following locations:	
	W9th Str Btw Gowanus Canal and 2nd Ave. 2nd Ave. Btw W8th Str and W9th Str 2nd Ave. Btw W7th Str and W8th Str W7th Str and 2nd Ave.	
	Total Quantity for CET 200.1 = 52	
CET 225.1A	INSTALLATION AND REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	EΛ
	At the following locations:	
	W9th Str Btw Smith Str and Gowanus Canal W9th Str Btw Gowanus Canal and 2nd Ave. 2nd Ave. Btw W7th Str and W8th Str W7th Str and 2nd Ave.	
	Total Quantity for CET 225.1A = 8	
CET 225.1B	INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES	EA
	At the following locations:	
	W9th Str Btw Gowanus Canal and 2nd Ave. 2nd Ave. Btw W8th Str and W9th Str W8th Str and 2nd Ave. W7th Str and 2nd Ave.	
	Total Quantity for CET 225.1B = 5	
CET 225.1C	REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	EA
	At the following locations:	
	W9th Str Btw Smith Str and Gowanus Canal W8th Str and 2nd Ave. W9th Str Btw Gowanus Canal and 2nd Ave. W7th Str and 2nd Ave.	
	Total Quantity for CET 225.1C = 4	

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CONSTRUCTION OF STORM & COMBINED SEWERS AND WATER MAINS IN W. 9TH STREET

CET 300	SPECIAL CARE EXCAVATION AND BACKFILING	CY
	At the following locations:	
	W9th Str Btw Gowanus Canal and 2nd Ave. 2nd Ave. Btw W8th Str and W9th Str W7th Str and 2nd Ave.	
	Total Quantity for CET 300 = 16	
CET 304 A	FURNISH, DELIVER AND INSTALL CONCRETE ROAD BASE	CY
	At the following locations:	
	W9th Str Btw Gowanus Canal and 2nd Ave. W8th Str and 2nd Ave. 2nd Ave. Btw W7th Str and W8th Str W7th Str and 2nd Ave.	•
	Total Quantity for CET 304 A = 104	
CET 400	TEST PITS FOR UTILITY FACILITIES	CY
	At the following locations:	
	Various	
	Total Quantity for CET 400 = 40	
CET 401	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITIES	CY
	At the following locations:	
	W9th Str Btw Gowanus Canal and 2nd Ave. W8th Str and 2nd Ave. 2nd Ave. Btw W7th Str and W8th Str W7th Str and 2nd Ave.	
	AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE Total Quantity for CET 401 = 329	
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CONSTRUCTION OF STORM & COMBINED SEWERS AND WATER MAINS IN W. 9TH STREET

CET 402.1	EXISTING OCCUPIED CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION W/O CONCRETE ENCASEMENT	LF.
	At the following locations:	
	W9th Str Btw Gowanus Canal and 2nd Ave. 2nd Ave. Btw W7th Str and W8th Str W7th Str and 2nd Ave.	
	AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE	
	Total Quantity for CET 402.1 = 280	
CET 402.V1	EXISTING VACANT CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION W/O CONCRETE ENCASEMENT	LF
	At the following locations:	
	W9th Str Btw Gowanus Canal and 2nd Ave. W7th Str and 2nd Ave.	
	AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE	
	Total Quantity for CET 402.V1 = 80	
CET 402.V2	EXISTING VACANT NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION W/O CONCRETE ENCASEMENT	1.F
	At the following locations:	
	W8th Str and 2nd Ave.	•
	AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE	
	Total Quantity for CET 402.V2 = 40	
CET 450.1	CONSTRUCTION FIELD SUPPORT REQUIRING AVERAGE SIZE SURVEY CREW PERFORMING TYPICAL SURVEY FUNCTIONS (TYPE .1)	CRHRS
	At the following locations:	
	Various	
	Total Quantity for CET 450,1 = 1	
CET 450.2	CONSTRUCTION FIELD SUPPORT REQUIRING AVERAGE SMALL SIZE CREW CAPABLE OF PERFORMING VARIOUS TASKS (TYPE .2)	CRHRS
	At the following locations:	
	Various	
	Total Quantity for CET 450.2 = 1	

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CONSTRUCTION OF STORM & COMBINED SEWERS AND WATER MAINS IN W. STH STREET

CET 450.3 CONSTRUCTION FIELD SUPPORT REQUIRING AVERAGE MEDIUM SIZE CREW CAPABLE OF CRHRS PERFORMING VARIOUS TASKS (TYPE .3) At the following locations: Various Total Quantity for CET 450.3 REMOVAL OF ABANDONED UTILITY CONDUITS (NON-CONCRETE ENCASED) **CET 500** LF At the following locations: W7th Str and 2nd Ave. AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE Total Quantity for CET 500 = 50 CET 636 ED RD ADJUSTMENT OF UTILITY HARDWARE IN ROADWAY (30" TO UNDER 34" WIDTH) EA At the following locations: Various Various AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE Total Quantity for CET 636 ED R = 23

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SEK 20068- Const. of Storm & Combined Sewers, Water Mains, and Appurtenances in 9th Street ETC. Boroughs of Brooklyn

Schedule UI: Scope of Work for CET items

		***	e UI: Scope of Work for CET items
CET ITEM	UNITS	TOTAL	DESCRIPTION
CET 100,1	EACH	6	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTIONS AND/OR TEST PITS (TYPE .1)
CET 101.1	EACH	5	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .1)
		<u> </u>	
CET 102.1	EACH	2	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .1)
CET 103.1	EACH	1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMETER (TYPE .1)
CET 109,1	EACH	1	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1)
CET 225.1A	EACH	2	INSTALLATION AND REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES
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CET 225.1B	EACH	2	INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES
257 207 42	F1011		
CET 225.1C	EACH	2	REMOVAL OF CATCH BASINS WITH UTILITY INTERFERNCES NOT BEING REPLACED
<u> </u>			
CET 300	CY	10	SPECIAL CARE EXCAVATION AND BACKFILLING
	A		
CET 304 A	CY	6	FURNISH, DELIVER AND INSTALL CONCRETE ROAD BASE
		ļ	
CET 305	TON	1 1	FURNISH, DELIVER AND INSTALL ASPHALT PAVING MIXTURES
		455	
CET 330T	LF	480	SUPPORT AND PROTECTION OF COMMUNICATION UTILITY FACILITIES
			DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE IN
		ļ	OR IN CLOSE PROXIMITY TO TRENCH LIMITS
0== 0==		<u> </u>	
CET 350	LS	1	OVERHEAD ACCOMMODATION PROTECTION OF OVERHEAD
		ļ	FACILITIES, POLES AND APPURTENANCES
OFT (00	- 07	45	THOS BUTA CAN LITY COLUMN THEA
CET 400	CY	15	TEST PITS FOR UTILITY FACILITIES
OFT 404	617		TOCHOLI CYON VATIONI COR AD RIGHTING TO LITTLE TO A ON OTHER
CET 401	CY	36	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES
CET 402T 04	1.5		EVICTIBLE NON CONCRETE ENCACED TELECOMMUNICATION CONTRUCTO
CET 402T.2A	LF	220	EXISTING NON-CONCRETE ENCASED TELECOMMUNICATION CONDUITS
		 	PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT
CET 403		460	DI ACINO CTEEL OPOTECTION DI ATEC COD LITEUTE FACULTICO
CET 403	SF	150	PLACING STEEL PROTECTION PLATES FOR UTILITY FACILITIES
L	<u> </u>	<u>t</u>	

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SEK 20068- Const. of Storm & Combined Sewers, Water Mains, and Appurtenances in 9th Street ETC. Boroughs of Brooklyn Schedule UI: Scope of Work for CET items

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CET ITEM	UNITS	TOTAL	DESCRIPTION			
CET 500	LF	15	REMOVAL OF ABANDONED UTILITY CONDUITS (NON-CONCRETE ENCASED)			
CET 636 EE RD	£Α	2	ADJUSTMENT OF UTILITY HARDWARE (34" TO UNDER 41" WIDTH)			
CET 636 EE SW	EA	1	ADJUSTMENT OF UTILITY HARDWARE (34" TO UNDER 41" WIDTH)			
CET 700	CY	280	SPECIAL MODIFICATION OF WORK METHODS TO ACCOMMODATE PROTECT UNDERGROUND FACILITIES WITH LIMITED COVER			
CET 710.1	LF	20	REMOVAL OF ABANDONED UTILITY STEEL/CAST IRON/PLASTIC PIPES UP TO AND INCLUDING 12" DIAMETER PIPES			
CET 802A	SF	210	SPECIAL MODIFICATION OF WORK METHODS FOR INSTALLATION OF NEW SIDEWALK			
CET 802B	LF	45	SPECIAL MODIFICATION OF WORK METHODS FOR INSTALLATION OF NEW CURB			
CET 803	LF	10	LINE CUT BY PNEUMATIC TOOLS IN LIEU OF SAW CUT ASSOCIATED WITH ROADWAY REMOVAL OPERATIONS			

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SEK 20068- Const. of Storm & Combined Sewers, Water Mains, and Appurtenances in 9th Street ETC. Boroughs of Brooklyn

Schedule UI: Scope of Work for CET items

Schedule of, Scope of Work for CET items		National designation of the second section is a second
CET 100.1 UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION AND/OR TEST PITS (TYPE .1)	ONS	
@ THE FOLLOWING LOCATIONS		QTY(EA)
S SIDE OF W 9TH ST BTWN SMITH STREET & 2ND AVE		3
E SIDE OF 2ND AVENUE BTWN 9TH STREET & 8TH STREET		2
SEC OF INT OF 2ND AVENUE & 7TH STREET		1
CET 100.1	TOTAL	6
CET 101.1		
UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMET (TYPE .1)	ER	
@ THE FOLLOWING LOCATIONS		QTY(EA)
N SIDE OF W 9TH STREET BTWN SMITH STREET & 2ND AVENUE		1
SWC INT OF 2ND AVENUE & 9TH STREET		1
W SIDE OF 2ND AVENUE BTWN 9TH STREET & 8TH STREET		1
NEC INT OF 2ND AVENUE & 8TH STREET		1
NEC INT OF 2ND AVENUE & 7TH STREET	,	1
CET 101.1	TOTAL	5
CET 102.1 UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMET (TYPE .1)	FER	
@ THE FOLLOWING LOCATIONS		QTY(EA)
E SIDE 2ND AVENUE BYWN 9TH STREET & 8TH STREET		1
SEC INT OF 2ND AVENUE & 8TH STREET		1
CET 102.1	TOTAL	2

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Schedule UI: Scope of Work for CET items

CET 103.1		
UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAME (TYPE .1)	TER	
(1112.1)	•	
@ THE FOLLOWING LOCATIONS		QTY(EA)
N SIDE OF 9TH STREET BTWN SMITH STREET & 2ND AVENUE		1
CET 103.1	TOTAL	1
CET 109.1		
UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP T 24" DIAMETER (TYPE .1)	O	
@ THE FOLLOWING LOCATIONS		QTY(EA)
W SIDE OF 2ND AVE BTWN 9TH STREET & 8TH STREET		1
CET 109.1	TOTAL	1
CET 225.1A		
INSTALLATION AND REMOVAL OF CATCH BASINS WITH		
UTILITY INTERFERENCES		
@ THE FOLLOWING LOCATIONS		QTY(EA)
NEC INT OF 2ND AVENUE & 8TH STREET		1
SEC OF INT OF 2ND AVENUE & 7TH STREET		1
CET 225.1A	TOTAL	2
CET 225.1B		
INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES		
@ THE FOLLOWING LOCATIONS		QTY(EA)
E SIDE OF 2ND AVENUE BTWN 9TH STREET & 8TH STREET		1
W SIDE INT OF 2ND AVENUE & 8TH STREET		I
CET 225.1B	TOTAL	2

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Schedule UI: Scope of Work for CET items	
CET 225.1C REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES NOT BEING REPLACED	
@ THE FOLLOWING LOCATIONS E SIDE OF 2ND AVENUE BTWN 9TH STREET & 8TH STREET NEC INT OF 2ND AVENUE & 7TH STREET	QTY(EA)
CET 225.1C TOTAL	2
CET 300 SPECIAL CARE EXCAVATION AND BACKFILLING	
@ THE FOLLOWING LOCATIONS E SIDE OF 2ND AVENUE BTWN 9TH STREET & 8TH STREET	QTY(CY)
CET 300 TOTAL	. 10
CET 304 A FURNISH, DELIVER AND INSTALL CONCRETE ROAD BASE	
@ THE FOLLOWING LOCATIONS AS ENCOUNTERED & DIRECTED BY THE VERIZON FIELD REPRESENTATIVE	QTY(CY) 6
CET 304 A TOTAL	6
CET 305 FURNISH, DELIVER AND INSTALL ASPHALT PAVING MIXTURES	
@ THE FOLLOWING LOCATIONS AS ENCOUNTERED & DIRECTED BY THE VERIZON FIELD REPRESENTATIVE	QTY(TON)
CET 305 TOTAL	1
CET 330T SUPPORT AND PROTECTION OF COMMUNICATION UTILITY FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE IN OR IN CLOSE PROXIMITY TO TRENCH LIMITS	
@ THE FOLLOWING LOCATIONS	QTY(LF)

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SEK 20068- Const. of Storm & Combined Sewers, Water Mains, and Appurtenances in 9th Street ETC. Boroughs of Brooklyn Schedule III. Scape of Work for CET items

Schedule UI: Scope of Work for CET items	
S SIDE OF 9TH STREET BTWN SMITH STREET & 2ND AVENUE	480
CET 330T TOTAL	480
CET 350	
OVERHEAD ACCOMMODATION PROTECTION OF OVERHEAD FACILITIES, POLES AND APPURTENANCES	
@ THE FOLLOWING LOCATIONS	QTY(LS)
AS ENCOUNTERED & DIRECTED BY THE VERIZON FIELD REPRESENTATIVE	1
CET 350 TOTAL	1
CET 400	
TEST PITS FOR UTILITY FACILITIES	
@ THE FOLLOWING LOCATIONS	QTY(CY)
AS ENCOUNTERED & DIRECTED BY THE VERIZON FIELD REPRESENTATIVE	15
CET 400 TOTAL	15
CET 401	
TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES	
@ THE FOLLOWING LOCATIONS	QTY(CY)
S SIDE OF 9TH STREET BTWN SMITH STREET & 2ND AVENUE	14
SWC OF INT OF 2ND AVE & W 9TH ST	7
NEC INT OF 2ND AVENUE & 7TH STREET	15
CET 401 TOTAL	36
CET 402T.2A	
EXISTING NON-CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	
@ THE FOLLOWING LOCATIONS	QTY(LF)
S SIDE OF 9TH STREET BTWN SMITH STREET & 2ND AVENUE SWC OF INT OF 2ND AVE & W 9TH ST	100 80

TOTAL

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SEK 20068- Const. of Storm & Combined Sewers, Water Mains, and Appurtenances in 9th Street ETC. Boroughs of Brooklyn

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Schedule UI: Scope of Work for CET items		
NEC INT OF 2ND AVENUE & 7TH STREET		40
CET 402T.2A	TOTAL	220
CET 403 PLACING STEEL PROTECTION PLATES FOR UTILITY FACILITIES		
	•	
@ THE FOLLOWING LOCATIONS AS ENCOUNTERED & DIRECTED BY THE VERIZON FIELD REPRESENTATION	VE	QTY(SF) 150
CET 403	TOTAL	150
CET 500 REMOVAL OF ABANDONED UTILITY CONDUITS (NON-CONCRETE ENCASED)		
@ THE FOLLOWING LOCATIONS		QTY(LF)
AS ENCOUNTERED & DIRECTED BY THE VERIZON FIELD REPRESENTATIVE		15
CET 500	TOTAL	15
CET 636 EE RD ADJUSTMENT OF UTILITY HARDWARE (34" TO UNDER 41" WIDTH)		
@ THE FOLLOWING LOCATIONS E SIDE OF 2ND AVENUE BTWN 9TH STREET & 8TH STREET NEC INT OF 2ND AVENUE & 8TH STREET		QTY(EA) 1
CET 636 EE RD	TOTAL	2
CET 636EE SW ADJUSTMENT OF UTILITY HARDWARE (34" TO UNDER 41" WIDTH)		
@ THE FOLLOWING LOCATIONS S SIDE OF 9TH STREET BTWN SMITH STREET & 2ND AVENUE		QTY(EA)

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SEK 20068- Const. of Storm & Combined Sewers, Water Mains, and Appurtenances in 9th Street ETC. Boroughs of Brooklyn

Schedule UI: Scope of Work for CET items

CET 700

SPECIAL MODIFICATION OF WORK METHODS TO ACCOMMODATE/PROTECT UNDERGROUND FACILITIES WITH LIMITED COVER

CET 700	TOTAL	280
INT OF 2ND AVENUE & 7TH STREET		20
ON 2ND AVENUE BTWN 8TH STREET & 7TH STREET		50
INT OF 2ND AVENUE & 8TH STREET		20
ON 2ND AVENUE BTWN 9TH STREET & 8TH STREET		50
INT OF 2ND AVENUE & 9TH STREET		20
ON 9TH STREET BTWN SMITH STREET & 2ND AVENUE		120
@ THE FOLLOWING LOCATIONS		QTY(CY)

CET 710.1

REMOVAL OF ABANDONED UTILITY STEEL/CAST IRON/PLASTIC PIPES UP TO AND INCLUDING 12" DIAMETER PIPES

@ THE FOLLOWING LOCATIONS		QTY(LF)
AS ENCOUNTERED & DIRECTED BY THE VERIZON FIELD REPRESENTATIVE		20
CET 710.1	TOTAL	20

CET 802A

SPECIAL MODIFICATION OF WORK METHODS FOR INSTALLATION OF NEW SIDEWALK

CET 802A	TOTAL	210
W SIDE INT OF 2ND AVENUE & 8TH STREET		40
W SIDE OF 2ND AVE BTWN 9TH STREET & 8TH STREET	•	40
S SIDE OF 9TH STREET BTWN SMITH STREET & 2ND AVENUE		80
N SIDE OF 9TH STREET BTWN SMITH STREET & 2ND AVENUE		50
@ THE FOLLOWING LOCATIONS		QTY(SF)

For Information Only

OCTOBER 2016

SEK 20068- Const. of Storm & Combined Sewers, Water Mains, and Appurtenances in 9th Street ETC. Boroughs of Brooklyn

Schedule UI: Scope of Work for CET items

CET 802B

SPECIAL MODIFICATION OF WORK METHODS FOR INSTALLATION OF	NEW CUR	В
@ THE FOLLOWING LOCATIONS		QTY(LF)
N SIDE OF 9TH STREET BTWN SMITH STREET & 2ND AVENUE		5
S SIDE OF 9TH STREET BTWN SMITH STREET & 2ND AVENUE		30
W SIDE OF 2ND AVE BTWN 9TH STREET & 8TH STREET		5
W SIDE INT OF 2ND AVENUE & 8TH STREET		5
CET 802B	TOTAL	45
CET 803		
LINE CUT BY PNEUMATIC TOOLS IN LIEU OF SAW CUT ASSOCIATED		
WITH ROADWAY REMOVAL OPERATIONS		
@ THE FOLLOWING LOCATIONS		QTY(LF)
AS ENCOUNTERED & DIRECTED BY THE VERIZON FIELD REPRESENTATIVE		10
Cet 202	TO CATE A T	10

FOR INFORMATION ONLY ENGINEER'S ESTIMATE OF QUANTITIES AND TYPES OF INTERFERENCE TIME WARNER CABLE OF NEW YORK CITY SEK20068

Storm & Combined Sewers in West 9th Street, etc. Borough of Brooklyn

CET ITEM	DESCRIPTION	UNITS	ESTIMATED QUANTITY
	OVERHEAD ACCOMMODATION, PROTECTION OF OVERHEAD FACILITIES, POLES & APPURTENANCES	LS	1

TIME WARNER CABLE
SUPPORT & PROTECTION
SEK20068
Storm & Combined Sewers in West 9th Street, etc.
Borough of Brooklyn

CET 350	OVERHEAD ACCOMMODATION, PROTECTION OF OVERHEAD FACILITIES, POLES & APPURTENANCES At the following locations:		L
	AS ENCOUNTERED		1
		Total quantity for CET 350	1

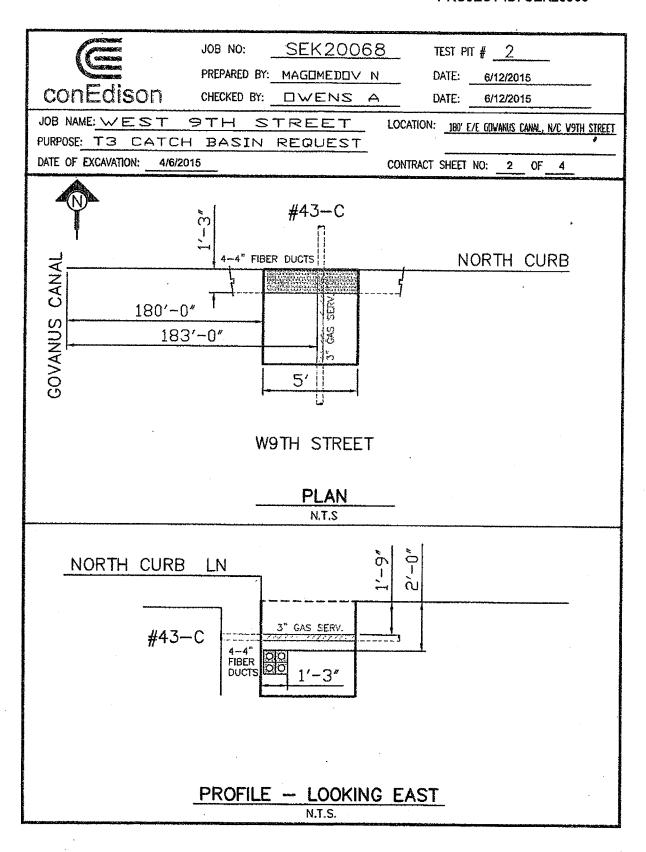
SCHEDULE U-3

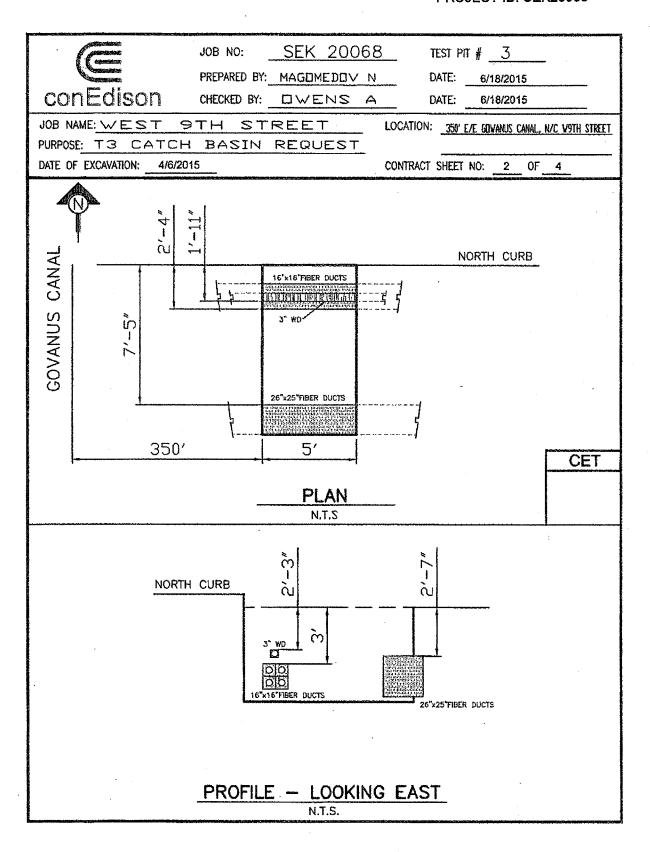
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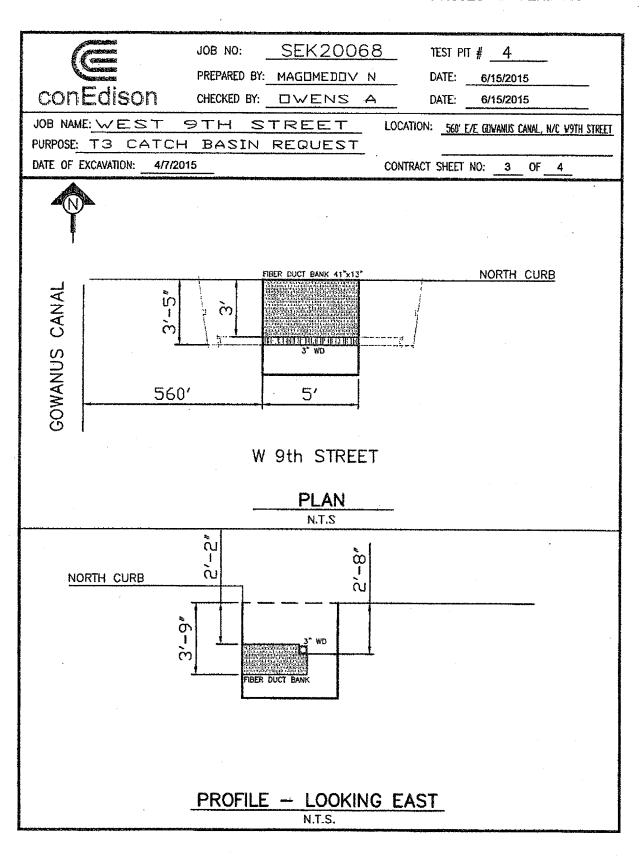
TEST PITS

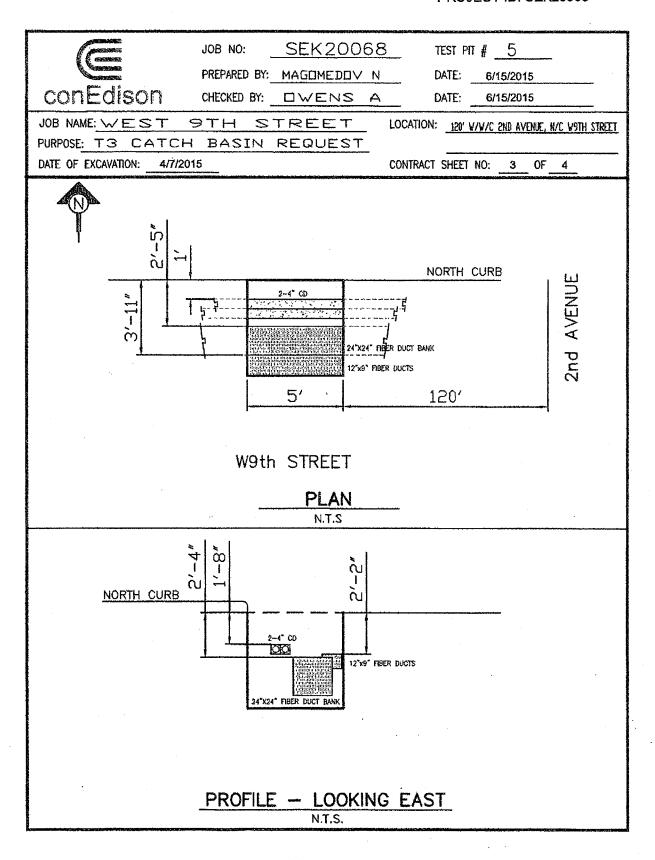
- (1) THESE TEST PITS DETAIL EXISTING CONDITIONS (AS OF BID DATE) OF UTILITIES AND OTHER SUBSURFACE FACILITIES AT LOCATIONS AS SHOWN ON THE TEST PIT LOCATIONS PLAN OF THE CONTRACT DRAWINGS.
- (2) DEPTHS OF FACILITIES ARE FROM EXISTING ROADWAY AND SIDEWALK ELEVATIONS AS SHOWN, OFFSETS ARE FROM EXISTING CURB, PROPERTY AND BUILDING LINES, AS SHOWN.
- (3) RELEVANT ITEMS ARE NOTED ON EACH TEST PIT DIAGRAM.

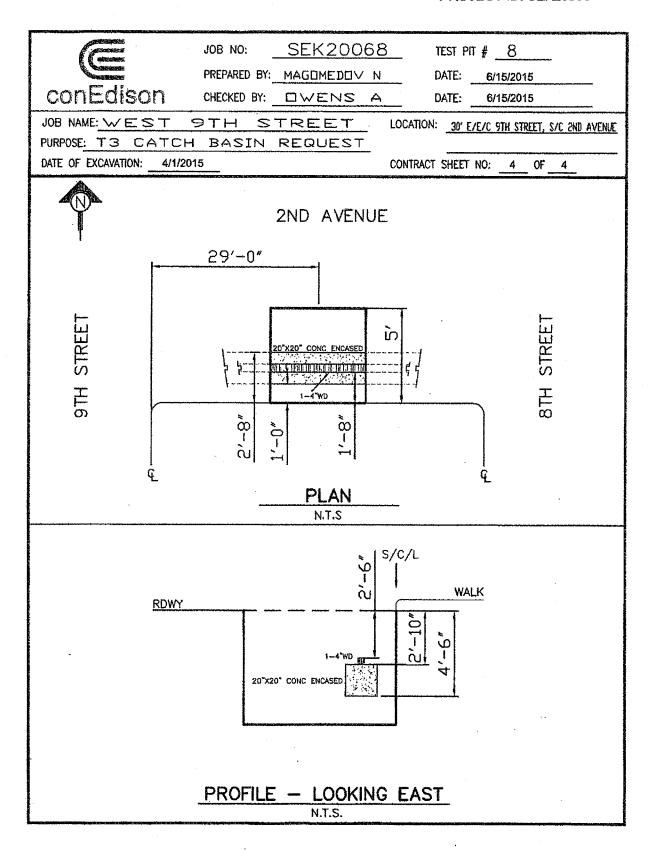
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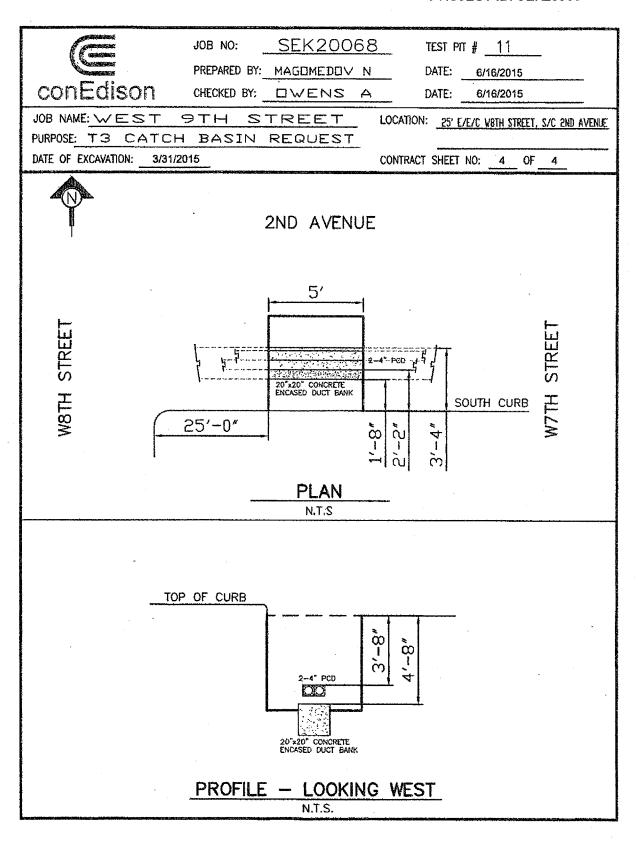


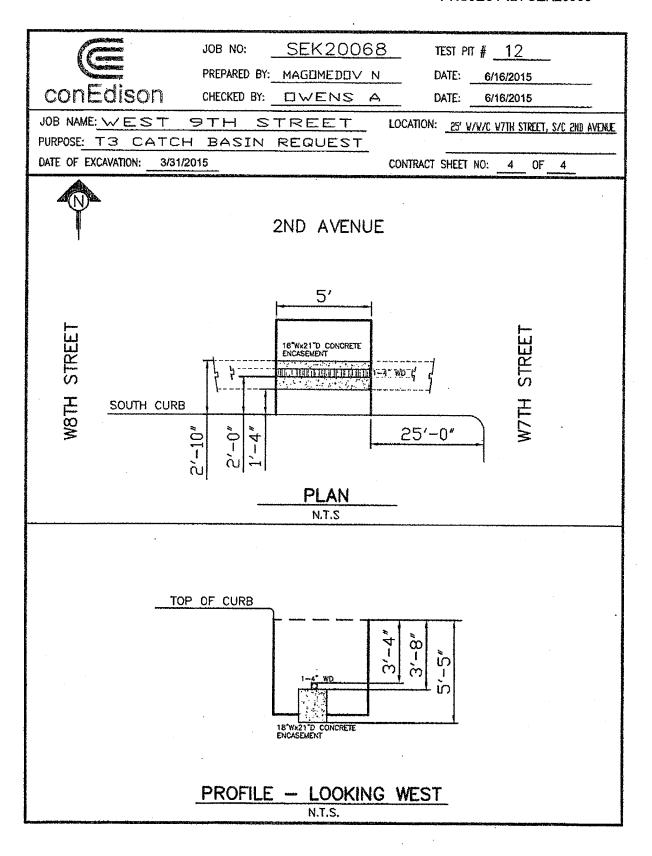


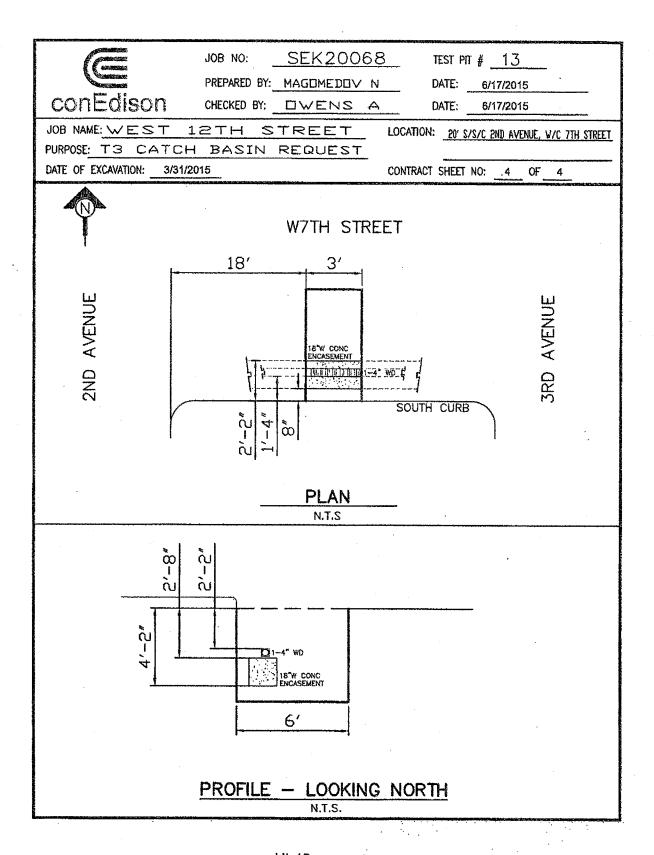














INFRASTRUCTURE DIVISION BUREAU OF DESIGN

VOLUME 3 OF 3

PROJECT ID: SEK20068

FOR THE CONSTRUCTION OF STORM AND COMBINED SEWERS AND APPURTENANCES IN:

9TH STREET BETWEEN SMITH STREET AND 2ND AVENUE 2ND AVENUE BETWEEN 9TH STREET AND 7TH STREET

CAPITAL PROJECT WM-1

FOR THE REPLACEMENT OF WATER MAINS AND APPURTENANCES IN: 2ND AVENUE BETWEEN 9TH STREET AND 7TH STREET

Together With All Work Incidental Thereto BOROUGH OF BROOKLYN CITY OF NEW YORK

	Contractor
Dated	, 20