



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

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

VOLUME 1 OF 3

LAW

BID BOOKLET

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED FOR:

PROJECT ID: HWQ411B

RECONSTRUCTION OF ALBERT ROAD AREA

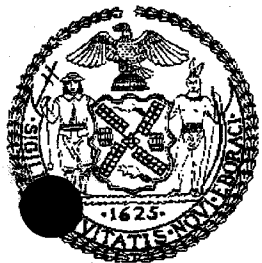
**INCLUDING SEWER, WATERMAIN, STREET LIGHTING,
AND TRAFFIC SIGNAL WORK**

Together With All Work Incidental Thereto

**BOROUGH OF QUEENS
CITY OF NEW YORK**

FOR THE DEPARTMENT OF TRANSPORTATION
PREPARED BY
IN-HOUSE

FEBRUARY 19, 2014



14-052



Bid Tab

Description	RECONSTRUCTION OF ALBERT ROAD AREA - BOROUGH OF QUEENS		
Bid Date	4/30/2014	FMS ID	HWQ411B
Estimated Cost	\$48,863,353.00	DEP Supervised	No
Bid Security	2% of Total Bid Price	PLA	No
Time Allowed	1,095 CCD	Contract Manager	Vicky Ayo- Vaughan
Addendum	8	Project Manager	Geyman, Alla
PIN	8502010HW0008C	E-PIN	85014B0047
Selective Bidding	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Consultant	In-House

Bid Rank	Vendor	Bid Amount	Security Type
1	MASPETH SUPPLY CO, LLC	\$41,455,755.11	Bond
2	LAWS CONSTRUCTION CORP.	\$41,570,000.00	Bond
3	P & T II CONTRACTING CORP.	\$44,677,061.16	Bond
4	C.A.C. INDUSTRIES, INC.	\$45,531,625.86	Bond
5	JR CRUZ CORP.	\$51,030,000.00	Bond
6	RESTANI CONSTRUCTION CORP.	\$55,985,122.00	Bond

Recorder: Phyllis Lopez – ext. 1283

Approver: 

Bid Tab
Pin: 8502010HW0008C

Page 1 of 1





NEW YORK CITY DEPARTMENT OF
DESIGN + CONSTRUCTION

FENIOSKY A. PEÑA-MORA, FAIA
Commissioner

Ramon Rodriguez
Acting Agency Chief
Contracting Officer

June 10, 2014

CERTIFIED MAIL - RETURN RECEIPT REQUEST

MASPETH SUPPLY CO, LLC

55-14 48th Street

Maspeth, NY 11378

RE: FMS ID: HWQ411B
E-PIN: 85014B0047001
DDC PIN: 8502010HW0008C
RECONSTRUCTION OF ALBERT ROAD
AREA - BOROUGH OF QUEENS
NOTICE OF AWARD

Dear Contractor:

You are hereby awarded the above referenced contract based upon your bid in the amount of \$41,455,755.11 submitted at the bid opening on April 30, 2014. 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.

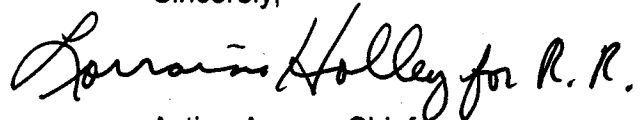
- (1) Execute four copies of the Agreement in the Contracts Unit, 30-30 Thomson Avenue, 1st Floor, Long Island City, New York (IDCNY Building). A Commissioner of Deeds will be available to witness and notarize your signature. The Agreement must be signed by an officer of the corporation or a partner of the firm.
- (2) Submit to the Contracts Unit four properly executed performance and payment bonds. If required for this contract, copies of performance and payment bonds are attached.
- (3) Submit to the Contracts Unit the following insurance documentation: (a) original certificate of insurance for general liability in the amount required by Schedule A, and (b) original certificates of insurance or other proof of coverage for workers' compensation and 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,



Acting Agency Chief
Contracting Officer

PROJECT ID: HWQ411B

RECONSTRUCTION OF ALBERT ROAD AREA

135TH DR. FROM CENTREVILLE ST. TO DEAD END EAST OF CENTREVILLE ST.,
135TH RD. FROM 97TH ST. TO HAWTREE ST.,
94TH ST., 95TH ST., AND 96TH ST. FROM ALBERT RD. TO LINDEN BLVD.,
95TH ST FROM 150 TH RD. TO ALBERT RD.,
96TH PL. FROM LINDEN BLVD. TO DEAD END SOUTH OF 149TH AVE.,
97TH ST. FROM 149TH AVE. TO LINDEN BLVD.,
99TH PL. FROM ALBERT ROAD. TO HAWTREE ST.,
ALBERT RD. FROM CROSS BAY BLVD. TO NORTH CONDUIT AVE.,
BRISTOL AVE. FROM CENTREVILE ST. TO DEAD END EAST OF CENTREVILLE ST.,
CENTREVILLE ST. FROM PITKIN AVE. TO NORTH CONDUIT AVE.,
COHANCY ST. FROM NORTH CONDUIT AVE. TO HAWTREE ST.,
ECKFORD AVE., FORM CENTREVILLE ST. TO HAWTREE ST.,
HAWTREE ST. FROM COHANCY ST. TO BRISTOL AVE. AND
FROM PITKIN AVE. TO LINDEN BLVD. HURON ST., FROM ECKFORD AVE. TO ALBERT RD.
RALEIGH ST., AND TAHOE ST. FROM ALBERT RD. TO ECKFORD AVE.,
LINDEN BLVD. FROM CROSS BAY BLVD. TO HAWTREE ST.,
NORTH CONDUIT AVE. FROM RALEIGH ST. TO TAHOE ST.,
PITKIN AVE. FROM CROSS BAY BLVD. TO END OF R.O.W.,
RELEIGH ST. FROM NORTH CONDUIT AVE. TO DEAD END NORTH OF CONDUIT AVE.,
TAHOE ST. FROM NORTH CONDUIT AVE. TO ALBERT RD
149TH AVE. FROM CROSS BAY BLVD. TO CENTREVILLE ST.

INCLUDING SEWER, WATERMAIN, STREET LIGHTING,
AND TRAFFIC SIGNAL WORK

Together With All Work Incidental Thereto

BOROUGH OF QUEENS
CITY OF NEW YORK

(NO TEXT ON THIS PAGE)

SPECIAL NOTICE TO BIDDERS

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

Under this initiative, loans are available for early stage mobilization needs such as insurance, labor, supplies and equipment. Bidders are strongly encouraged to visit "Growing Your Business" at www.nyc.gov/nycbusiness to 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.

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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: HWQ411B

RECONSTRUCTION OF ALBERT ROAD AREA

**INCLUDING SEWER, WATERMAIN, STREET LIGHTING,
AND TRAFFIC SIGNAL WORK**

Together With All Work Incidental Thereto

**BOROUGH OF QUEENS
CITY OF NEW YORK**

(NO TEXT ON THIS PAGE)

PROJECT ID: HWQ411B

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

BID BOOKLET

TABLE OF CONTENTS

SECTION		PAGE
PART A		
1.	Table of Contents.....	1
2.	Special Notice to Bidders.....	2
3.	Attachment 1 – Bid Information.....	A-1
4.	Bid Schedule.....	B-1
5.	Bid Form.....	C-1
6.	Affirmation.....	C-6
7.	Bid Bond	C-7
8.	M/WBE Program: M/WBE Utilization Plan.....	5
9.	Apprenticeship Program Requirements	19
PART B		
10.	Safety Questionnaire	21
11.	Pre-award Process.....	24
12.	Project Reference Form.....	26
13.	Contract Certificate.....	29
14.	Vendex Compliance.....	30
15.	Iran Divestment Act Compliance Rider	31
16.	Construction Employment Report.....	33

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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 (718-391-2615).
- (3) VENDEX QUESTIONNAIRES: The Bidder is advised that Vendex Questionnaires and procedures have been changed. Vendex Questionnaires, as well as detailed instructions, may be obtained at www.nyc.gov/vendex. The bidder may also obtain Vendex forms and instructions by contacting the Agency Chief Contracting Officer or the contact person for this contract.
- (4) SPECIAL EXPERIENCE REQUIREMENTS: The Bidder is advised that Special Experience Requirements may apply to this contract. Such requirements are set forth on pages 3 and 4 of this Bid Booklet.

SPECIAL NOTICE TO BIDDERS
SPECIAL EXPERIENCE REQUIREMENTS (Revised 02/2007)

- (A) **EXPERIENCE REQUIREMENTS FOR THE BIDDER:** 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 requirements set forth below under Article (B) apply to this contract where indicated by a blackened box (■) or by X in a □ to left.

- (B) **EXPERIENCE REQUIREMENTS FOR INSTALLER OF TRUNK WATER MAIN:** The special experience requirements set forth below apply to the contractor who will install the Trunk Water Main. 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 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.

- (1) The contractor who will install the Trunk Water Main 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.

- (C) **SUBMISSION REQUIREMENTS:** For each project submitted to meet the experience requirements set forth above, the bidder must complete and submit the Qualification Form set forth in the Bid Booklet. Separate Qualification Forms shall be provided for bidder and the contractor who will install the Trunk Water Main.

- (D) **CONDITIONS:** In determining compliance with the special experience requirements for the bidder set forth above, the City may consider prior projects completed by principal(s) or other employees of the bidder while affiliated with another entity, subject to the conditions set forth below.

- (1) 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 months or more from the inception of the bidding entity.
- (2) 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.

- (E) **JOINT VENTURES:** In the event the bidder is a joint venture, at least one firm in the joint venture must meet the above described experience requirements.

- (F) **COMPLIANCE:** Compliance with the experience requirements set forth herein will be determined solely by the City, prior to an award of contract. The bidder is advised that failure to meet the above described experience will result in the rejection of the bid as non-responsive.

Qualification Form

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

Name of Contractor: _____

Name of Project: _____

Location of Project: _____

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

Name: _____

Title: _____ Phone Number: _____

Brief description of the Project completed or the Project in progress: _____

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

Amount of Contract, Subcontract or Sub-subcontract: _____

Start Date and Completion Date: _____

Name of Contractor: _____

Name of Project: _____

Location of Project: _____

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

Name: _____

Title: _____ Phone Number: _____

Brief description of the Project completed or the Project in progress: _____

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

Amount of Contract, Subcontract or Sub-subcontract: _____

Start Date and Completion Date: _____

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ATTACHMENT 1 - BID INFORMATION

PROJECT ID: HWQ411B

PIN: 8502010HW0008C

Description and Location of Work:

RECONSTRUCTION OF ALBERT ROAD AREA

INCLUDING SEWER, WATERMAIN, STREET LIGHTING,
AND TRAFFIC SIGNAL WORK

Together With All Work Incidental Thereto

BOROUGH OF QUEENS
CITY OF NEW YORK

Documents Available At:

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

Submission of Bids To:

30-30 Thomson Avenue
First Floor Bid Procurement Room
Long Island City, New York 11101
Before 11:00 A.M. on APRIL 30, 2014

Bid Opening:

30-30 Thomson Avenue
First Floor Bid Procurement Room
Long Island City, New York 11101
Time and Date: 11:00 A.M. on APRIL 30, 2014

Pre-Bid Conference:

Yes _____ No X
If Yes, Mandatory _____ Optional: _____
Time and Date: _____
Location: _____

Bid Security:

Bid Security is required in the amount set forth below; provided, however, bid security is not required if the TOTAL BID PRICE set forth on the Bid Form is less than \$ 1,000,000.00.

- (1) Bond in an amount not less than 10% of the TOTAL BID PRICE set forth on the Bid Form, OR
- (2) Certified Check in an amount not less than 2% of the TOTAL BID PRICE set forth on the Bid Form.

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

Agency Contact Person:

Lorraine Holley
Phone: 718-391-2601 FAX: 718-391-2615

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BID SCHEDULE
NOTICE TO BIDDERS

Items listed in this Bid Schedule which have one (1) digit followed by a decimal (e.g. 4.02 AG), excluding items beginning with the number "8.01", shall comply with the requirements of the corresponding numerical Sections of the NYCDOT Standard Highway Specifications as amended by Addendum No. 1, herein Volume 3 of 3.

Items listed in this Bid Schedule beginning with the prefix "GI-" shall comply with the requirements of the corresponding alphanumeric Sections incorporated in Addendum No. 1, herein Volume 3 of 3.

Items listed in this Bid Schedule beginning with the number "8.01" (e.g. 8.01 C1) shall comply with the requirements of Addendum No. 5, herein Volume 3 of 3.

Items listed in this Bid Schedule which have two (2) digits beginning with the number "5" followed by a decimal (e.g. 52.21D10) shall comply with the requirements of the New York City Department of Environmental Protection (NYCDEP) Standard Sewer Specifications dated August 1, 2009, as amended by Addendum No. 2 herein Volume 3 of 3.

Items listed in this Bid Schedule which have two (2) digits beginning with the number "6" followed by a decimal (e.g. 60.12DMM06) shall comply with the requirements of the New York City Department of Environmental Protection (NYCDEP) Standard Water Main Specifications dated August 1, 2009, and as amended by Addendum No. 2, herein Volume 3 of 3.

Items listed in the Bid Schedule which have two (2) digits beginning with the number "7" followed by a decimal (e.g. 70.61RE), shall comply with the requirements of the New York City Department of Environmental Protection (NYCDEP) Standard Sewer Specifications, dated August 1, 2009, or the NYCDEP Standard Water Main Specifications, dated August 1, 2009, as applicable, and as amended by Addendum No. 2, herein Volume 3 of 3.

Items listed in this Bid Schedule beginning with the prefix "BMP" (e.g. BMP-7.09, BMP-7.18, etc.), shall comply with the requirements of the corresponding alphanumeric Sections incorporated in Addendum No. 4, herein Volume 3 of 3.

Items listed in this Bid Schedule beginning with the prefix "SL-" (e.g. SL-21.09.07) are Street Lighting Items, less the prefix, which shall be done in accordance with the requirements of Sub-Section 1.06.23.(D) and Section 1.06.49 in the Standard Highway Specifications.

Items listed in this Bid Schedule beginning with the prefix "T-" (e.g. T-2.22) are Traffic Items, less the prefix, which shall be done in accordance with the requirements of Sub-Section 1.06.23.(D) and Section 1.06.49 in the Standard Highway Specifications, except for Item No. "T-60000B which shall comply with the requirements of Section T-60000B in Addendum No. 1, herein Volume 3 of 3.

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: HWQ411B

RECONSTRUCTION OF ALBERT ROAD AREA

INCLUDING SEWER, WATERMAIN, STREET LIGHTING,
AND TRAFFIC SIGNAL WORK

Together With All Work Incidental Thereto

BOROUGH OF QUEENS
CITY OF NEW YORK

Name of Bidder: MASPEH SUPPLY LLC

Date of Bid Opening: APRIL 30, 2014

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

Place of Business of Bidder: 55-14 48 St MASNAN NY 11378

Bidder's Telephone Number: 718 786 7000 Fax Number: 718 937 5164

Bidder's E-Mail Address: _____

Residence of Bidder (If Individual): _____

If Bidder is a Partnership, fill in the following blanks:

Names of Partners
HARVEY BLATT
HARVEY LYONS

Residence of Partners
17 Grand Ridge Rd, Rossmore NY
5 Broadlawn Ave, Great Neck NY

If Bidder is a Corporation, fill in the following blanks:
Organized under the laws of the State of _____

Name and Home Address of President: _____

Name and Home Address of Secretary: _____

Name and Home Address of Treasurer: _____

BID FORM

The above-named Bidder affirms and declares:

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

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

5. The bidder, as an individual, or as a member, partner, director or officer of the bidder, if the same be a firm, partnership or corporation, executes this document expressly warranting and representing that should this bid be accepted by the City and the Contract awarded to him, he and his subcontractors engaged in the performance: (1) will comply with the provisions of Section 6-108 of the Administrative Code of the City of New York and the non-discrimination provisions of Section 220a of the New York State Labor Law, as more expressly and in detail set forth in the Agreement; (2) will comply with Section 6-109 of the Administrative Code of the City of New York in relation to minimum wages and other stipulations as more expressly and in detail set forth in the Agreement; (3) have complied with the provisions of the aforesaid laws since their respective effective dates, and (4) will post notices to be furnished by the City, setting forth the requirements of the aforesaid laws in prominent and conspicuous places in each and every plant, factory, building and structure where employees engaged in the performance of the Contract can readily view it, and will continue to keep such notices posted until the supplies, materials and equipment, or work labor and services required to be furnished or rendered by the Contractor have been finally accepted by the City. In the event of any breach or violation of the foregoing, the Contractor may be subject to damages, liquidated or otherwise, cancellation of the Contract and suspension as a bidder for a period of three years. (The words, "the bidder", "he", "his", and "him" where used herein shall mean the individual bidder, firm, partnership or corporation executing this bid).

AFFIRMATION

The undersigned bidder affirms and declares that said bidder is not in arrears to the City of New York upon debt, contract or taxes and is not a defaulter, as surety or otherwise, upon obligation to the City of New York, and has not been declared not responsible, or disqualified, by any agency of the City of New York, nor is there any proceeding pending relating to the responsibility or qualification of the bidder to receive public contracts except: NONE

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

Full Name of Bidder: MASPETH SUPPLY CO. LLC
Address: 55-48 STREET
City: MASPETH State: NEW YORK Zip Code: 11372

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

11-3493939

C - Corporation
EMPLOYER IDENTIFICATION NUMBER

By: [Signature]
Signature

Title: Member

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.

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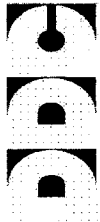


NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
Project ID HWQ411B

BID SCHEDULE

- NOTE: (1) The Agency may reject a bid if it contains unbalanced bid prices. An unbalanced bid is considered to be one containing lump sum or unit items which do not reflect reasonable actual costs plus a reasonable proportionate share of the Bidder's anticipated profit, overhead costs, and other indirect costs, anticipated for the performance of the items in question.
- (2) The following bid prices on Unit Price Contracts are to be paid for the actual quantities of the several classes of work in the completed work or structure, and they cover the cost of all work, labor, material, tools, plant and appliances of every description necessary to complete the entire work, as specified, and the removal of all debris, temporary work and appliances.
- (3) PLEASE BE SURE A LEGIBLE BID IS ENTERED, IN INK, FOR EACH ITEM. Alterations must be initialed in ink by the bidder.
- (4) The Extended Amount entered in Column 5 shall be the product of the Estimated Quantity in Column 2 times the Unit Price Bid in Column 4.
- (5) Prospective bidders must examine the Bid Schedule carefully and, before bidding, must advise the Commissioner, in writing, if any pages are missing, and must request that such missing pages be furnished them. The pages of this Bid Schedule are numbered consecutively, as follows: B - 3 through B - 90

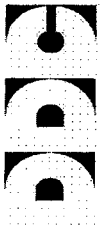


02/06/2014
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BID PAGES

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

Contract PIN 8502010HW0008C
Project ID HWQ411B

COL. 1 ITEM NUMBER (SEQUENCE NO.)	COL. 2 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 3 CLASSIFICATIONS	COL. 4 UNIT PRICES (IN FIGURES)		COL. 5 EXTENDED AMOUNTS (IN FIGURES)	
			DOLLARS	CTS	DOLLARS	CTS
4.02 AG (001)	86,000.0 S.Y.	ASPHALTIC CONCRETE WEARING COURSE, 3" THICK	15		\$ 1,290,000	
4.02 CB (002)	10,595.0 TONS	ASPHALTIC CONCRETE MIXTURE	20		\$ 211,900	
4.04 H (003)	95.0 C.Y.	CONCRETE BASE FOR PAVEMENT, VARIABLE THICKNESS FOR TRENCH RESTORATION, (HIGH-EARLY STRENGTH)	350		\$ 33,250	
4.04 HA (004)	18,500.0 C.Y.	CONCRETE BASE FOR PAVEMENT, 6" THICK (HIGH-EARLY STRENGTH)	80		\$ 1,480,000	

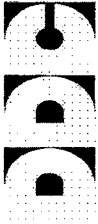


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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
Project ID HWQ411B

COL. 1 ITEM NUMBER (SEQUENCE NO.)	COL. 2 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 3 CLASSIFICATIONS	COL. 4 UNIT PRICES (IN FIGURES)		COL. 5 EXTENDED AMOUNTS (IN FIGURES)	
			DOLLARS	CTS	DOLLARS	CTS
4.05 AX (005)	350.0 C.Y.	HIGH-EARLY STRENGTH REINFORCED CONCRETE PAVEMENT (BUS STOPS)	\$ 400	—	\$ 140,000	—
4.08 AA (006)	1,000.0 L.F.	CONCRETE CURB (18" DEEP)	\$ 20	—	\$ 20,000	—
4.08 AFM (007)	30.0 L.F.	CONCRETE CURB, MOUNTABLE (23" DEEP)	\$ 60	—	\$ 1,800	—
4.08 AG (008)	25,000.0 L.F.	CONCRETE CURB (24" DEEP)	\$ 25	—	\$ 625,000	—

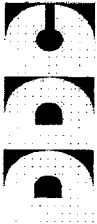


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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
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			DOLLARS	CTS	DOLLARS	CTS
4.08 AX (009)	630.0 L.F.	CONCRETE CURB (41" DEEP)	95		59850	
4.09 AEC (010)	20,000.0 L.F.	STRAIGHT STEEL FACED CONCRETE CURB (24" DEEP)	40		800,000	
4.09 BEC (011)	4,000.0 L.F.	DEPRESSED STEEL FACED CONCRETE CURB (24" DEEP)	30		120,000	
4.09 CEC (012)	3,000.0 L.F.	CORNER STEEL FACED CONCRETE CURB (24" DEEP)	200		600,000	

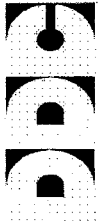


02/06/2014
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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

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			DOLLARS	CTS	DOLLARS	CTS
4.09 PAT (013)	3,300.0 L.F.	STRAIGHT STEEL FACED CONCRETE CURB (41" DEEP)	\$ 150	—	\$ 495,000	—
4.09 PBT (014)	650.0 L.F.	DEPRESSED STEEL FACED CONCRETE CURB (41" DEEP)	\$ 60	—	\$ 39,000	—
4.13 AAS (015)	538,400.0 S.F.	4" CONCRETE SIDEWALK (UNPIGMENTED)	\$ 5	—	\$ 2,692,000	—
4.13 AAT (016)	6,200.0 S.F.	4" CONCRETE SIDEWALK ON EXISTING FOUNDATION (UNPIGMENTED)	\$ 9	—	\$ 55,800	—



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

Contract PIN 8502010HW0008C
Project ID HWQ411B

02/06/2014
3:41PM
BID PAGES

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			DOLLARS	CTS	DOLLARS	CTS
4.13 BAS (017)	119,000.0 S.F.	7" CONCRETE SIDEWALK (UNPIGMENTED)	\$ 13	—	\$ 1,547,000	—
4.13 DE (018)	2,000.0 S.F.	EMBEDDED PREFORMED DETECTABLE WARNING UNITS	\$ 10	—	\$ 20,000	—
4.14 (019)	100.0 LBS.	STEEL REINFORCEMENT BARS	\$ 2	—	\$ 200	—
4.14 W (020)	5,000.0 LBS.	WELDED STEEL WIRE FABRIC	\$ 1	—	\$ 5,000	—

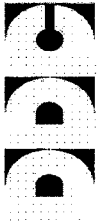
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
Project ID HWQ411B

COL. 1 ITEM NUMBER (SEQUENCE NO.)	COL. 2 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 3 CLASSIFICATIONS	COL. 4 UNIT PRICES (IN FIGURES)		COL. 5 EXTENDED AMOUNTS (IN FIGURES)	
			DOLLARS	CTS	DOLLARS	CTS
4.16 AA (021)	12.0 EACH	TREES REMOVED (4" TO UNDER 12" CALIPER)	\$ 360	—	\$ 4320	—
4.16 AB (022)	5.0 EACH	TREES REMOVED (12" TO UNDER 18" CALIPER)	\$ 750	—	\$ 3750	—
4.16 AC (023)	2.0 EACH	TREES REMOVED (18" TO UNDER 24" CALIPER)	\$ 1300	—	\$ 2600	—
4.16 AD (024)	9.0 EACH	TREES REMOVED (24" CALIPER AND OVER)	\$ 2200	—	\$ 19800	—

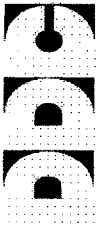


Contract PIN 8502010HW0008C
 Project ID HWQ411B

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 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

02/06/2014
 3:41PM
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			DOLLARS	CTS	DOLLARS	CTS
4.16 CAA (025)	200.0 EACH	TREES PLANTED, 2-1/2" TO 3" CALIPER, ALL TYPES	\$ 1100	—	\$ 220,000	—
4.16 STUMP (026)	10.0 UNITS	STUMP REMOVAL	\$ 420	—	\$ 4200	—
4.18 A (027)	110.0 EACH	MAINTENANCE TREE PRUNING (UNDER 12" CAL.)	\$ 135	—	\$ 14850	—
4.18 B (028)	160.0 EACH	MAINTENANCE TREE PRUNING (12" TO UNDER 18" CAL.)	\$ 180	—	\$ 28800	—



02/06/2014
3:41PM
BID PAGES

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

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
4.18 C (029)	90.0 EACH	MAINTENANCE TREE PRUNING (18" TO UNDER 24" CAL.)	\$ 250		\$ 22500	
4.18 D (030)	180.0 EACH	MAINTENANCE TREE PRUNING (24" CAL. AND OVER)	\$ 305		\$ 54900	
4.19 (031)	28,500.0 S.Y.	SODDING	\$ 25		\$ 712500	
4.20 (032)	160.0 S.Y.	SEEDING	\$ 6		\$ 960	



02/06/2014
3:41PM
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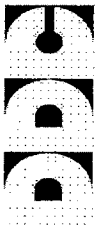
Contract PIN 8502010HW0008C
Project ID HWQ411B

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

COL. 1 ITEM NUMBER (SEQUENCE NO.)	COL. 2 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 3 CLASSIFICATIONS	COL. 4 UNIT PRICES (IN FIGURES)		COL. 5 EXTENDED AMOUNTS (IN FIGURES)	
			DOLLARS	CTS	DOLLARS	CTS
4.21 (033)	4,200.0 P/HR	TREE CONSULTANT	\$ 75	—	\$ 315000	—
50.21C3C024D (034)	585.0 L.F.	24" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	\$ 700	—	\$ 409500	—
50.21C3C030D (035)	655.0 L.F.	30" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	\$ 425	—	\$ 278375	—
50.21C3C036D (036)	755.0 L.F.	36" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	\$ 450	—	\$ 339750	—

02/06/2014
3:41PM

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

Contract PIN
Project ID

8502010HW0008C

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COL. 1 ITEM NUMBER (SEQUENCE NO.)	COL. 2 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 3 CLASSIFICATIONS	COL. 4 UNIT PRICES (IN FIGURES)		COL. 5 EXTENDED AMOUNTS (IN FIGURES)	
			DOLLARS	CTS	DOLLARS	CTS
50.21C3C060D (037)	260.0 L.F.	60" R.C.P. CLASS III COMBINED SEWER, ON CONCRETE CRADLE	\$ 1200	—	\$ 312000	—
50.21C3E042D (038)	380.0 L.F.	42" R.C.P. CLASS III COMBINED SEWER, ENCASED IN CONCRETE	\$ 1100	—	\$ 418000	—
50.21C3E048D (039)	80.0 L.F.	48" R.C.P. CLASS III COMBINED SEWER, ENCASED IN CONCRETE	\$ 1375	—	\$ 110,000	—
50.21C3E060D (040)	370.0 L.F.	60" R.C.P. CLASS III COMBINED SEWER, ENCASED IN CONCRETE	\$ 700	—	\$ 259000	—



02/06/2014
3:41PM
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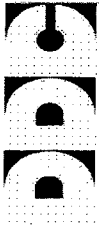
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Project ID HWQ411B

COL. 1 ITEM NUMBER (SEQUENCE NO.)	COL. 2 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 3 CLASSIFICATIONS	COL. 4 UNIT PRICES (IN FIGURES)		COL. 5 EXTENDED AMOUNTS (IN FIGURES)	
			DOLLARS	CTS	DOLLARS	CTS
50.21C4C024D (041)	250.0 I.F.	24" R.C.P. CLASS IV COMBINED SEWER, ON CONCRETE CRADLE	700		\$ 175000	
50.21C4C030D (042)	425.0 I.F.	30" R.C.P. CLASS IV COMBINED SEWER, ON CONCRETE CRADLE	550		\$ 233750	
50.21C4C048D (043)	390.0 I.F.	48" R.C.P. CLASS IV COMBINED SEWER, ON CONCRETE CRADLE	975		\$ 380250	
50.31CC12 (044)	535.0 I.F.	12" E.S.V.P. COMBINED SEWER, ON CONCRETE CRADLE <i>AMU</i>	X		\$	X

02/06/2014

3:41PM

BID PAGES



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

Contract PIN

8502010HW0008C

Project ID

HWQ411B

COL. 1 ITEM NUMBER (SEQUENCE NO.)	COL. 2 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 3 CLASSIFICATIONS	COL. 4 UNIT PRICES (IN FIGURES)		COL. 5 EXTENDED AMOUNTS (IN FIGURES)	
			DOLLARS	CTS	DOLLARS	CTS
50.31CC15 (045)	8,920.0 L.F.	15" E.S.V.P. COMBINED SEWER, ON CONCRETE CRADLE	\$ 650	—	\$ 5,798,000	—
50.31CC18 (046)	1,770.0 L.F.	18" E.S.V.P. COMBINED SEWER, ON CONCRETE CRADLE	\$ 425	—	\$ 752,250	—
50.31CE15 (047)	305.0 L.F.	15" E.S.V.P. COMBINED SEWER, ENCASED IN CONCRETE	\$ 575	—	\$ 175,375	—
50.41M6C12 (048)	535.0 L.F.	12" D.I.P. CLASS 56 STORM SEWER, ON CONCRETE CRADLE	\$ 300	—	\$ 160,500	—



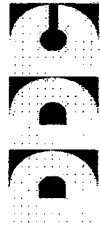
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
51.11C001 (049)	1.0 EACH	CHAMBER NO. 1	\$ 60,000	—	\$ 60,000	—
51.11C002 (050)	1.0 EACH	CHAMBER NO. 2	\$ 65,000	—	\$ 65,000	—
51.11C003 (051)	1.0 EACH	CHAMBER NO. 3	\$ 150,000	—	\$ 150,000	—
51.11C004 (052)	1.0 EACH	CHAMBER NO. 4	\$ 55,000	—	\$ 55,000	—

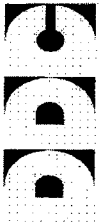
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3:41PM
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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
51.11C005 (053)	1.0 EACH	CHAMBER NO. 5	\$ 40,000		\$ 40,000	
51.11P005 (054)	2.0 EACH	STANDARD 5'-0" DIAMETER PRECAST MANHOLE	\$ 8000		\$ 16000	
51.11P006 (055)	1.0 EACH	STANDARD 6'-0" DIAMETER PRECAST MANHOLE	\$ 9000		\$ 9000	
51.11P007 (056)	3.0 EACH	STANDARD 7'-0" DIAMETER PRECAST MANHOLE	\$ 7500		\$ 22500	



02/06/2014
3:41PM
BID PAGES

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

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
51.11P008 (057)	1.0 EACH	STANDARD 8'-0" DIAMETER PRECAST MANHOLE	\$ 17000	—	\$ 17000	—
51.11P010 (058)	4.0 EACH	STANDARD 10'-0" DIAMETER PRECAST MANHOLE	\$ 28000	—	\$ 112000	—
51.21C000000C (059)	1.0 EACH	CLEANOUT MANHOLE	\$ 5000	—	\$ 5000	—
51.21S0A1000V (060)	84.0 EACH	STANDARD MANHOLE TYPE A-1	\$ 5000	—	\$ 420,000	—

02/06/2014

3:41PM

BID PAGES



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

Contract PIN

8502010HW0008C

Project ID

HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
51.21S0A2000V (061)	26.0 EACH	STANDARD MANHOLE TYPE A-2	\$ 5500	—	\$ 143000	—
51.21S0A3000V (062)	3.0 EACH	STANDARD SHALLOW MANHOLE TYPE A-3	\$ 1800	—	\$ 5400	—
51.21S0C1036R (063)	2.0 EACH	STANDARD MANHOLE TYPE C-1 ON 36" R.C.P. SEWER	\$ 10,000	—	\$ 20,000	—
51.21S0C1042R (064)	2.0 EACH	STANDARD MANHOLE TYPE C-1 ON 42" R.C.P. SEWER	\$ 3700	—	\$ 7400	—



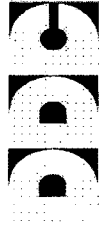
02/06/2014
3:41PM
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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
51.21S0C1060R (065)	2.0 EACH	STANDARD MANHOLE TYPE C-1 ON 60" R.C.P. SEWER	\$ 20,000		\$ 40,000	
51.21S0C2048R (066)	3.0 EACH	STANDARD MANHOLE TYPE C-2 ON 48" R.C.P. SEWER	\$ 30,000		\$ 90,000	
51.23RF (067)	15.0 EACH	REPLACEMENT OF EXISTING MANHOLE FRAME AND COVER	\$ 700		\$ 10500	
51.41P000 (068)	1.0 EACH	SPECIAL CATCH BASIN	\$ 4000		\$ 4000	

02/06/2014
3:41PM
BID PAGES



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

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
51.41S001 (069)	194.0 EACH	STANDARD CATCH BASIN, TYPE 1	\$ 7300	—	\$ 1,416,200	—
51.42B1W (070)	6.0 EACH	INCREMENTAL COST OF TYPE 3 CATCH BASIN WITH CURB PIECE IN LIEU OF TYPE 1 CATCH BASIN	\$ 3000	—	\$ 18000	—
52.11D12 (071)	3,305.0 L.F.	12" DUCTILE IRON PIPE BASIN CONNECTION	\$ 350	—	\$ 1,156,750	—
52.21V08 (072)	165.0 V.F.	8" E.S.V.P. RISER FOR HOUSE CONNECTION	\$ 120	—	\$ 19800	—



02/06/2014
3:41PM
BID PAGES

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

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
52.31V06C15 (073)	428.0 EACH	6" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 15" E.S.V.P. COMBINED SEWER	\$ 120	—	\$ 51360	—
52.31V06C18 (074)	68.0 EACH	6" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 18" E.S.V.P. COMBINED SEWER	\$ 150	—	\$ 10200	—
52.41C08R (075)	250.0 L.F.	8" C.I.S.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	\$ 10	—	\$ 2500	—
52.41D06R (076)	1,575.0 L.F.	6" D.I.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	\$ 20	—	\$ 31500	—

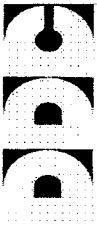
02/06/2014
3:41PM
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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
52.41D08R (077)	150.0 L.F.	8" D.I.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	\$ 10	—	\$ 1500	—
52.41V06N (078)	1,280.0 L.F.	NEW 6" E.S.V.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE Unit price bid shall not be greater than: \$ 75.00	\$ 75	—	\$ 96000	—
52.41V06R (079)	3,128.0 L.F.	6" E.S.V.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	\$ 25	—	\$ 78200	—
53.11DR (080)	15,680.0 L.F.	TELEVISION INSPECTION AND DIGITAL AUDIO-VISUAL RECORDING OF SEWERS	\$ 4	—	\$ 62720	—

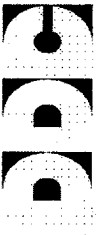


02/06/2014
3:41PM
BID PAGES

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

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
6.01 AA (081)	1.0 L.S.	CLEARING AND GRUBBING	\$ 15000	—	\$ 15000	—
6.02 AAN (082)	31,185.0 C.Y.	UNCLASSIFIED EXCAVATION	\$ 120	—	\$ 3,742,200	—
6.02 XHEC (083)	220.0 C.Y.	INCREMENTAL COST FOR MODIFYING WORK METHODS NEAR (WITHIN 3 FEET OF) TRANSIT FACILITIES AND BUILDING VAULTS	\$ 100	—	\$ 22000	—
6.02 XSCW (084)	28,000.0 C.Y.	INCREMENTAL COST FOR USING SPECIAL CARE WORK METHODS NEAR (FROM 3 FEET TO 50 FEET) TRANSIT FACILITIES	\$ 0	01	\$ 280	—

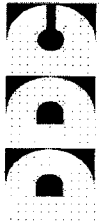


02/06/2014
3:41PM
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
Project ID HWQ411B

COL. 1 ITEM NUMBER (SEQUENCE NO.)	COL. 2 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 3 CLASSIFICATIONS	COL. 4 UNIT PRICES (IN FIGURES)		COL. 5 EXTENDED AMOUNTS (IN FIGURES)	
			DOLLARS	CTS	DOLLARS	CTS
6.09 (085)	806.0 L.F.	CONCRETE HEADER (6" WIDE X 15" DEEP)	\$ 60		\$ 48360	
6.22 F (086)	500.0 LBS.	ADDITIONAL HARDWARE	\$ 2		\$ 1000	
6.23 AB (087)	3.0 EACH	REMOVE EXISTING FIRE ALARM POST	\$ 450		\$ 1350	
6.23 AF (088)	2.0 EACH	FURNISH AND INSTALL FIRE DEPARTMENT POLE TERMINAL (CHIPPY) BOX IN ACCORDANCE WITH FIRE DEPARTMENT STANDARD DRAWING #145AA	\$ 1700		\$ 3400	



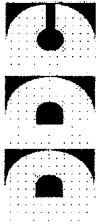
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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

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			DOLLARS	CTS	DOLLARS	CTS
6.23 BA (089)	3.0 EACH	FURNISH AND INSTALL FIRE ALARM POST AND SUBBASE IN ACCORDANCE WITH F.D. STD. DWG. #141	\$ 2600	—	\$ 7800	—
6.23 BD (090)	411.0 L.F.	FURNISH AND INSTALL 4-PAIR FIRE ALARM CABLE	\$ 11	50	\$ 4726	50
6.23 BEA (091)	1.0 EACH	FURNISH AND INSTALL FIRE DEPARTMENT 48 WIRE TERMINAL BOX AND TERMINATE FIRE ALARM CABLES	\$ 3300	—	\$ 3300	—
6.23 BEB (092)	2.0 EACH	FURNISH AND INSTALL FIRE DEPARTMENT 24 WIRE TERMINAL BOX AND TERMINATE FIRE ALARM CABLES	\$ 2700	—	\$ 5400	—

02/06/2014
3:41PM
BID PAGES



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

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			DOLLARS	CTS	DOLLARS	CTS
6.23 BGR (093)	2.0 EACH	FURNISH AND INSTALL 4" P.V.C. CONDUIT TO 2" GALVANIZED STEEL REDUCER BUSHING AS SHOWN IN F.D. STD. DWG. #145AA	\$ 300	—	\$ 600	—
6.23 BGS (094)	75.0 L.F.	FURNISH AND INSTALL 4" P.V.C. CONDUIT, SCHEDULE 40, U.L. 651 (WITHOUT PAVEMENT EXCAVATION)	\$ 23	—	\$ 1725	—
6.23 BGSE (095)	175.0 L.F.	FURNISH AND INSTALL 4" P.V.C. CONDUIT, SCHEDULE 40, U.L. 651 (WITH PAVEMENT EXCAVATION)	\$ 36	50	\$ 6387	50
6.23 BH (096)	2.0 EACH	FURNISH AND INSTALL 4" 90-DEGREE P.V.C. WIDE BEND, SCHEDULE 40, U.L. 651 (WITHOUT PAVEMENT EXCAVATION) IN ACCORDANCE WITH F.D. STD. DWG. #141 OR #145AA	\$ 185	—	\$ 370	—



02/06/2014
3:41PM
BID PAGES

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

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
6.23 BHE (097)	3.0 EACH	FURNISH AND INSTALL 4" 90-DEGREE P.V.C. WIDE BEND, SCHEDULE 40, U.L. 651 (WITH PAVEMENT EXCAVATION) IN ACCORDANCE WITH F.D. STD. DWG. #141 OR #145AA	\$ 185	—	\$ 555	—
6.23 BP (098)	3.0 SETS	FURNISH AND INSTALL FIRE ALARM PEDESTAL BUMPERS (2 REQUIRED PER SET) IN ACCORDANCE WITH F.D. STD. DWG. #168	\$ 600	—	\$ 1800	—
6.23 DC (099)	100.0 L.F.	FURNISH AND INSTALL 10 PAIR FIRE ALARM CABLE	\$ 23	—	\$ 2300	—
6.23 FC (100)	1.0 EACH	REMOVE EXISTING F.D.N.Y. MANHOLE FRAME & COVER AND FURNISH AND INSTALL F.D.N.Y. FRAME & COVER IN ACCORDANCE WITH F.D. STD. DWG. #140	\$ 4600	—	\$ 4600	—

02/06/2014
3:41PM
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
6.23 XAPE (101)	2.0 EACH	FURNISH AND INSTALL 1/2" GALVANIZED STEEL CONDUIT POLE RISER IN ACCORDANCE WITH FIRE DEPARTMENT STANDARD DRAWING #145AA	\$ 1340	—	\$ 2680	—
6.23 XBPE (102)	2.0 EACH	FURNISH AND INSTALL 2" GALVANIZED STEEL CONDUIT POLE RISER IN ACCORDANCE WITH FIRE DEPARTMENT STANDARD DRAWING #145AA	\$ 1560	—	\$ 3120	—
6.25 RS (103)	750.0 S.F.	TEMPORARY SIGNS	\$ 5	—	\$ 3750	—
6.26 (104)	159,000.0 L.F.	TIMBER CURB	\$ 0	25	\$ 39750	—



02/06/2014
3:41PM
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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

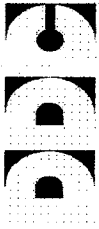
Contract PIN 8502010HW0008C
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			DOLLARS	CTS	DOLLARS	CTS
6.28 AA (105)	40,330.0 L.F.	LIGHTED TIMBER BARRICADES	0	10	\$ 4033	
6.34 AA (106)	5,000.0 L.F. 500	CHAIN LINK FENCE, 3'-6" HIGH	50		\$ 25000	
6.36 DR (107)	20.0 C.Y.	STRUCTURAL REPAIR AND ADJUSTMENT OF UTILITY STRUCTURES	500		\$ 10,000	
6.40 D (108)	42.0 MONTH	ENGINEER'S FIELD OFFICE (TYPE D)	3500		\$ 147000	

02/06/2014

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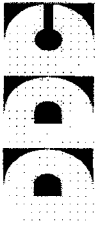
Contract PIN

8502010HW0008C

Project ID

HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
6.41 (109)	1.0 L.S.	LINE AND GRADE SURVEYS	\$ 200,000	—	\$ 200,000	—
6.43 (110)	4,000.0 SETS	PHOTOGRAPHS	\$ 18	—	\$ 72,000	—
6.44 (111)	80,000.0 L.F.	THERMOPLASTIC REFLECTORIZED PAVEMENT MARKINGS (4" WIDE)	\$ 1	—	\$ 80,000	—
6.47 PCS5.0 (112)	15.0 S.Y.	PRECAST POROUS CONCRETE PAVING SLABS (5' WIDE)	\$ 200	—	\$ 3,000	—



02/06/2014
3:41PM
BID PAGES

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

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
6.47 PCSBS1.5 (113)	18.0 S.Y.	PRECAST POROUS CONCRETE PAVING SLABS (1-1/2' WIDE)	\$ 200	—	\$ 3600	—
6.47 PCSG4.0 (114)	2,100.0 S.Y.	PRECAST POROUS CONCRETE PAVING SLABS (4' WIDE)	\$ 270	—	\$ 567000	—
6.50 (115)	20.0 EACH	CLEANING OF DRAINAGE STRUCTURES	\$ 550	—	\$ 11000	—
6.52 CG (116)	5,835.0 P/HR	CROSSING GUARD	\$ 35	—	\$ 204225	—

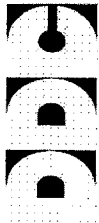
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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
6.55 (117)	1,000.0 L.F.	SAWCUTTING EXISTING PAVEMENT	\$ 1	50	\$ 1500	
6.67 (118)	15,003.0 C.Y.	SUBBASE COURSE, SELECT GRANULAR MATERIAL	\$ 10		\$ 150,030	
6.67 PCP-SR (119)	1,400.0 C.Y.	CRUSHED STONE RESERVOIR COURSE FOR PRECAST PERVIOUS CONCRETE PAVING SLABS	\$ 43		\$ 60200	
6.68 (120)	133,700.0 S.Y.	PLASTIC FILTER FABRIC	\$ 1		\$ 133700	



02/06/2014
3:41PM
BID PAGES

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

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
6.73 A (121)	20.0 EACH	REMOVING EXISTING PARKING METER POSTS	\$ 25	—	\$ 500	—
6.74 (122)	50.0 L.F.	STEEL PLATE AT TREE WELLS	\$ 15	—	\$ 750	—
6.82 A (123)	900.0 S.F.	REMOVING EXISTING TRAFFIC AND STREET NAME SIGNS	\$ 6	—	\$ 5400	—
6.82 B (124)	3,600.0 L.F.	REMOVING EXISTING TRAFFIC AND STREET NAME SIGN POSTS	\$ 6	—	\$ 21600	—

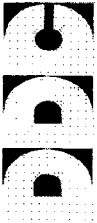
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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
6.83 AA (125)	900.0 S.F.	FURNISHING NEW NON-REFLECTORIZED TRAFFIC SIGNS	20	25	18225	
6.83 AB (126)	8,000.0 L.F.	FURNISHING NEW TRAFFIC SIGN POSTS	7		56000	
6.83 AR (127)	1,600.0 S.F.	FURNISHING NEW REFLECTORIZED TRAFFIC SIGNS	22	50	36000	
6.83 BA (128)	2,500.0 S.F.	INSTALLING TRAFFIC SIGNS	14	25	35625	



02/06/2014
3:41PM
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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

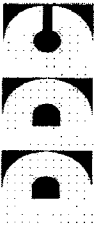
Contract PIN 8502010HW0008C
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			DOLLARS	CTS	DOLLARS	CTS
6.83 BB (129)	8,000.0 L.F.	INSTALLING TRAFFIC SIGN POSTS	\$ 14	25	\$ 114000	
6.84 B (130)	1.0 F.S.	LOLLIPOP TYPE BUS STOP SIGNS PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 25,000.00	\$ 25,000.00		\$ 25,000.00	
6.86 AA (131)	1,000.0 S.F.	FURNISHING NEW STREET NAME SIGNS	\$ 24	25	\$ 24250	
6.86 AB (132)	900.0 L.F.	FURNISHING NEW STREET NAME SIGN POSTS	\$ 11		\$ 9900	

02/06/2014

3:41PM

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

Contract PIN

8502010HW0008C

Project ID

HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
6.86 BA (133)	1,000.0 S.F.	INSTALLING STREET NAME SIGNS	\$ 14	—	\$ 14000	—
6.86 BB (134)	900.0 L.F.	INSTALLING STREET NAME SIGN POSTS	\$ 14	25	\$ 12825	—
6.87 (135)	33,180.0 EACH	PLASTIC BARRELS	\$ 0	10	\$ 3318	—
6.91 (136)	63,000.0 L.F.	REFLECTIVE CRACKING MEMBRANE (18" WIDE)	\$ 2	—	\$ 126000	—

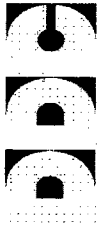
02/06/2014
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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
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			DOLLARS	CTS	DOLLARS	CTS
6.99 (137)	1.0 I.S.	AUDIO AND VIDEO DOCUMENTATION SURVEY	\$ 15000	—	\$ 15000	—
60.11R520 (138)	400.0 I.F.	FURNISHING AND DELIVERING 20-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 55)	\$ 250	—	\$ 100,000	—
60.11R606 (139)	1,150.0 I.F.	FURNISHING AND DELIVERING 6-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	\$ 5	—	\$ 5750	—
60.11R608 (140)	14,650.0 I.F.	FURNISHING AND DELIVERING 8-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	\$ 60	—	\$ 879000	—

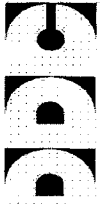


02/06/2014
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
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			DOLLARS	CTS	DOLLARS	CTS
60.11R612 (141)	1,140.0 L.F.	FURNISHING AND DELIVERING 12-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	\$ 140	—	\$ 159600	—
60.12D06 (142)	1,405.0 L.F.	LAYING 6-INCH DUCTILE IRON PIPE AND FITTINGS	\$ 10	—	\$ 14050	—
60.12D08 (143)	16,300.0 L.F.	LAYING 8-INCH DUCTILE IRON PIPE AND FITTINGS	\$ 80	—	\$ 1,304,000	—
60.12D12 (144)	1,300.0 L.F.	LAYING 12-INCH DUCTILE IRON PIPE AND FITTINGS	\$ 70	—	\$ 91000	—

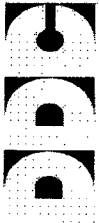


02/06/2014
3:41PM
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
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			DOLLARS	CTS	DOLLARS	CTS
60.12D20 (145)	440.0 L.F.	LAYING 20-INCH DUCTILE IRON PIPE AND FITTINGS	\$ 250	—	\$ 11000	—
60.13M0A24 (146)	29.0 TONS	FURNISHING AND DELIVERING DUCTILE IRON MECHANICAL JOINT 24-INCH DIAMETER AND SMALLER FITTINGS, INCLUDING WEDGE TYPE RETAINER GLANDS	\$ 3500	—	\$ 101500	—
60.18BJC20EL (147)	20.0 EACH	FURNISHING, DELIVERING AND INSTALLING BELL JOINT CLAMPS, COMPLETE FOR 20-INCH PIPE AND LESS	\$ 10	—	\$ 200	—
61.11DM06 (148)	78.0 EACH	FURNISHING AND DELIVERING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 1100	—	\$ 85800	—

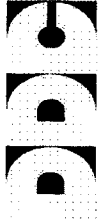


02/06/2014
3:41PM
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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
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			DOLLARS	CTS	DOLLARS	CTS
61.11DMM08 (149)	59.0 EACH	FURNISHING AND DELIVERING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 2200	—	\$ 129800	—
61.11DMM12 (150)	5.0 EACH	FURNISHING AND DELIVERING 12-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 6000	—	\$ 30,000	—
61.11DMM20 (151)	1.0 EACH	FURNISHING AND DELIVERING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 25000	—	\$ 25000	—
61.11TWC03 (152)	2.0 EACH	FURNISHING AND DELIVERING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 1000	—	\$ 2000	—

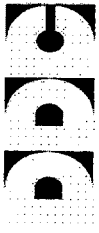


02/06/2014
3:41PM
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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
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			DOLLARS	CTS	DOLLARS	CTS
61.11TWC04 (153)	2.0 EACH	FURNISHING AND DELIVERING 4-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 1100	—	\$ 2200	—
61.11TWC06 (154)	2.0 EACH	FURNISHING AND DELIVERING 6-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 1200	—	\$ 2400	—
61.12DM06 (155)	78.0 EACH	SETTING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 500	—	\$ 39000	—
61.12DM08 (156)	59.0 EACH	SETTING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 1000	—	\$ 59000	—

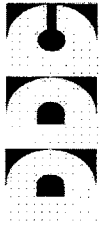


02/06/2014
3:41PM
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
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			DOLLARS	CTS	DOLLARS	CTS
61.12DMM12 (157)	4.0 EACH	SETTING 12-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 1500		\$ 6000	
61.12DMM20 (158)	1.0 EACH	SETTING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 2500		\$ 2500	
61.12TWC03 (159)	2.0 EACH	SETTING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 300		\$ 600	
61.12TWC04 (160)	2.0 EACH	SETTING 4-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 400		\$ 800	



02/06/2014
3:41PM
BID PAGES

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

Contract PIN 8502010HW0008C
Project ID HWQ411B

COL. 1 ITEM NUMBER (SEQUENCE NO.)	COL. 2 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 3 CLASSIFICATIONS	COL. 4 UNIT PRICES (IN FIGURES)		COL. 5 EXTENDED AMOUNTS (IN FIGURES)	
			DOLLARS	CTS	DOLLARS	CTS
61.12TWC06 (161)	2.0 EACH	SETTING 6-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 500	—	\$ 1000	—
62.11SD (162)	78.0 EACH	FURNISHING AND DELIVERING HYDRANTS	\$ 3000	—	\$ 234000	—
62.12SG (163)	78.0 EACH	SETTING HYDRANTS COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 1000	—	\$ 78000	—
62.13RH (164)	53.0 EACH	REMOVING HYDRANTS	\$ 400	—	\$ 21200	—

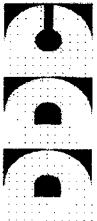


02/06/2014
3:41PM
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
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			DOLLARS	CTS	DOLLARS	CTS
62.14FS (165)	164.0 EACH	FURNISHING, DELIVERING AND INSTALLING HYDRANT FENDERS	\$ 100		\$ 16400	
63.11VC (166)	53.0 TONS	FURNISHING AND DELIVERING VARIOUS CASTINGS	\$ 2000		\$ 106000	
64.11EL (167)	12.0 EACH	WITHDRAWING AND REPLACING HOUSE SERVICES USING 1-1/2-INCH OR LARGER SCREW TAPS	\$ 700		\$ 8400	
64.11ST (168)	531.0 EACH	WITHDRAWING AND REPLACING HOUSE SERVICES USING SMALLER THAN 1-1/2-INCH SCREW TAPS	\$ 150		\$ 79650	



02/06/2014
3:41PM
BID PAGES

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

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
64.12COEG (169)	220.0 L.F.	CUTTING AND OFFSETTING HOUSE SERVICE WATER CONNECTIONS (EQUAL TO OR GREATER THAN 3-INCH DIAMETER)	\$ 10	—	\$ 2200	—
64.12COLT (170)	2,810.0 L.F.	CUTTING AND OFFSETTING HOUSE SERVICE WATER CONNECTIONS (LESS THAN 3-INCH DIAMETER)	\$ 5	—	\$ 14050	—
64.12ESEG (171)	100.0 L.F.	EXTENDING HOUSE SERVICE WATER CONNECTIONS (EQUAL TO OR GREATER THAN 3-INCH DIAMETER)	\$ 15	—	\$ 1500	—
64.12ESLT (172)	100.0 L.F.	EXTENDING HOUSE SERVICE WATER CONNECTIONS (LESS THAN 3-INCH DIAMETER)	\$ 250	—	\$ 25000	—

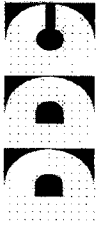


02/06/2014
3:41PM
BID PAGES

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

Contract PIN 8502010HW0008C
Project ID HWC411B

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			DOLLARS	CTS	DOLLARS	CTS
64.13WC08 (173)	2.0 EACH	FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 8-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	\$ 1500	—	\$ 3000	—
64.13WC12 (174)	2.0 EACH	FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 12-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	\$ 1000	—	\$ 2000	—
64.13WC20 (175)	2.0 EACH	FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 20-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	\$ 0	01	\$ 0	02
65.11BR (176)	1,700.0 LBS.	FURNISHING, DELIVERING AND INSTALLING BANDS, RODS, WASHERS, ETC., COMPLETE, FOR RESTRAINING JOINTS	\$ 0	01	\$ 17	—



02/06/2014
3:41PM
BID PAGES

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

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
65.21PS (177)	9,360.0 L.F.	FURNISHING AND PLACING POLYETHYLENE SLEEVE Unit price bid shall not be less than: \$ 0.50	\$ 0	50	\$ 4680	
65.31FF (178)	138,700.0 S.F.	FURNISHING, DELIVERING AND PLACING FILTER FABRIC Unit price bid shall not be less than: \$ 0.10	\$ 0	10	\$ 13870	
65.71SG (179)	932.0 C.Y.	FURNISHING, DELIVERING AND PLACING SCREENED GRAVEL OR SCREENED BROKEN STONE BEDDING	\$ 0	01	\$ 9	32
7.12 A (180)	15.0 EACH	PROCTOR ANALYSIS	\$ 225		\$ 3375	



02/06/2014
3:41PM
BID PAGES

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

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
7.12 B (181)	350.0 EACH	IN-PLACE SOIL DENSITY TEST	\$ 40	—	\$ 14000	—
7.13 B (182)	36.0 MONTH	MAINTENANCE OF SITE Unit price bid shall not be less than: \$ 10,000.00	\$ 10,000	—	\$ 360000	—
7.22 (183)	650.0 S.Y.	SLOPE PROTECTION	\$ 9	50	\$ 6195	—
7.36 (184)	175,180.0 L.F.	PEDESTRIAN STEEL BARRICADES	\$ 0	50	\$ 87590	—

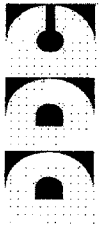


02/06/2014
3:41PM
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
7.88 AA (185)	1.0 I.S.	RODENT INFESTATION SURVEY AND MONITORING Unit price bid shall not be less than: \$ 28,000.00	\$ 30,000	—	\$ 30,000	—
7.88 AB (186)	3,700.0 EACH	RODENT BAIT STATIONS Unit price bid shall not be less than: \$ 60.00	\$ 60	—	\$ 222,000	—
7.88 AC (187)	3,700.0 EACH	BAITING OF RODENT BAIT STATIONS Unit price bid shall not be less than: \$ 8.50	\$ 8	50	\$ 31,450	—
7.88 AD (188)	1,050.0 BLOCK	WATERBUG BAIT APPLICATIONS Unit price bid shall not be less than: \$ 65.00	\$ 65	—	\$ 68,250	—

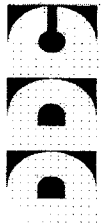


02/06/2014
3:41PM
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
70.21DK (189)	1,400.0 S.Y.	DECKING	\$ 0	01	\$ 14	
70.31FN (190)	31,000.0 L.F.	FENCING Unit price bid shall not be less than: \$ 2.00	\$ 2		\$ 62000	
70.51EO (191)	20.0 C.Y.	EXCAVATION OF BOULDERS IN OPEN CUT Unit price bid shall not be less than: \$ 75.00	\$ 75		\$ 1500	
70.61RE (192)	20.0 C.Y.	ROCK EXCAVATION	\$ 0	01	\$ 0	20

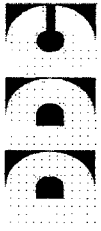


02/06/2014
3:41PM
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
70.71SB (193)	3,000.0 C.Y.	STONE BALLAST Unit price bid shall not be less than: \$ 15.00	\$ 15	—	\$ 45000	—
70.81CB (194)	4,795.0 C.Y.	CLEAN BACKFILL Unit price bid shall not be less than: \$ 15.00	\$ 15	—	\$ 71925	—
70.91SW12 (195)	20,330.0 S.F.	FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 12-INCH IN DIAMETER AND LESS	\$ 0	10	\$ 2033	—
70.91SW20 (196)	5,200.0 S.F.	FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 20-INCH IN DIAMETER	\$ 0	10	\$ 520	—

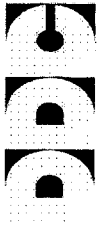


02/06/2014
3:41PM
BID PAGES

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

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
72.11HF (197)	180.0 C.Y.	HYDRAULIC FILL FOR ABANDONED SEWERS AND WATER MAINS	\$ 50	—	\$ 9000	—
73.11AB (198)	40.0 C.Y.	ADDITIONAL BRICK MASONRY Unit price bid shall not be less than: \$ 62.50	\$ 62	50	\$ 2500	—
73.21AC (199)	1,020.0 C.Y.	ADDITIONAL CONCRETE Unit price bid shall not be less than: \$ 62.50	\$ 62	50	\$ 63750	—
73.31AE0 (200)	5,000.0 C.Y.	ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (ALL DEPTHS) Unit price bid shall not be less than: \$ 20.00	\$ 20	—	\$ 100,000	—

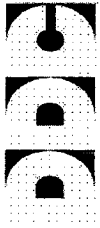


02/06/2014
3:41PM
BID PAGES

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

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
73.41AG (201)	40.0 C.Y.	ADDITIONAL SELECT GRANULAR BACKFILL Unit price bid shall not be less than: \$ 15.00	\$ 15		\$ 600	
73.51AS (202)	34,000.0 LBS.	ADDITIONAL STEEL REINFORCING BARS Unit price bid shall not be less than: \$ 1.00	\$ 1		\$ 34000	
8.01 C1 (203)	9,000.0 TONS	HANDLING, TRANSPORTING AND DISPOSAL OF NON-HAZARDOUS CONTAMINATED SOIL	\$ 0	01	\$ 90	
8.01 C2 (204)	15.0 SETS	SAMPLING AND TESTING OF CONTAMINATED/POTENTIALLY HAZARDOUS SOIL FOR DISPOSAL PURPOSES	\$ 3000		\$ 45000	



02/06/2014
3:41PM
BID PAGES

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

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
8.01 H (205)	2.0 TONS	HANDLING, TRANSPORTING AND DISPOSAL OF HAZARDOUS SOIL	\$ 0	01	\$ 0	02
8.01 S (206)	1.0 I.S.	HEALTH AND SAFETY	\$ 10,000		\$ 10,000	
8.01 W1 (207)	30.0 DAY	REMOVAL, TREATMENT, AND DISCHARGE/DISPOSAL OF CONTAMINATED WATER	\$ 0	01	\$ 0	30
8.01 W2 (208)	3.0 SETS	SAMPLING AND TESTING OF WATER	\$ 3500		\$ 10500	



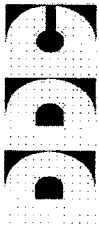
Contract PIN 8502010HW0008C
Project ID HWQ411B

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

02/06/2014
3:41PM
BID PAGES

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			DOLLARS	CTS	DOLLARS	CTS
8.02 A (209)	50,000.0 S.F.	SPECIAL CARE EXCAVATION AND RESTORATION FOR SIDEWALK WORK	\$ 1	—	\$ 50,000	—
8.02 B (210)	3,000.0 L.F.	SPECIAL CARE EXCAVATION AND RESTORATION FOR CURB WORK	\$ 5	—	\$ 15,000	—
8.12 (211)	1,000.0 S.F.	TEMPORARY RETAINING WALL	\$ 75	—	\$ 75,000	—
8.32 (212)	700.0 S.Y.	BARK CHIP MULCH	\$ 7	—	\$ 4,900	—

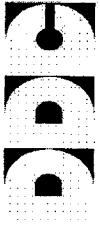
02/06/2014
3:41PM
BID PAGES



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

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
BMP-7.09 (213)	4.0 DAY	LICENSED SURVEYOR	\$ 1080	—	\$ 4000	—
BMP-7.129-SC (214)	264.0 C.F.	STORMWATER CULVERT	\$ 95	—	\$ 250080	—
BMP-7.401-I (215)	11,500.0 S.F.	SEEDING	\$ 0	55	\$ 6325	—
BMP-7.404-A (216)	120.0 HRS	RESTORATION SPECIALIST	\$ 165	—	\$ 19800	—



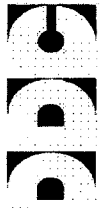
02/06/2014
3:41PM
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
BMP-7.404-B (217)	10.0 DAY	EROSION AND SEDIMENT CONTROL LICENSED/CERTIFIED PROFESSIONAL	\$ 1300	—	\$ 1300	—
GI-2.03 (218)	174.0 C.F.	CONCRETE APRON	\$ 11	—	\$ 1914	—
GI-2.05 (219)	25.0 C.Y.	STONE STRIP BED	\$ 50	—	\$ 1250	—
GI-2.06 (220)	260.0 L.F.	L-SHAPED EDGING	\$ 10	50	\$ 2730	—

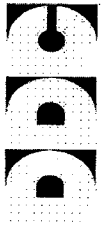
02/06/2014
3:41PM
BID PAGES



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

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
GI-2.07 (221)	490.0 C.Y.	OPEN GRADED STONE BASE	175		85750	
GI-2.08 (222)	4,260.0 S.F.	HDPE BARRIER	2	50	10650	
GI-2.09 (223)	325.0 S.Y.	GEOTEXTILE FABRIC	2		650	
GI-2.10B (224)	580.0 L.F.	STEEL TREE PIT GUARDS - TYPE 'B	35		20300	



02/06/2014
3:41PM
BID PAGES

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

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
GI-2.11PM-07 (225)	44.0 EACH	LARGE DECIDUOUS SHRUBS	\$ 79	—	\$ 3476	—
GI-2.11PM-12 (226)	461.0 EACH	MEDIUM DECIDUOUS SHRUBS - CLASS B	\$ 48	—	\$ 22128	—
GI-2.11PM-14 (227)	8.0 EACH	SMALL DECIDUOUS SHRUBS	\$ 37	—	\$ 296	—
GI-2.11PM-16 (228)	2,160.0 EACH	PERENNIALS #1 can	\$ 26	50	\$ 57240	—

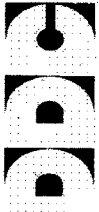
02/06/2014
3:41PM
BID PAGES



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

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
GI-2.11PM-17 (229)	522.0 EACH	PERENNIALS #2 can	\$ 31	50	\$ 16,443	
GI-2.11PM-20 (230)	2,160.0 EACH	GRASSES #1 can	\$ 26	50	\$ 572,40	
GI-2.11PM-21 (231)	120.0 EACH	GRASSES #2 can	\$ 31	50	\$ 3780	
GI-2.12A (232)	320.0 EACH	PLANTING BULBS CLASS A	\$ 8		\$ 2560	



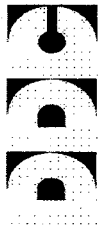
02/06/2014
3:41PM
BID PAGES

Contract PIN 8502010HW0008C
Project ID HWQ411B

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

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			DOLLARS	CTS	DOLLARS	CTS
GI-2.12B (233)	320.0 EACH	PLANTING BULBS CLASS B	\$ 7	50	\$ 2400	
GI-2.13 (234)	630.0 C.Y.	ENGINEERED SOIL	\$ 195		\$ 122850	
GI-2.14 (235)	595.0 S.Y.	MULCH	\$ 7	35	\$ 4373	25
GI-2.16P (236)	60.0 L.F.	PERFORATED HDPE PIPE (6" DIA.)	\$ 10		\$ 600	

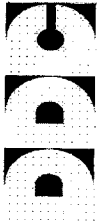
02/06/2014
3:41PM
BID PAGES



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

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
GI-2.168 (237)	20.0 L.F.	SOLID HDPE PIPE (6" DIA.)	\$ 12		\$ 240	
GI-2.17 (238)	12.0 EACH	STONE GABION	\$ 525		\$ 6300	
GI-2.19 (239)	170.0 L.F.	HDPE STORM WATER CHAMBER	\$ 140		\$ 23800	
GI-4.02 (240)	2,110.0 C.Y.	EARTH EXCAVATION	\$ 80		\$ 168800	



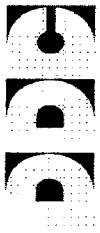
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Contract PIN
Project ID

8502010HW0008C
HWQ411B

COL. 1 ITEM NUMBER (SEQUENCE NO.)	COL. 2 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 3 CLASSIFICATIONS	COL. 4 UNIT PRICES (IN FIGURES)		COL. 5 EXTENDED AMOUNTS (IN FIGURES)	
			DOLLARS	CTS	DOLLARS	CTS
GI-5.01 (241)	1,956.0 S.Y.	SITE CLEARING	\$ 10	—	\$ 19560	—
GI-5.08PM-1 (242)	25.0 EACH	PLANT MAJOR TREES - 2 TO 2.5 INCH CALIPER	\$ 700	—	\$ 17500	—
GI-5.08PM-2 (243)	6.0 EACH	PLANT MAJOR TREES - 3.5 TO 4 INCH CALIPER	\$ 1125	—	\$ 6750	—
GI-5.08PM-3 (244)	40.0 EACH	PLANT FLOWERING TREES	\$ 550	—	\$ 22000	—

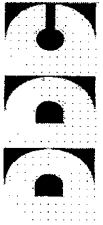


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			DOLLARS	CTS	
GI-5.35 (245)	100.0 L.F.	SLEEVE FOR UTILITY CROSSINGS	\$ 10	—	\$ 1000
SL-20.02.02 (246)	2.0 EACH	FURNISH AND INSTALL STANDARD TYPE ANCHOR BOLT FOUNDATION, AS PER DRAWING E-3788	\$ 1100	—	\$ 2200
SL-20.08.01 (247)	2.0 EACH	REMOVE STANDARD TYPE ANCHOR BOLT CONCRETE FOUNDATION	\$ 500	—	\$ 1000
SL-21.02.02 (248)	25.0 EACH	FURNISH AND INSTALL A STANDARD WOOD POLE	\$ 1400	—	\$ 35000

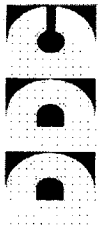


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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

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			DOLLARS	CTS	DOLLARS	CTS
SL-21.03.02 (249)	2.0 EACH	FURNISH AND INSTALL TYPE 2S, 4S, 6S, 8S OR 12S LAMPOST WITH TRANSFORMER BASE	2100		4200	
SL-21.09.05 (250)	2.0 EACH	REMOVE STANDARD FABRICATED STEEL, SPUN ALUMINUM NO. 10, ETC. WITH ARM(S), LUMINAIRE(S), CONTROL(S) WITH ALL ATTACHMENTS, IF ANY.	550		1100	
SL-22.03.17 (251)	97.0 EACH	FURNISH AND INSTALL TYPE COBRA HEAD LUMINAIRE WITH 100 WATT HPS WITH SOLID STATE BALLAST AND STRAY VOLTAGE INDICATOR FOR 55 VOLT LAMP.	425		41225	
SL-24.01.04 (252)	67.0 EACH	REMOVE BRACKET, LUMINAIRE AND CONTROL, IF ANY, FROM WOOD POLE	220		14740	

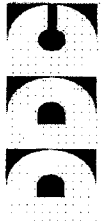


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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
SL-24.01.05 (253)	95.0 EACH	FURNISH AND INSTALL FABRICATED STEEL 8 FT. BRACKET WITH HARDWARE ON WOOD POLE, AS PER DRAWING J-3585.	\$ 370	—	\$ 35150	—
SL-26.01.01 (254)	97.0 EACH	FURNISH AND INSTALL, OR FURNISH AND REPLACE A PLUG-IN SOLID STATE PHOTOELECTRIC CONTROL	\$ 55	—	\$ 5335	—
SL-26.06.02 (255)	5.0 EACH	FURNISH AND INSTALL LED FIRE ALARM LUMINAIRES.	\$ 200	—	\$ 1000	—
SL-33.02.02 (256)	500.0 L.F.	FURNISH AND INSTALL NO. 6 AWG XLP COPPER CABLE OR EQUAL FOR OVERHEAD INSTALLATION	\$ 12	—	\$ 6000	—

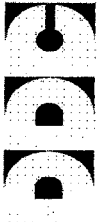


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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

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			DOLLARS	CTS	DOLLARS	CTS
T-1.1 (257)	7.0 EACH	INSTALL TYPE "S" OR "T" FOUNDATION	\$ 1600	—	\$ 11200	—
T-1.18 (258)	7.0 EACH	REMOVE TYPE "A", "B", "S" OR "T" SERIES FOUNDATION	\$ 220	—	\$ 1540	—
T-1.20 (259)	11.0 EACH	REMOVE TYPE "M" SERIES FOUNDATION	\$ 220	—	\$ 2420	—
T-1.29 (260)	1.0 EACH	RAISE OR LOWER FOUNDATION TO GRADE	\$ 1200	—	\$ 1200	—



02/06/2014
3:41PM
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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
T-1.3 (261)	8.0 EACH	INSTALL TYPE "M2-5S" FOUNDATION	\$ 2200	---	\$ 17600	---
T-1.6 (262)	6.0 EACH	INSTALL TYPE "M2-5T" FOUNDATION	\$ 2200	---	\$ 13200	---
T-2.1 (263)	8.0 EACH	INSTALL TYPE "S-1" OR "T-1" SERIES POST	\$ 430	---	\$ 3440	---
T-2.16 (264)	3.0 EACH	FURNISH, INSTALL, MAINTAIN AND REMOVE TEMPORARY POST OR PYLON WITH SIGNALS	\$ 1150	---	\$ 3450	---



02/06/2014
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Contract PIN 8502010HW00008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
T-2.18 (265)	4.0 EACH	FURNISH, INSTALL, MAINTAIN AND REMOVE TEMPORARY POST OR PYLON WITH CONTROLLER AND SIGNALS	\$ 1350	—	\$ 5400	—
T-2.22 (266)	7.0 EACH	REMOVE TYPE "S-1" OR "T-1" SERIES POST	\$ 410	—	\$ 2870	—
T-2.24 (267)	11.0 EACH	REMOVE TYPE "M" SERIES POST	\$ 1125	—	\$ 12375	—
T-2.28 (268)	10.0 EACH	REMOVE MAST ARM FROM ANY POST	\$ 225	—	\$ 2250	—

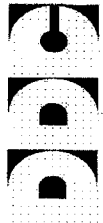


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Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
T-2.32 (269)	3.0 EACH	INSTALL STREET LIGHT LUMINAIRE SUPPORT ARM ON "M-2" POST	\$ 225	—	\$ 675	—
T-2.4 (270)	14.0 EACH	INSTALL TYPE "M-2" POST	\$ 1350	—	\$ 18900	—
T-20000 (271)	8.0 EACH	FURNISH TEN FOOT ALUMINUM SIGNAL POST TYPE "S-1"	\$ 520	—	\$ 4160	—
T-20020 (272)	24.0 EACH	a) FURNISH 3/4" ANCHOR BOLT ASSEMBLIES FOR S-1 (EACH) (3 REQUIRED PER POST)	\$ 15	—	\$ 360	—

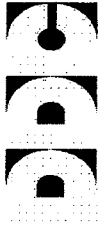


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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
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			DOLLARS	CTS	DOLLARS	CTS
T-20160 (273)	14.0 EACH	FURNISH 20 FOOT SIGNAL MAST ARM POLE ASSEMBLY TYPE "M-2"	\$ 3050	—	\$ 42700	—
T-20184 (274)	8.0 EACH	a) FURNISH 5' EXTENSION ARM ASSEMBLY WITH FITTINGS	\$ 285	—	\$ 2280	—
T-20220 (275)	56.0 EACH	c) FURNISH 1-1/4" ANCHOR BOLT ASSEMBLIES FOR M-2 (EACH) (4 REQUIRED PER POST)	\$ 45	—	\$ 2520	—
T-3.1 (276)	45.0 EACH	INSTALL "ONE-WAY" SIGNAL UNIT ON MAST ARM OR TOP OF TRAFFIC POST	\$ 225	—	\$ 10125	—



02/06/2014
3:41PM
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
T-3.18 (277)	28.0 EACH	REMOVE SIGNAL HEAD FROM ANY TYPE POST	\$ 220	—	\$ 6160	—
T-3.2 (278)	13.0 EACH	INSTALL "ONE-WAY" SIGNAL UNIT ON THE SHAFT OF ANY POST	\$ 360	—	\$ 4680	—
T-3.21 (279)	36.0 EACH	REMOVE PEDESTRIAN SIGNAL OR SIGN UNIT OR OTHER ILLUMINATED SIGNS FROM ANY POST	\$ 220	—	\$ 7920	—
T-3.26 (280)	6.0 EACH	REMOVE STREET LIGHT LUMINAIRE AND PHOTO ELECTRIC CONTROL FROM STREET LIGHT ARM	\$ 110	—	\$ 660	—



02/06/2014
3:41PM
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
T-3.27 (281)	6.0 EACH	INSTALL STREET LIGHT LUMINAIRE AND PHOTO ELECTRIC CONTROL ON STREET LIGHT MAST	\$ 230		\$ 1380	
T-3.37 (282)	1.0 EACH	INSTALL SIGNAL ON MAST ARM USING RIGID MOUNT BRACKETS	\$ 675		\$ 675	
T-3.6 (283)	48.0 EACH	INSTALL PEDESTRIAN SIGNAL ON ANY TYPE POST	\$ 320		\$ 15360	
T-30013L (284)	35.0 EACH	FURNISH ADJUSTABLE 3 SECTION 1-WAY, DIE CAST ALUMINUM TRAFFIC SIGNALS 8" - W/LED LENS	\$ 330		\$ 11550	

02/06/2014

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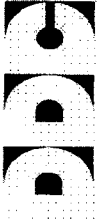
Contract PIN

8502010HW0008C

Project ID

HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
T-31150 (285)	1.0 EACH	FURNISH "1SA" ALUMINUM DIE CASTINGS AND ASSEMBLY FOR POST SIGNAL MOUNTING	\$ 75	—	\$ 75	—
T-31200 (286)	12.0 EACH	e) "VB" ASSEMBLY *ASSEMBLY IS EQUAL TO ONE PAIR	\$ 65	—	\$ 780	—
T-31205 (287)	5.0 EACH	FURNISH MAST ARM SIGNAL MOUNTING ASSEMBLY - a) "IMS"	\$ 29	—	\$ 145	—
T-31210 (288)	36.0 EACH	h) "HUB" ASSEMBLY *ASSEMBLY IS EQUAL TO ONE PAIR	\$ 36	—	\$ 1296	—

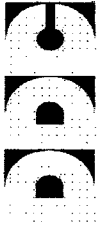


02/06/2014
3:41PM
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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
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			DOLLARS	CTS	DOLLARS	CTS
T-31215 (289)	3.0 EACH	b) "2MS"	\$ 210	—	\$ 630	—
T-31225 (290)	6.0 EACH	c) "3MS"	\$ 250	—	\$ 1500	—
T-31235 (291)	2.0 EACH	d) "4MS"	\$ 265	—	\$ 530	—
T-31245 (292)	1.0 EACH	FURNISH RIGID MOUNT SIGNAL BRACKETS	\$ 175	—	\$ 175	—



02/06/2014
3:41PM
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

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			DOLLARS	CTS	DOLLARS	CTS
T-31351 (293)	24.0 EACH	9) "VB-2P" ASSEMBLY *ASSEMBLY IS EQUAL TO ONE PAIR	\$ 200	—	\$ 4800	—
T-31500AL (294)	10.0 EACH	FURNISH 12" LENS & SIGNAL SECTION (LED AMBER ARROWS)	\$ 175	—	\$ 1750	—
T-31500GL (295)	10.0 EACH	FURNISH 12" LENS & SIGNAL SECTION (LED GREEN ARROWS)	\$ 175	—	\$ 1750	—
T-31500L (296)	24.0 EACH	FURNISH ADJUSTABLE 3 SECTION 1-WAY, DIE CAST ALUMINUM TRAFFIC SIGNALS 12" - W/LED LENS	\$ 400	—	\$ 9600	—

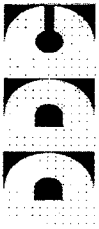


02/06/2014
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Contract PIN 8502010HW0008C
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			DOLLARS	CTS	DOLLARS	CTS
T-31501AA (297)	10.0 EACH	FURNISH 12" AMBER ARROW LED (AS PER NYC SPEC)	\$ 75	—	\$ 750	—
T-31501GA (298)	10.0 EACH	FURNISH 12 INCH GREEN ARROW LED (AS PER NYC SPECIFICATION)	\$ 65	—	\$ 650	—
T-31501-RA (299)	10.0 EACH	FURNISH 12 INCH RED ARROW LED (AS PER ITE SPECIFICATION 1/1/98)	\$ 55	—	\$ 550	—
T-33000L (300)	26.0 EACH	FURNISH POLYCARBONATE INCANDESCENT PED SIGNAL W/LED LENS	\$ 275	—	\$ 7150	—

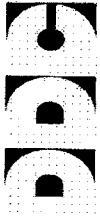


02/06/2014
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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
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			DOLLARS	CTS	DOLLARS	CTS
T-33001-L (301)	20.0 EACH	FURNISH POLYCARBONATE PEDESTRIAN SIGNAL (16 X 16) W/LED COUNT LENS (SPECIFICATION A-L)	\$ 360		\$ 7200	
T-4.1 (302)	1.0 EACH	INSTALL ONE CONTROL BOX AND CONTROLLER ON ANY POST OR SUPPORT	\$ 2000		\$ 2000	
T-4.23 (303)	1.0 EACH	INSTALL BATTERY BACK-UP POWER SUPPLY SYSTEM ON ANY POST <i>HR</i>	\$ 1000		\$ 1000	
T-4.8 (304)	1.0 EACH	REMOVE ONE CONTROL BOX AND CONTROLLER FROM ANY POST OR SUPPORT	\$ 670		\$ 670	



02/06/2014
3:41PM
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
T-5.1 (305)	800.0 L.F.	FURNISH AND INSTALL 2" RIGID UNDERGROUND CONDUIT IN UNPAVED ROADWAY	45	—	\$ 36000	—
T-5.17 (306)	20.0 L.F.	FURNISH AND INSTALL 2" RIGID CONDUIT ON A POST	55	—	\$ 1100	—
T-5.2 (307)	550.0 L.F.	FURNISH AND INSTALL 2" RIGID UNDERGROUND CONDUIT IN PAVED ROADWAY	60	—	\$ 33000	—
T-5.32 (308)	550.0 L.F.	RESTORING PERMANENT ROADWAY (INCLUDING SAWCUT)	28	—	\$ 15400	—

02/06/2014
3:41PM
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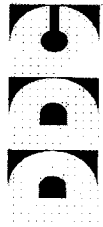


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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

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			DOLLARS	CTS	DOLLARS	CTS
T-5.36 (309)	60.0 L.F.	REMOVE CONDUIT FROM POST	\$ 24	50	\$ 1470	
T-6.1 (310)	500.0 L.F.	INSTALL CABLE (INCLUDES OVERHEAD)	\$ 4	50	\$ 2250	
T-6.10 (311)	2,500.0 L.F.	REMOVE CABLE (INCLUDES OVERHEAD)	\$ 4	50	\$ 11250	
T-6.2 (312)	2,500.0 L.F.	INSTALL MULTIPLE CABLE (INCLUDES OVERHEAD)	\$ 9		\$ 22500	

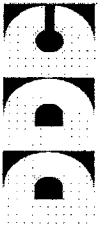
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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
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			DOLLARS	CTS	DOLLARS	CTS
T-60000B (313)	3,500.0 L.F.	FURNISH 2 c # 10B (BREAKDOWN = 2#10 WITH 3RD WIRE FOR GROUNDING).	1	75	\$ 6125	
T-60040 (314)	2,000.0 L.F.	c) 7 CONDUCTOR, 14 A.W.G.	1	35	\$ 2700	
T-60190 (315)	4,000.0 L.F.	e) 13 CONDUCTOR, 14 A.W.G.	2	50	\$ 10,000	
T-7.47 (316)	4.0 EACH	REMOVE JUNCTION BOX	240		\$ 960	

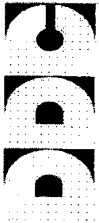


02/06/2014
3:41PM
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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

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Project ID HWQ411B

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			DOLLARS	CTS	DOLLARS	CTS
T-7-50 (317)	1.0 EACH	REMOVE (1812) HAND BOX OR PULL BOX IN PAVED SIDEWALK	\$ 600	—	\$ 600	—
T-7-78 (318)	1.0 EACH	INSTALL MICROWAVE SENSOR ON METAL POLE (CENTER SUPPORT BRACKET)	\$ 680	—	\$ 680	—
T-73001 (319)	1.0 EACH	FURNISH RIMS WITH FHSS TRANS W/WIRELESS ANTENNA INCL 25' CAB.	\$ 8500	—	\$ 8500	—
T-73002 (320)	1.0 EACH	CUSTOMIZED WIRELESS RECEIVER WITH CARD & 40FT. RF CABLE.	\$ 4200	—	\$ 4200	—



02/06/2014
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BID PAGES

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

Contract PIN 8502010HW0008C
Project ID HWQ411B

COL. 1 ITEM NUMBER (SEQUENCE NO.)	COL. 2 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 3 CLASSIFICATIONS	COL. 4 UNIT PRICES (IN FIGURES)		COL. 5 EXTENDED AMOUNTS (IN FIGURES)	
			DOLLARS	CTS	DOLLARS	CTS
T-73003 (321)	1.0 EACH	EXPANSION CARD.	725	—	725	—
T-79999 (322)	1.0 EACH	FURNISH ADVANCED SOLID STATE TRF CONTROLLER (6 LOAD SWITCH).	12000	—	12000	—
T-8.10 (323)	10.0 EACH	RELOCATE CONCRETE PYLON WITH POST	1350	—	13500	—
T-8.8 (324)	10.0 EACH	INSTALL CONCRETE PYLON	1200	—	12000	—



02/06/2014

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BID PAGES

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

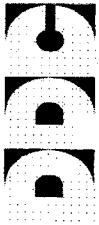
Contract PIN

Project ID

8502010HW0008C

HWQ411B

COL. 1 ITEM NUMBER (SEQUENCE NO.)	COL. 2 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 3 CLASSIFICATIONS	COL. 4 UNIT PRICES (IN FIGURES)		COL. 5 EXTENDED AMOUNTS (IN FIGURES)	
			DOLLARS	CTS	DOLLARS	CTS
T-8.9 (325)	10.0 EACH	REMOVE CONCRETE PYLON	\$ 670	—	\$ 6700	—
T-81000 (326)	10.0 EACH	FURNISH CONCRETE PYLON	\$ 440	—	\$ 4400	—
UTL-6.01.1 (327)	31.0 EACH	GAS MAIN CROSSING SEWER UP TO 24" IN DIAMETER (S6.01) Unit price bid shall not be less than: \$ 1,040.00	\$ 1090	—	\$ 32240	—
UTL-6.01.2 (328)	6.0 EACH	GAS MAIN CROSSING SEWER 30" IN DIAMETER (S6.01) Unit price bid shall not be less than: \$ 1,770.00	\$ 1770	—	\$ 10620	—



02/06/2014
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BID PAGES

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

Contract PIN 8502010HW0008C
Project ID HWQ411B

COL. 1 ITEM NUMBER (SEQUENCE NO.)	COL. 2 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 3 CLASSIFICATIONS	COL. 4 UNIT PRICES (IN FIGURES)		COL. 5 EXTENDED AMOUNTS (IN FIGURES)	
			DOLLARS	CTS	DOLLARS	CTS
UTL-6.01.3 (329)	2.0 EACH	GAS MAIN CROSSING SEWER 36" THRU 42" IN DIAMETER (S6.01) Unit price bid shall not be less than: \$ 2,040.00	\$ 2040	—	\$ 4080	—
UTL-6.01.4 (330)	1.0 EACH	GAS MAIN CROSSING SEWER 48" THRU 54" IN DIAMETER (S6.01) Unit price bid shall not be less than: \$ 2,120.00	\$ 2120	—	\$ 2120	—
UTL-6.01.5 (331)	1.0 EACH	GAS MAIN CROSSING SEWER 60" IN DIAMETER (S6.01) Unit price bid shall not be less than: \$ 2,340.00	\$ 2340	—	\$ 2340	—
UTL-6.01.8 (332)	422.0 EACH	GAS SERVICES CROSSING TRENCHES AND/OR EXCAVATIONS (S6.01) Unit price bid shall not be less than: \$ 465.00	\$ 465	—	\$ 196230	—

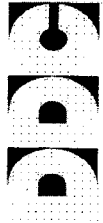


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BID PAGES

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

Contract PIN 8502010HW0008C
Project ID HWQ411B

COL. 1 ITEM NUMBER (SEQUENCE NO.)	COL. 2 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 3 CLASSIFICATIONS	COL. 4 UNIT PRICES (IN FIGURES)		COL. 5 EXTENDED AMOUNTS (IN FIGURES)	
			DOLLARS	CTS	DOLLARS	CTS
UTL-6.01.9 (333)	41.0 EACH	GAS MAIN CROSSING WATER MAIN UP TO 20" IN DIAMETER (S6.01) Unit price bid shall not be less than: \$ 485.00	\$ 485	—	\$ 19885	—
UTL-6.02 (334)	10.0 EACH	EXTRA EXCAVATION FOR THE INSTALLATION OF CATCH BASIN SEWER DRAIN PIPES WITH GAS INTERFERENCES (S6.02) Unit price bid shall not be less than: \$ 715.00	\$ 715	—	\$ 7150	—
UTL-6.03 (335)	10,000.0 L.F.	REMOVAL OF ABANDONED GAS FACILITIES. ALL SIZES. (S6.03) Unit price bid shall not be less than: \$ 15.00	\$ 15	—	\$ 150000	—
UTL-6.03.1 (336)	1,500.0 L.F.	REMOVAL OF ABANDONED GAS FACILITIES WITH POSSIBLE COAL TAR WRAP. ALL SIZES. (S6.03) Unit price bid shall not be less than: \$ 25.00	\$ 25	—	\$ 37500	—

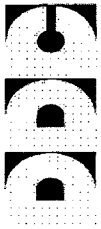


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BID PAGES

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DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

Contract PIN 8502010HW0008C
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			DOLLARS	CTS	DOLLARS	CTS
UTL-6.04 (337)	300.0 EACH	ADJUST HARDWARE TO GRADE USING SPACER RINGS/ADAPTORS. (STREET REPAVING.) (S6.04) Unit price bid shall not be less than: \$ 35.00	\$ 35		\$ 10500	
UTL-6.05 (338)	500.0 EACH	ADJUST HARDWARE TO GRADE BY RESETTING. (ROAD RECONSTRUCTION.) (S6.05) Unit price bid shall not be less than: \$ 65.00	\$ 65		\$ 32500	
UTL-6.06 (339)	2,500.0 C.Y.	SPECIAL CARE EXCAVATION AND BACKFILLING (S6.06) Unit price bid shall not be less than: \$ 180.00	\$ 180		\$ 450,000	
UTL-6.06A (340)	1,600.0 C.Y.	SPECIAL CARE EXCAVATION AND BACKFILLING FOR TRANSMISSION MAINS (TRANSMISSION MAIN IS DESCRIBED AS ANY GAS MAIN WITH A MAOP GREATER THAN 124-PSIG) (S6.06A) Unit price bid shall not be less than: \$ 230.00	\$ 230		\$ 368000	

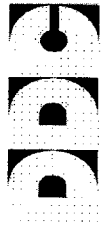


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BID PAGES

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Contract PIN 8502010HW0008C
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			DOLLARS	CTS	DOLLARS	CTS
UTL-6.07 (341)	1,000.0 C.Y.	TEST PITS FOR GAS FACILITIES (S6.07) Unit price bid shall not be less than: \$ 100.00	\$ 100		\$ 100,000	
UTL-GCS-2WS (342)	1.0 F.S.	GAS INTERFERENCES AND ACCOMMODATIONS PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 150,000.00	\$ 150,000.00		\$ 150,000.00	



02/06/2014
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BID PAGES

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

Contract PIN 8502010HW0008C
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COL. 1 ITEM NUMBER (SEQUENCE NO.)	COL. 2 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 3 CLASSIFICATIONS	COL. 4 UNIT PRICES (IN FIGURES)		COL. 5 EXTENDED AMOUNTS (IN FIGURES)	
			DOLLARS	CTS	DOLLARS	CTS
6.39 A (343)	1.0 LUMP SUM	MOBILIZATION PRICE BID SHALL NOT EXCEED 4% OF THE ABOVE SUB-TOTAL PRICE.			\$ 39,905,755.11	
SUB-TOTAL:					\$ 1,550,000	
TOTAL BID PRICE:					\$ 41,455,755.11	

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

PROJECT ID. HWQ411B

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

TOTAL BID PRICE:
(a/k/a BID PROPOSAL)

\$ 41,455,755.11

4/30/14 P.8.

BIDDER'S SIGNATURE AND AFFIDAVIT

Bidder: MASPETH SUPPLY COLLE

By: [Signature]

(Signature of Participant Corporate officer)

(mirrored text from reverse side)
Notary Public
For the State of New York
My Commission Expires 12-31-14

Attest:
(Corporate Seal)

Secretary of Corporate Bidder

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

BID FORM (TO BE NOTARIZED)

AFFIDAVIT WHERE BIDDER IS AN INDIVIDUAL

STATE OF NEW YORK, COUNTY OF _____ ss:

_____ being duly sworn says:

I am the person described in and who executed the foregoing bid, and the several matters therein stated are in all respects true.

(Signature of the person who signed the Bid)

Subscribed and sworn to before me this _____ day of _____,

Notary Public

AFFIDAVIT WHERE BIDDER IS A PARTNERSHIP

STATE OF NEW YORK, COUNTY OF Queens ss:

HARVEY BLATT

_____ being duly sworn says:

I am a member of WASPEN SUPPLY CO. INC the firm described in and which executed the foregoing bid. I subscribed the name of the firm thereto on behalf of the firm, and the several matters therein stated are in all respects true.

(Signature of Partner who signed the Bid)

Subscribed and sworn to before me this 30 day of Aug, 2014

Notary Public

Kath Salomon
Notary Public
State of New York
Reg # 0100000000
My Commission Expires 12-30-17

AFFIDAVIT WHERE BIDDER IS A CORPORATION

STATE OF NEW YORK, COUNTY OF _____ ss:

_____ being duly sworn says:

I am the _____ of the above named corporation whose name is subscribed to and which executed the foregoing bid. I reside at _____.

I have knowledge of the several matters therein stated, and they are in all respects true.

(Signature of Corporate Officer who signed the Bid)

Subscribed and sworn to before me this _____ day of _____,

Notary Public

**BID BOND 1
FORM OF BID BOND**

KNOW ALL MEN BY THESE PRESENTS. That we, _____

Maspeth Supply Co., LLC

55-14 48th Street, Maspeth, NY

hereinafter referred to as the "Principal", and _____

Liberty Mutual Insurance Company

114 W. 47th Street, 21st Floor, New York, NY 10036

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

Ten Percent of Amount Bid

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

Whereas, the Principal is about to submit (or has submitted) to the City the accompanying proposal, hereby made a part hereof, to enter into a contract in writing for Project No. HWQ411B, Reconstruction of Albert Road Area.

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

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

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

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

BID BOND 2

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

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

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

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

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers the 30th day of April, 2014.

(Seal)

Maspeth Supply Co., LLC
Principal

(L.S.)

By:



(Seal)

Liberty Mutual Insurance Company
Surety

By:


Raymond C. Carman Attorney-in-Fact

BID BOND 3

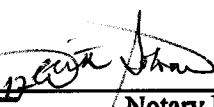
ACKNOWLEDGEMENT OF PRINCIPAL, IF A CORPORATION

State of _____ County of _____ ss:
On this _____ day of _____, _____, before me personally came
_____ to me known, who, being by me duly sworn, did depose and say that he
resides at _____
that he is the _____ of _____
the corporation described in and which executed the foregoing instrument; that he knows the seal of said
corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the
directors of said corporation, and that he signed his name thereto by like order.

Notary Public

ACKNOWLEDGEMENT OF PRINCIPAL, IF A PARTNERSHIP

State of New York County of Dutchess ss:
On this 30 day of April, 2014, before me personally appeared
~~_____~~ to me known and known to me to be one of the members of the firm of
~~_____~~ described in and who executed the foregoing instrument, and he
acknowledged to me that he executed the same as and for the act and deed of said firm.

Keith Solomon
Notary Public
State of New York
Reg # 01866216332
My Commission Expires 12-30-14


Notary Public

ACKNOWLEDGEMENT OF PRINCIPAL, IF AN INDIVIDUAL

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

Notary Public

AFFIX ACKNOWLEDGEMENTS AND JUSTIFICATION OF SURETIES

My Commission Expires 12-31-88
Reg # 01804378883
State of New York
Henry R. Hall
Kathy S. Brown

Surety Acknowledgment


State of New York

County of Nassau

On the 30 day of April, 2014 personally came Raymond C Carman to me known , who being by me duly sworn did depose and say that he/she is an Attorney-in-Fact of Liberty Mutual Insurance Company, the corporation described in and in and which executed the above Instrument; that (s)he knows the corporate seal of said corporation; that the seal affixed to the within instrument is such corporate seal, and that he/she/they signed the said instrument and affixed the said seal as Attorney-in-fact by authority of the Board of Directors of said corporation and by authority of this office under the standing resolution thereof.

My commission expires

DOROTHY SCOTTO
Notary Public, State of New York
No. 01SC6111007
Qualified in Nassau County
Commission Expires June 01, 2016


Notary Public



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

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

Certificate No. 6049173

American Fire and Casualty Company
The Ohio Casualty Insurance Company

Liberty Mutual Insurance Company
West American Insurance Company

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That American Fire & Casualty Company and The Ohio Casualty Insurance Company are corporations duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company 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, D. J. Scotto; Dorothy Scotto; Lisa Marrazzo; Raymond C. Carman; Theresa A. Lanfranco

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

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 25th day of March, 2013.



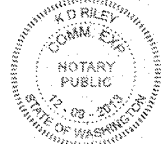
American Fire and Casualty Company
The Ohio Casualty Insurance Company
Liberty Mutual Insurance Company
West American Insurance Company

By: Gregory W. Davenport
Gregory W. Davenport, Assistant Secretary

STATE OF WASHINGTON ss
COUNTY OF KING

On this 25th day of March, 2013, before me personally appeared Gregory W. Davenport, who acknowledged himself to be the Assistant Secretary of American Fire and Casualty Company, 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 Seattle, Washington, on the day and year first above written.



By: KD Riley
KD Riley, Notary Public

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

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

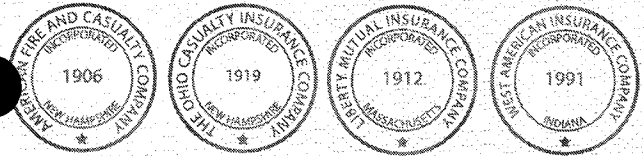
ARTICLE XIII - Execution of Contracts - SECTION 5. Surety Bonds and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as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

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes Gregory W. Davenport, Assistant Secretary to appoint such attorneys-in-fact 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, David M. Carey, the undersigned, Assistant Secretary, of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 30 day of April, 20 14.



By: David M. Carey
David M. Carey, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, bank deposit, currency rate, interest rate or individual value guarantees.

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.





LIBERTY MUTUAL INSURANCE COMPANY
 FINANCIAL STATEMENT — DECEMBER 31, 2013

Assets	Liabilities
Cash and Bank Deposits..... \$1,118,180,550	Unearned Premiums..... \$5,940,431,054
*Bonds — U.S Government..... 1,888,225,943	Reserve for Claims and Claims Expense..... 17,305,063,560
*Other Bonds..... 12,039,490,815	Funds Held Under Reinsurance Treaties..... 212,659,311
*Stocks..... 9,030,962,112	Reserve for Dividends to Policyholders..... 1,226,236
Real Estate..... 251,301,907	Additional Statutory Reserve..... 63,348,980
Agents' Balances or Uncollected Premiums..... 4,781,042,931	Reserve for Commissions, Taxes and
Accrued Interest and Rents..... 149,855,386	Other Liabilities..... <u>5,826,683,629</u>
Other Admitted Assets..... <u>15,216,749,451</u>	Total.....\$29,349,412,770
Total Admitted Assets.....<u>\$44,475,809,095</u>	Special Surplus Funds..... \$55,686,852
	Capital Stock..... 11,250,000
	Paid in Surplus..... 7,898,288,167
	Unassigned Surplus..... 7,161,171,306
	Surplus to Policyholders..... <u>15,126,396,325</u>
	Total Liabilities and Surplus.....<u>\$44,475,809,095</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, 2013, to the best of my knowledge and belief.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation at Seattle, Washington, this 20th day of March, 2014.

T. Mikolajewski

Assistant Secretary



Tax ID #: 11-3493929

APT E- PIN #: 85014B0047

**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 # 85014B0047 FMS Project ID#: HWQ411B
 Project Title/ Agency PIN # RECONSTRUCTION OF ALBERT ROAD AREA / 8502010HW0008C
 Bid/Proposal Response Date APRIL 30, 2014
 Contracting Agency Department of Design and Construction
 Agency Address 30-30 Thomson Ave. City Long Island City State NY Zip Code 11101
 Contact Person Jessica Lavidis Title MWBE Liaison & Compliance Analyst
 Telephone # (718) 391-1065 Email LavidisJe@ddc.nyc.gov

Project Description (attach additional pages if necessary)

**RECONSTRUCTION OF ALBERT ROAD AREA
INCLUDING SEWER, WATERMAIN, STREET LIGHTING,
AND TRAFFIC SIGNAL WORK**

Together With All Work Incidental Thereto

**BOROUGH OF QUEENS
CITY OF NEW YORK**

Together With All Work Incidental Thereto
**BOROUGH OF STATEN ISLAND
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>	<u>13 %</u>
or	
Black American	UNSPECIFIED*
Hispanic American	UNSPECIFIED*
Asian American	UNSPECIFIED*
Women	UNSPECIFIED*
Total Participation Goals	13 % Line 1

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

Tax ID #: 11-3493939

APTE- HWA 4118
PIN #: HWA 4118

SCHEDULE B - Part II: MWBE 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 Information

Tax ID # 11-3493939 FMS Vendor ID # _____
 Business Name MASPOTH SUPPLY/ROLLS Contact Person HARVEY BLATT
 Address 55-1442 ST MARYS HWY 11378
 Telephone # 718 7867000 Email _____

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

PRIME CONTRACTOR ADOPTING AGENCY M/WBE PARTICIPATION GOALS

<input type="checkbox"/> For Prime Contractors (including Qualified Joint Ventures and M/WBE firms) adopting Agency M/WBE Participation Goals.	Total Bid/Proposal Value	Agency Total Participation Goals (Line 1, Page 13)	Calculated M/WBE Participation Amount
Calculate the total dollar value of your total bid that you agree will be awarded to M/WBE subcontractors for services and/or credited to an M/WBE prime contractor or Qualified Joint Venture. Please review the Notice to Prospective Contractors for more information on how to obtain credit for M/WBE participation.	<u>41,455,755.11</u>	<u>13%</u>	<u>5,389,248.10</u>
	\$	X	= \$ Line 2

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

<input type="checkbox"/> For Prime Contractors (including Qualified Joint Ventures and M/WBE firms) adopting Modified M/WBE Participation Goals.	Total Bid/Proposal Value	Adjusted Participation Goal (From Partial Waiver)	Calculated M/WBE Participation Amount
Calculate the total dollar value of your total bid that you agree will be awarded to M/WBE subcontractors for services and/or credited to an M/WBE prime contractor or Qualified Joint Venture. Please review the Notice to Prospective Contractors for more information on how to obtain credit for M/WBE participation.			
	\$	X	= \$ Line 3

Tax ID #: 11-3493939

APT E-
PIN #:

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

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

MBE WBE

As a Qualified Joint Venture with an M/WBE partner, in which the value of the M/WBE partner's participation and/or the value of any work subcontracted to other M/WBE firms is at least the amount located on Lines 2 or 3 above, as applicable. The value of any work subcontracted to non M/WBE firms will not be credited towards fulfillment of M/WBE Participation Goals.

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

Section IV: General Contract Information

What is the expected percentage of the total contract dollar value that you expect to award in subcontracts for services, regardless of M/WBE status? % 13

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

MBE 6.52 CB
WBE 5311 D
MBE
WBE

1	Crossing Guards	207,225	10/14 to 6/16
2	JANITOR	62,720	Sub 6/10/16
3			
4	TRUCKING	1,800,000	10/14 to 6/16
5			
6	WATERMAIN MATERIALS	850,000	10/14 to 3/15
7			
8	SEWER MATERIALS (Pipe)	2,000,000	10/14 to 11/15
9			
10	Cas Iron Castings	472,303	10/14 to 10/16
11			
12			
13			
14			
15			
16			
17			

✓ Scopes of Subcontract Work

Tax ID #: 11-3493939

APT E: HWA 411 B
PIN #:

Section V: Vendor Certification and Required Affirmations

I hereby:

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

Signature	<u>[Handwritten Signature]</u>	Date	<u>April 30, 2014</u>
Print Name	<u>HARVEY BLATT</u>	Title	<u>Member</u>

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

Contract Overview

Tax ID # _____ FMS Vendor ID # _____
 Business Name _____
 Contact Name _____ Telephone # _____ Email _____
 Type of Procurement Competitive Sealed Bids Other Bid/Response Due Date _____
 APT E-PIN # (for this procurement): _____ Contracting Agency: _____

M/WBE Participation Goals as described in bid/solicitation documents

_____ % Agency M/WBE Participation Goal

Proposed M/WBE Participation Goal as anticipated by vendor seeking waiver

_____ % of the total contract value anticipated in good faith by the bidder/proposer to be subcontracted for services and/or credited to an M/WBE Prime Contractor or Qualified Joint Venture.

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

- Vendor does not subcontract services, and has the capacity and good faith intention to perform all such work itself with its own employees.
- Vendor subcontracts some of this type of work but at a lower % than bid/solicitation describes, and has the capacity and good faith intention to do so on this contract. (Attach subcontracting plan outlining services that the vendor will self-perform and subcontract to other vendors or consultants.)
- Vendor has other legitimate business reasons for proposing the M/WBE Participation Goal above. Explain under separate cover.

References

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

CONTRACT NO. _____	AGENCY _____	DATE COMPLETED _____
Total Contract Amount \$ _____	Total Amount Subcontracted \$ _____	
Item of Work Subcontracted and Value of subcontract _____	Item of Work Subcontracted and Value of subcontract _____	Item of Work Subcontracted and Value of subcontract _____
CONTRACT NO. _____	AGENCY _____	DATE COMPLETED _____
Total Contract Amount \$ _____	Total Amount Subcontracted \$ _____	
Item of Work Subcontracted and Value of subcontract _____	Item of Work Subcontracted and Value of subcontract _____	Item of Work Subcontracted and Value of subcontract _____
CONTRACT NO. _____	AGENCY _____	DATE COMPLETED _____
Total Contract Amount \$ _____	Total Amount Subcontracted \$ _____	
Item of Work Subcontracted and Value of subcontract _____	Item of Work Subcontracted and Value of subcontract _____	Item of Work Subcontracted and Value of subcontract _____

List 3 most recent contracts performed for other entities. Include information for each subcontract awarded in performance of such contracts. Add more pages if necessary.

(Complete ONLY if vendor has performed fewer than 3 New York City contracts.)

TYPE OF Contract	ENTITY	DATE COMPLETED
Manager at entity that hired vendor (Name/Phone No./Email)		
Total Contract Amount \$	Total Amount Subcontracted \$	
Type of Work Subcontracted		

TYPE OF Contract	AGENCY/ENTITY	DATE COMPLETED
Manager at agency/entity that hired vendor (Name/Phone No./Email)		
Total Contract Amount \$	Total Amount Subcontracted \$	
Item of Work Subcontracted and Value of subcontract	Item of Work Subcontracted and Value of subcontract	Item of Work Subcontracted and Value of subcontract

TYPE OF Contract	AGENCY/ENTITY	DATE COMPLETED
Manager at entity that hired vendor (Name/Phone No./Email)		
Total Contract Amount \$	Total Amount Subcontracted \$	
Item of Work Subcontracted and Value of subcontract	Item of Work Subcontracted and Value of subcontract	Item of Work Subcontracted and Value of subcontract

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

Signature: _____ **Date:** _____
Print Name: _____ **Title:** _____

Shaded area below is for agency completion only

AGENCY CHIEF CONTRACTING OFFICER APPROVAL	
Signature: _____	Date: _____
CITY CHIEF PROCUREMENT OFFICER APPROVAL	
Signature: _____	Date: _____
Waiver Determination	
Full Waiver Approved <input type="checkbox"/>	
Waiver Denied <input type="checkbox"/>	
Partial Waiver Approved <input type="checkbox"/>	
Revised Participation Goal _____ %	

APPRENTICESHIP PROGRAM REQUIREMENTS

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

YES NO

(1) Apprenticeship Program Requirements

Notice to Bidders: Please be advised that, pursuant to the authority granted to the City under Labor Law Section 816-b, the Department of Design and Construction hereby requires that the contractor awarded a contract as a result of this Invitation for Bids, and any of its subcontractors with subcontracts worth one 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 programs have three years of current, successful experience in providing career opportunities.

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

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

(2) Apprenticeship Program Questionnaire

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

APPRENTICESHIP PROGRAM QUESTIONNAIRE

PROJECT ID: HWQ411B

The bidder must submit a completed and signed Apprenticeship Program Questionnaire.

Name of Bidder: _____

1. Does the bidder have an Apprenticeship Program appropriate for the type and scope of work to be performed?
[Note: Participation may be by either direct sponsorship or through collective bargaining agreement(s).]

_____ YES _____ NO

2. Has the bidder's Apprenticeship Program been registered with, and approved by, the New York State Commissioner of Labor?

_____ YES _____ NO

3. Has the bidder's Apprenticeship Program had three years of successful experience in providing career opportunities?

_____ YES _____ NO

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

Bidder: _____

By: _____ Title: _____
(Signature of Partner or Corporate Officer)

Date: _____

SAFETY QUESTIONNAIRE

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

1. Bidder Information:

Company Name: _____

DDC Project Number: _____

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

Company has previously worked for DDC _____ YES _____ NO

2. Type(s) of Construction Work

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

3. Experience Modification Rate:

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

Project ID. _____

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

YEAR	INTRASTATE RATE	INTERSTATE RATE
_____	_____	_____
_____	_____	_____
_____	_____	_____

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

4. OSHA Information:

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

___ YES ___ NO Contractor has had an incident requiring OSHA notification within 8 hours (i.e., fatality, or hospitalization of three or more employees).

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

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

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

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

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

YEAR	TOTAL NUMBERS OF HOURS WORKED BY EMPLOYEES	INCIDENT RATE
_____	_____	_____
_____	_____	_____
_____	_____	_____

Project ID. _____

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

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

5. Safety Performance on Previous DDC Project(s)

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

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

YES NO Accident on previous DDC Project(s).

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

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

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

Date: _____

By: _____

(Signature of Owner, Partner, Corporate Officer)

Title: _____

(NO TEXT ON THIS PAGE)

Pre-Award Process

The bidder is advised that as part of the pre-award review of its bid, it may be required to submit the information described in Sections (A) through (D) below. If required, such information must be submitted by the bidder within five (5) business days following receipt of notification from DDC that it is among the low bidders. Such notification from DDC will be by facsimile or in writing and will specify the types of information must be submitted. The types of information the bidder may be required to submit are described below. In the event the bidder fails to submit the required information within the specified time frame, its bid may be rejected as nonresponsive.

- (A) **Project Reference Form:** If required, the bidder must complete and submit the Project Reference Form set forth on pages 26 through 28 of this Bid Booklet. The Project Reference Form consists of 3 parts: (1) Similar Contracts Completed by the Bidder, (2) Contracts Currently Under Construction by the Bidder, and (3) Pending Contracts Not Yet Started by the Bidder.
- (B) **Copy of License:** If required, the bidder must submit a copy of the license under which the bidder will be performing the work. Such license must clearly show the following: (1) Name of the Licensee, (2) License Number, and (3) Expiration date of the License. A copy of the license will be required from bidders for the following contracts: Plumbing Work, Electrical Work and Asbestos Abatement.
- (C) **Financial Information:** If required, the bidder must submit the financial information described below:
- (1) **Audited Financial Statements:** Financial statements (Balance Sheet and Income Statement) of the entity submitting the bid, as audited by an independent auditor licensed to practice as a certified public accountant (CPA). Audited financial statements for the three most recent fiscal years must be submitted. Each such financial statement must include the auditor's standard report.
- If the bidder does not have audited financial statements, it must submit an affidavit attesting to the fact that the bidder does not have such statements. In addition, the bidder must submit the following documentation covering the three most recent fiscal years: signed federal tax returns, unaudited financial statements, and a "certified review letter" from a certified public accountant (CPA) verifying the unaudited financial statements.
- Unless the most recent audited or unaudited financial statement was issued within ninety (90) days, the bidder must submit interim financial information that includes data on financial position and results of operation (income data) for the current fiscal year. Such information may be summarized on a monthly or quarterly basis or at other intervals.
- (2) **Schedule of Aged Accounts Receivable,** including portion due within ninety (90) days.

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

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

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

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

A. PROJECT REFERENCES – SIMILAR CONTRACTS COMPLETED BY THE BIDDER

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

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

B. PROJECT REFERENCES – CONTRACTS CURRENTLY UNDER CONSTRUCTION BY THE BIDDER

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

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

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

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

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

(NO TEXT ON THIS PAGE)

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

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

Contractor: _____

Address: _____

Telephone Number: _____

Name and Title of Signatory: _____

Contracting Agency or Owner: _____

Project Number: _____

Proposed Contract Amount: _____

Description and Address of Proposed Contract: _____

Names of Subcontractors in the amount of 750,000 or more on this contract (if not known at this time, so state indicating that trades will be subcontracted):

I, (fill in name of person signing) _____ ,
hereby affirm that I am authorized by the above-named contractor to certify that said contractor's
proposed contract with the above-named owner or city agency is less than \$1,000,000. This affirmation
is made in accordance with Executive Order No. 50 (1980) as amended and its implementing regulations.

Date

Signature

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

(NO TEXT ON THIS PAGE)

VENDEX COMPLIANCE

(A) **Vendex Fees:** Pursuant to Procurement Policy Board Rule 2-08(f)(2), the contractor will be charged a fee for the administration of the VENDEX system, including the Vendor Name Check process, if a Vendor Name Check review is required to be conducted by the Department of Investigation. The contractor shall also be required to pay the applicable required fees for any of its subcontractors for which Vendor Name Check reviews are required. The fee(s) will be deducted from payments made to the contractor under the contract. For contracts with an estimated value of less than or equal to \$1,000,000, the fee will be \$175 per Vendor Name Check review. For contracts with an estimated value of greater than \$1,000,000, the fee will be \$350 per Vendor Name Check review.

(B) **Confirmation of Vendex Compliance:** The Bidder shall submit this Confirmation of Vendex Compliance to the Department of Design and Construction, Contracts Section, 30-30 Thomson Avenue – First Floor, Long Island City, NY 11101.

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

Name of Bidder: _____
Bidder's Address: _____
Bidder's Telephone Number: _____
Bidder's Fax Number: _____
Date of Bid Opening: _____
PROJECT ID: _____

Vendex Compliance: To demonstrate compliance with Vendex requirements, the Bidder shall complete either Section (1) or Section (2) below, whichever applies.

(1) **Submission of Vendex Questionnaires to MOCS:** By signing in the space provided below, the Bidder certifies that as of the date specified below, the Bidder has submitted Vendex Questionnaires to the Mayor's Office of Contract Services, Attn: VENDEX, 253 Broadway, 9th Floor, New York, New York 10007.

Date of Submission: _____

By: _____
(Signature of Partner or 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: _____
(Signature of Partner or corporate officer)

Print Name: _____

(NO TEXT ON THIS PAGE)

Certificate of No Change Form



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

I, HARVEY BLATT, 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: MARATHI SUPPLY CO LLC

Vendor's Address: 55-14 48 ST MARATHI NY

Vendor's EIN: 3493229 Requesting Agency: DDA

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: 4-24-12

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
1 HARRY BLATT	4-24-12	
2 HARRY LVOIS	4-24-12	
3		
4		
5		
6		

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

Certification This section is required.

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

Certified By:

HARRY BLATT
Name (Print)

MEMBER
Title

MASPEIN SUPPLY CO, LLC
Name of Submitting Entity

[Signature] 4-30-14
Signature Date

Kath Solomon
Notary Public
State of New York
Reg # 01806216332
My Commission Expires 12-28-2017

Notarized By:

[Signature]
Notary Public

KINGS
County License Issued

License Number

Sworn to before me on: 4-30-14
Date

IRAN DIVESTMENT ACT COMPLIANCE RIDER

FOR NEW YORK CITY CONTRACTORS

The Iran Divestment Act of 2012, effective as of April 12, 2012, is codified at State Finance Law (“SFL”) §165-a and General Municipal Law (“GML”) §103-g. The Iran Divestment Act, with certain exceptions, prohibits municipalities, including the City, from entering into contracts with persons engaged in investment activities in the energy sector of Iran. Pursuant to the terms set forth in SFL §165-a and GML §103-g, a person engages in investment activities in the energy sector of Iran if:

- (a) The person provides goods or services of twenty million dollars or more in the energy sector of Iran, including a person that provides oil or liquefied natural gas tankers, or products used to construct or maintain pipelines used to transport oil or liquefied natural gas, for the energy sector of Iran; or
- (b) The person is a financial institution that extends twenty million dollars or more in credit to another person, for forty-five days or more, if that person will use the credit to provide goods or services in the energy sector in Iran and is identified on a list created pursuant to paragraph (b) of subdivision three of Section 165-a of the State Finance Law and maintained by the Commissioner of the Office of General Services.

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

Each bidder or proposer must certify that it is not on the list of entities engaged in investment activities in Iran created pursuant to paragraph (b) of subdivision 3 of Section 165-a of the State Finance Law. In any case where the bidder or proposer cannot certify that they are not on such list, the bidder or proposer shall so state and shall furnish with the bid or proposal a signed statement which sets forth in detail the reasons why such statement cannot be made. The City of New York may award a bid to a bidder who cannot make the certification on a case by case basis if:

- (1) The investment activities in Iran were made before the effective date of this section (i.e., April 12, 2012), the investment activities in Iran have not been expanded or renewed after the effective date of this section and the person has adopted, publicized and is implementing a formal plan to cease the investment activities in Iran and to refrain from engaging in any new investments in Iran: or
- (2) The City makes a determination that the goods or services are necessary for the City to perform its functions and that, absent such an exemption, the City would be unable to obtain the goods or services for which the contract is offered. Such determination shall be made in writing and shall be a public document.

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

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

[Please Check One]

BIDDER'S CERTIFICATION

- By submission of this bid or proposal, each bidder/proposer and each person signing on behalf of any bidder/proposer certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief, that each bidder/proposer is not on the list created pursuant to paragraph (b) of subdivision 3 of Section 165-a of the State Finance Law.

- I am unable to certify that my name and the name of the bidder/proposer does not appear on the list created pursuant to paragraph (b) of subdivision 3 of Section 165-a of the State Finance Law. I have attached a signed statement setting forth in detail why I cannot so certify.

Dated: _____, New York
_____, 20__

SIGNATURE

PRINTED NAME

TITLE

Sworn to before me this
____ day of _____, 20__

Notary Public

Dated:

**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

(NO TEXT ON THIS PAGE)

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

CONSTRUCTION EMPLOYMENT REPORT
 INSTRUCTIONS

WHO MUST FILE A CONSTRUCTION EMPLOYMENT REPORT

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

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

Prime Contractor:

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

Subcontractor:

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

WHERE TO FILE

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

DLS REVIEW PROCESS

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

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

Certificate of Approval

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

Continued Approval Certificate

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

Conditional Certificate of Compliance

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

Determination of Nonperformance

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

HOW TO COMPLETE THE EMPLOYMENT REPORT

Contents

General Information

Part I: Contractor/Subcontractor Information

Part II: Employment Policies and Practices

Part III: Contract Bid Information and Projected and Current Workforce Forms

Signature Page

PART I: CONTRACTOR/SUBCONTRACTOR INFORMATION

- Questions 7 – 11: Please provide the required contact information for your company. All contracts must have a designated Equal Employment Officer.
- Question 12: If you are a subcontractor, you must state the name of the contractor for whom you are providing the construction services.
- Question 13: Please provide the number of permanent employees in your company.
- Question 14a-g: The Project Identification Number (PIN) and the Contract Registration ID Number (CT#) can be obtained from the City agency. Provide a description of the trade work you will perform on this project and the address where the work will be performed. Subcontractors can obtain this information from the contract they have with the prime contractor.
- Questions 15 – 18: If your company has received a valid Certificate of Approval within the past 36 months, been audited by the United States Department of Labor, Office of Federal Contract Compliance Programs (OFCCP), or if your company has submitted an ER for a different contract for which you have not yet received a compliance certificate, then you only need to complete and submit the following:
- General Information section
 - Part I - Contractor/Subcontractor Information
 - Form B - Projected Workforce
 - Signature Page

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

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

- Question 18: If the company was audited by the OFCCP, also provide the following:
- Identify the reviewing OFCCP office by its name and address
 - If an unconditional certificate of compliance was issued by the OFCCP, attach a copy of the certificate in lieu of completing Parts II and III;
 - Include copies of all corrective actions and documentation of OFCCP's performance; and
 - Provide a copy of all stated OFCCP findings.

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

PART II: EMPLOYMENT POLICIES AND PRACTICES

Remember to label all documents with the question number for which they are submitted.

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

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

Question 22: Inquires into where and how I-9 forms are maintained and stored.

Questions 23a – e: Inquires into whether or not there is a requirement that an applicant or employee be subjected to a medical examination at any given time. Copies of the medical information questionnaire and instructions must be submitted with the Employment Report.

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

Question 25: Submit any current Affirmative Action Plan(s) created pursuant to Executive Order 11246.

Question 26: If your firm or collective bargaining agreement has an internal grievance procedure, indicate this and submit a copy of the policy and procedure. If unwritten, explain its nature and operation. Explain how your firm's procedure addresses EEO complaints.

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

1. Number of complaint(s)	2. Nature of the complaint(s)	3. Position(s) of the complainant(s)	4. Was an investigation conducted? Y/N	5. Current status of the disposition
---------------------------	-------------------------------	--------------------------------------	---	--------------------------------------

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

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

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

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

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

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

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

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

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

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

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

SIGNATURE PAGE

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

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

CONSTRUCTION EMPLOYMENT REPORT

GENERAL INFORMATION

1. Your contractual relationship in this contract is: Prime contractor Subcontractor
- 1a. Are M/WBE goals attached to this project? Yes No
2. Please check one of the following if your firm would like information on how to certify with the City of New York as a:
- Minority Owned Business Enterprise Locally Based Business Enterprise
 Women Owned Business Enterprise Emerging Business Enterprise
 Disadvantaged Business Enterprise
- 2a. If you are certified as an **MBE, WBE, LBE, EBE** or **DBE**, what city/state agency are you certified with? _____ Are you DBE certified? Yes No
3. Please indicate if you would like assistance from SBS in identifying certified M/WBEs for contracting opportunities: Yes No
4. Is this project subject to a project labor agreement? Yes No
5. Are you a Union contractor? Yes No If yes, please list which local(s) you affiliated with _____
6. Are you a Veteran owned company? Yes No

PART I: CONTRACTOR/SUBCONTRACTOR INFORMATION

7. _____
Employer Identification Number or Federal Tax I.D. Email Address
8. _____
Company Name
9. _____
Company Address and Zip Code
10. _____
Chief Operating Officer Telephone Number
11. _____
Designated Equal Opportunity Compliance Officer Telephone Number
(If same as Item #10, write "same")
12. _____
Name of Prime Contractor and Contact Person
(If same as Item #8, write "same")

13. Number of employees in your company: _____

14. Contract information:

(a) _____
Contracting Agency (City Agency)

(b) _____
Contract Amount

(c) _____
Procurement Identification Number (PIN)

(d) _____
Contract Registration Number (CT#)

(e) _____
Projected Commencement Date

(f) _____
Projected Completion Date

(g) Description and location of proposed contract:

15. Has your firm been reviewed by the Division of Labor Services (DLS) within the past 36 months and issued a Certificate of Approval? Yes___ No___

If yes, attach a copy of certificate.

16. Has DLS within the past month reviewed an Employment Report submission for your company and issued a Conditional Certificate of Approval? Yes___ No___

If yes, attach a copy of certificate.

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

17. Has an Employment Report already been submitted for a different contract (not covered by this Employment Report) for which you have not yet received compliance certificate?

Yes___ No___ If yes,

Date submitted: _____

Agency to which submitted: _____

Name of Agency Person: _____

Contract No: _____

Telephone: _____

18. Has your company in the past 36 months been audited by the United States Department of Labor, Office of Federal Contract Compliance Programs (OFCCP)? Yes___ No___

If yes,

(a) Name and address of OFCCP office.

(b) Was a Certificate of Equal Employment Compliance issued within the past 36 months?
Yes___ No___

If yes, attach a copy of such certificate.

(c) Were any corrective actions required or agreed to? Yes___ No___

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

(d) Were any deficiencies found? Yes___ No___

If yes, attach a copy of such findings.

19. Is your company or its affiliates a member or members of an employers' trade association which is responsible for negotiating collective bargaining agreements (CBA) which affect construction site hiring? Yes___ No___

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

PART II: DOCUMENTS REQUIRED

20. For the following policies or practices, attach the relevant documents (e.g., printed booklets, brochures, manuals, memoranda, etc.). If the policy(ies) are unwritten, attach a full explanation of the practices. See instructions.

- ___ (a) Health benefit coverage/description(s) for all management, nonunion and union employees (whether company or union administered)
- ___ (b) Disability, life, other insurance coverage/description
- ___ (c) Employee Policy/Handbook
- ___ (d) Personnel Policy/Manual
- ___ (e) Supervisor's Policy/Manual
- ___ (f) Pension plan or 401k coverage/description for all management, nonunion and union employees, whether company or union administered
- ___ (g) Collective bargaining agreement(s).
- ___ (h) Employment Application(s)
- ___ (i) Employee evaluation policy/form(s).
- ___ (j) Does your firm have medical and/or non-medical (i.e. education, military, personal, pregnancy, child care) leave policy?

21. To comply with the Immigration Reform and Control Act of 1986 when and of whom does your firm require the completion of an I-9 Form?

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

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

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

If yes, is the medical examination given:

- (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 ___ No ___

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

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

- ___ Minorities and Women
- ___ Individuals with handicaps
- ___ Other. Please specify _____

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

If yes, please attach a copy of this policy.

If no, attach a report detailing your firm's unwritten procedure for handling EEO complaints.

27. Has any employee, within the past three years, filed a complaint pursuant to an internal grievance procedure or with any official of your firm with respect to equal employment opportunity? Yes ___ No ___

If yes, attach an internal complaint log. See instructions.

28. Has your firm, within the past three years, been named as a defendant (or respondent) in any administrative or judicial action where the complainant (plaintiff) alleged violation of any anti-discrimination or affirmative action laws? Yes ___ No ___

If yes, attach a log. See instructions.

29. Are there any jobs for which there are physical qualifications? Yes ___ No ___

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

30. Are there any jobs for which there are age, race, color, national origin, sex, creed, disability, marital status, sexual orientation, or citizenship qualifications? Yes ___ No ___

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

SIGNATURE PAGE

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

Contractor's Name

Name of person who prepared this Employment Report

Title

Name of official authorized to sign on behalf of the contractor

Title

Telephone Number

Signature of authorized official

Date

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

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

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

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

Only original signatures accepted.

Sworn to before me this _____ day of _____ 20 _____

Notary Public

Authorized Signature

Date

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

1. Do you plan to subcontractor work on this contract? Yes ___ No ___
2. If yes, complete the chart below.

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

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

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

OWNERSHIP CODES

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

FORM B: PROJECTED WORKFORCE

TRADE CLASSIFICATION CODES

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

Trade:	MALES					FEMALES				
	(1) White Non Hispanic	(2) Black Non Hispanic	(3) Hispanic	(4) Asian	(5) Native Amer.	(6) White Non Hispanic	(7) Black Non Hispanic	(8) Hispanic	(9) Asian	(10) Native Amer.
Union Affiliation, if applicable										
Total (Col. #1-10):										
Total Minority, Male & Female (Col. #2,3,4,5,7,8,9, & 10):										
Total Female (Col. #6 - 10):										
J										
H										
A										
TRN										
TOT										

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

FORM B: PROJECTED WORKFORCE

Trade: _____

Union Affiliation, if applicable _____

Total (Col. #1-10): _____

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

Total Female
(Col. #6 - 10): _____

MALES

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

FEMALES

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

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

FORM C: CURRENT WORKFORCE

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:	MALES						FEMALES															
	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)		(9)		(10)			
	White Non Hisp.	Black Non Hisp.	White Non Hisp.	Black Non Hisp.	White Non Hisp.	Black Non Hisp.	White Non Hisp.	Black Non Hisp.	White Non Hisp.	Black Non Hisp.	White Non Hisp.	Black Non Hisp.	White Non Hisp.	Black Non Hisp.	White Non Hisp.	Black Non Hisp.	White Non Hisp.	Black Non Hisp.	White Non Hisp.	Black Non Hisp.	Native Amer.	
Union Affiliation, if applicable																						
Total (Col. #1-10):	J																					
Total Minority, Male & Female (Col. #2,3,4,5,7,8,9, & 10):	H																					
Total Female (Col. #6 - 10):	A																					
	TRN																					
	TOT																					

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

FORM C: CURRENT WORKFORCE

Trade: _____

Union Affiliation, if applicable _____

Total (Col. #1-10): _____

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

Total Female
(Col. #6 - 10): _____

MALES

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

J

H

A

TRN

TOT

FEMALES

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

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

(NO TEXT ON THIS PAGE)

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

CONSTRUCTION EMPLOYMENT REPORT

GENERAL INFORMATION

1. Your contractual relationship in this contract is: Prime contractor ___ Subcontractor x
- 1a. Are M/WBE goals attached to this project? Yes ___ No ___
2. Please check one of the following if your firm would like information on how to certify with the City of New York as a:
- ___ Minority Owned Business Enterprise ___ Locally Based Business Enterprise
___ Women Owned Business Enterprise ___ Emerging Business Enterprise
___ Disadvantaged Business Enterprise
- 2a. If you are certified as an **MBE, WBE, LBE, EBE** or **DBE**, what city/state agency are you certified with? _____ Are you DBE certified? Yes ___ No ___
3. Please indicate if you would like assistance from SBS in identifying certified M/WBEs for contracting opportunities: Yes ___ No ___
4. Is this project subject to a project labor agreement? Yes ___ No ___
5. Are you a Union contractor? Yes ___ No ___ If yes, please list which local(s) you affiliated with _____
6. Are you a Veteran owned company? Yes ___ No ___

PART I: CONTRACTOR/SUBCONTRACTOR INFORMATION

7. _____
Employer Identification Number or Federal Tax I.D. Email Address
8. _____
Company Name
9. _____
Company Address and Zip Code
10. _____
Chief Operating Officer Telephone Number
11. _____
Designated Equal Opportunity Compliance Officer Telephone Number
(If same as Item #10, write "same")
12. _____
Name of Prime Contractor and Contact Person
(If same as Item #8, write "same")

13. Number of employees in your company: _____

14. Contract information:

(a) _____ (b) _____
Contracting Agency (City Agency) Contract Amount

(c) _____ (d) _____
Procurement Identification Number (PIN) Contract Registration Number (CT#)

(e) _____ (f) _____
Projected Commencement Date Projected Completion Date

(g) Description and location of proposed contract:

15. Has your firm been reviewed by the Division of Labor Services (DLS) within the past 36 months and issued a Certificate of Approval? Yes ___ No ___

If yes, attach a copy of certificate.

16. Has DLS within the past month reviewed an Employment Report submission for your company and issued a Conditional Certificate of Approval? Yes ___ No ___

If yes, attach a copy of certificate.

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

17. Has an Employment Report already been submitted for a different contract (not covered by this Employment Report) for which you have not yet received compliance certificate? Yes ___ No ___ If yes,

Date submitted: _____
Agency to which submitted: _____
Name of Agency Person: _____
Contract No: _____
Telephone: _____

18. Has your company in the past 36 months been audited by the United States Department of Labor, Office of Federal Contract Compliance Programs (OFCCP)? Yes ___ No ___

If yes,

(a) Name and address of OFCCP office.

(b) Was a Certificate of Equal Employment Compliance issued within the past 36 months?
Yes___ No___

If yes, attach a copy of such certificate.

(c) Were any corrective actions required or agreed to? Yes___ No___

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

(d) Were any deficiencies found? Yes___ No___

If yes, attach a copy of such findings.

19. Is your company or its affiliates a member or members of an employers' trade association which is responsible for negotiating collective bargaining agreements (CBA) which affect construction site hiring? Yes___ No___

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

PART II: DOCUMENTS REQUIRED

20. For the following policies or practices, attach the relevant documents (e.g., printed booklets, brochures, manuals, memoranda, etc.). If the policy(ies) are unwritten, attach a full explanation of the practices. See instructions.

- ___ (a) Health benefit coverage/description(s) for all management, nonunion and union employees (whether company or union administered)
- ___ (b) Disability, life, other insurance coverage/description
- ___ (c) Employee Policy/Handbook
- ___ (d) Personnel Policy/Manual
- ___ (e) Supervisor's Policy/Manual
- ___ (f) Pension plan or 401k coverage/description for all management, nonunion and union employees, whether company or union administered
- ___ (g) Collective bargaining agreement(s).
- ___ (h) Employment Application(s)
- ___ (i) Employee evaluation policy/form(s).
- ___ (j) Does your firm have medical and/or non-medical (i.e. education, military, personal, pregnancy, child care) leave policy?

21. To comply with the Immigration Reform and Control Act of 1986 when and of whom does your firm require the completion of an I-9 Form?

- (a) Prior to job offer Yes___ No___
- (b) After a conditional job offer Yes___ No___
- (c) After a job offer Yes___ No___
- (d) Within the first three days on the job Yes___ No___
- (e) To some applicants Yes___ No___
- (f) To all applicants Yes___ No___
- (g) To some employees Yes___ No___
- (h) To all employees Yes___ No___

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

23. Does your firm or any of its collective bargaining agreements require job applicants to take a medical examination? Yes___ No___

If yes, is the medical examination given:

- (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___ No___

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

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

- ___ Minorities and Women
- ___ Individuals with handicaps
- ___ Other. Please specify _____

26. Does your firm or collective bargaining agreement(s) have an internal grievance procedure with respect to EEO complaints? Yes___ No___

If yes, please attach a copy of this policy.

If no, attach a report detailing your firm's unwritten procedure for handling EEO complaints.

27. Has any employee, within the past three years, filed a complaint pursuant to an internal grievance procedure or with any official of your firm with respect to equal employment opportunity? Yes ___ No ___

If yes, attach an internal complaint log. See instructions.

28. Has your firm, within the past three years, been named as a defendant (or respondent) in any administrative or judicial action where the complainant (plaintiff) alleged violation of any anti-discrimination or affirmative action laws? Yes ___ No ___

If yes, attach a log. See instructions.

29. Are there any jobs for which there are physical qualifications? Yes ___ No ___

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

30. Are there any jobs for which there are age, race, color, national origin, sex, creed, disability, marital status, sexual orientation, or citizenship qualifications? Yes ___ No ___

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

SIGNATURE PAGE

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

Contractor's Name

Name of person who prepared this Employment Report

Title

Name of official authorized to sign on behalf of the contractor

Title

Telephone Number

Signature of authorized official

Date

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

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

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

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

Only original signatures accepted.

Sworn to before me this _____ day of _____ 20 _____

Notary Public

Authorized Signature

Date

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

1. Do you plan to subcontractor work on this contract? Yes ___ No ___
2. If yes, complete the chart below.

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

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

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

OWNERSHIP CODES

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

FORM B: PROJECTED WORKFORCE

TRADE CLASSIFICATION CODES

- (J) Journeylevel Workers
- (H) Helper
- (A) Apprentice
- (TRN) Trainee
- (TOT) Total by Column

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

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

Total (Col. #1-10):

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

Total Female
(Col. #6 - 10):

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

FORM B: PROJECTED WORKFORCE

Trade: _____

FEMALES

MALES

Union Affiliation, if applicable _____

Total (Col. #1-10): _____

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

Total Female
(Col. #6 - 10): _____

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

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

FORM C: CURRENT WORKFORCE

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

Total (Col. #1-10):

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

Total Female
(Col. #6 - 10):

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

FORM C: CURRENT WORKFORCE

Trade: _____

Union Affiliation, if applicable _____

Total (Col. #1-10): _____

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

Total Female
(Col. #6 - 10): _____

MALES

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

J

H

A

TRN

TOT

FEMALES

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

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

(NO TEXT ON THIS PAGE)

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

Date _____

File Number _____

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

Are you currently certified as one of the following? Please check yes or no:

MBE Yes ___ No ___ WBE Yes ___ No ___ LBE Yes ___ No ___

DBE Yes ___ No ___ EBE Yes ___ No ___

If you are certified as an MBE, WBE, LBE, EBE or DBE, what city/state agency are you certified with?

Please check one of the following if your firm would like information on how to certify with the City of New York as a:

___ Minority Owned Business Enterprise

___ Locally based Business Enterprise

___ Women Owned Business Enterprise

___ Emerging Business Enterprise

___ Disadvantaged Business Enterprise

_____ Company Name

_____ Employer Identification Number or Federal Tax I.D

_____ Company Address and Zip Code

_____ Contact Person (First Name, Last Name)

_____ Telephone Number

_____ Fax Number

_____ E-mail Address

Description and location of proposed subcontract: _____

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

Are you a Veteran owned company? Yes ___ No ___

_____ Procurement Identification Number (PIN)
(City contracts only)

_____ Contract Registration Number (CT#)
(City contracts only)

Block and Lot Number
(ICIP projects only)

Contract Amount

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

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

Signature of authorized official

Date

Sworn to before me this _____ day of _____ 20 _____
Only original signatures accepted.

Notary Public

Authorized Signature

Date





NEW YORK CITY DEPARTMENT OF
DESIGN + CONSTRUCTION

**INFRASTRUCTURE DIVISION
BUREAU OF DESIGN**

VOLUME 1 OF 3

PROJECT ID: HWQ411B

RECONSTRUCTION OF ALBERT ROAD AREA

INCLUDING SEWER, WATERMAIN, STREET LIGHTING,
AND TRAFFIC SIGNAL WORK

Together With All Work Incidental Thereto

BOROUGH OF QUEENS
CITY OF NEW YORK

Contractor.

Dated _____, 20____



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

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

VOLUME 2 OF 3

LAW

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

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED FOR:

PROJECT ID: HWQ411B

RECONSTRUCTION OF ALBERT ROAD AREA

**INCLUDING SEWER, WATERMAIN, STREET LIGHTING,
AND TRAFFIC SIGNAL WORK**

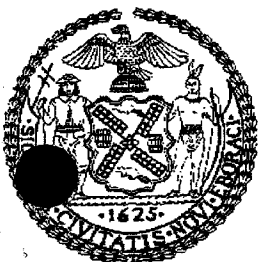
Together With All Work Incidental Thereto

**BOROUGH OF QUEENS
CITY OF NEW YORK**

FOR THE DEPARTMENT OF TRANSPORTATION
PREPARED BY
IN-HOUSE

FEBRUARY 19, 2014

4-052







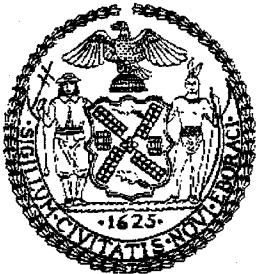
**THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE**

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

VOLUME 2 OF 3

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

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED
FOR:



FOR THE DEPARTMENT OF TRANSPORTATION
PREPARED BY
IN-HOUSE DESIGN

DECEMBER 24, 2013



NOTICE TO BIDDERS

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

Significant changes include the following:

ARTICLE 11 DAMAGES CAUSED BY DELAYS

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

ARTICLE 22 INSURANCE

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

ARTICLE 26 EXTRA WORK

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

ARTICLE 37 LABOR LAW REQUIREMENTS
ARTICLE 38 PAYROLL REPORTS

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

ARTICLE 70 ELECTRONIC FILING

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

Other significant changes include the following:

ARTICLE 7 INDEMNIFICATION

Changes have been made to the indemnification provisions.

ARTICLE 14 FINAL ACCEPTANCE OF WORK
ARTICLE 44 SUBSTANTIAL COMPLETION PAYMENT

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

ARTICLE 15 LIQUIDATED DAMAGES

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

ARTICLE 17 SUBCONTRACTS

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

ARTICLE 19 SECURITY DEPOSIT

The provisions governing the return of bid deposits are clarified.

ARTICLE 20 PAYMENT GUARANTEE

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

ARTICLE 28 RECORDKEEPING FOR EXTRA OR DISPUTED WORK

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

ARTICLE 35 EMPLOYEES

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

**ARTICLE 38 PAYROLL REPORTS
ARTICLE 77 RECORDS RETENTION**

Requirements that records be maintained for six years and directions on how such records must be made available.

ARTICLE 42 PARTIAL PAYMENTS

Increased flexibility has been provided for when contractors may submit invoices.

ARTICLE 62 TAX EXEMPTION

The provisions identifying the State tax exemption for municipalities are revised to more clearly describe State law.

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CITY OF NEW YORK

**DEPARTMENT OF
DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURES**

INFORMATION FOR BIDDERS

SEPTEMBER 2008

(NO TEXT ON THIS PAGE)

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

TABLE OF CONTENTS

SECTION 1.	DESCRIPTION AND LOCATION OF WORK	1
SECTION 2.	TIME AND PLACE FOR RECEIPT OF BIDS	1
SECTION 3.	DEFINITIONS	1
SECTION 4.	INVITATION FOR BIDS AND CONTRACT DOCUMENTS	1
SECTION 5.	PRE-BID CONFERENCE	2
SECTION 6.	AGENCY CONTACT	2
SECTION 7.	BIDDER'S OATH	2
SECTION 8.	EXAMINATION AND VIEWING OF SITE, CONSIDERATION OF OTHER SOURCES OF INFORMATION AND CHANGED CONDITIONS	2
SECTION 9.	EXAMINATION OF PROPOSED CONTRACT	3
SECTION 10.	FORM OF BID	3
SECTION 11.	IRREVOCABILITY OF BID	3
SECTION 12.	ACKNOWLEDGMENT OF AMENDMENTS	4
SECTION 13.	BID SAMPLES AND DESCRIPTIVE LITERATURE	4
SECTION 14.	PROPRIETARY INFORMATION/TRADE SECRETS	4
SECTION 15.	PRE-OPENING MODIFICATION OR WITHDRAWAL OF BIDS	4
SECTION 16.	BID EVALUATION AND AWARD	4
SECTION 17.	LATE BIDS, LATE WITHDRAWALS AND LATE MODIFICATIONS	5
SECTION 18.	WITHDRAWAL OF BIDS.	5
SECTION 19.	MISTAKE IN BIDS	5
SECTION 20.	LOW TIE BIDS	6
SECTION 21.	REJECTION OF BIDS	6
SECTION 22.	RIGHT TO APPEAL DETERMINATIONS OF NON-RESPONSIVENESS OR NON-RESPONSIBILITY AND RIGHT TO PROTEST SOLICITATIONS AND AWARD	7
SECTION 23.	AFFIRMATIVE ACTION AND EQUAL EMPLOYMENT OPPORTUNITY	7
SECTION 24.	VENDEX QUESTIONNAIRES	7
SECTION 25.	COMPLAINTS ABOUT THE BID PROCESS	8
SECTION 26.	BID, PERFORMANCE AND PAYMENT SECURITY	8
SECTION 27.	FAILURE TO EXECUTE CONTRACT	9
SECTION 28.	BIDDER RESPONSIBILITIES AND QUALIFICATIONS	9
SECTION 29.	EMPLOYMENT REPORT	10
SECTION 30.	LABOR LAW REQUIREMENTS	10
SECTION 31.	INSURANCE	10
SECTION 32.	LUMP SUM CONTRACTS	11
SECTION 33.	UNIT PRICE CONTRACTS	11
SECTION 34.	EXCISE TAX	11
SECTION 35.	LICENSES AND PERMITS	11
SECTION 36.	MULTIPLE PRIME CONTRACTORS	11
SECTION 37.	LOCALLY BASED ENTERPRISE REQUIREMENTS (LBE)	12
SECTION 38.	BID SUBMISSION REQUIREMENTS	13
SECTION 39.	COMPTROLLER'S CERTIFICATE	14
SECTION 40.	PROCUREMENT POLICY BOARD RULES	14
SECTION 41.	DDC SAFETY REQUIREMENTS	14

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INFORMATION FOR BIDDERS

1. Description and Location of Work

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

2. Time and Place for Receipt of Bids

Sealed bids shall be received on or before the date and hour specified in Attachment 1, at which time they will be publicly opened and read aloud in the presence of the Commissioner or his or her representative, and any bidders who may desire to be present.

3. Definitions

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

4. Invitation For Bids and Contract Documents

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

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

(B) For particulars as to this procurement, including quantity and quality of the purchase, extent of the work or labor to be performed, delivery and performance schedule, and any other special instructions, prospective bidders are referred to the Invitation For Bids Documents. A copy of such documents can be obtained at the location set forth in Attachment 1.

(C) Deposit for Copy of Invitation For Bids Documents: Prospective bidders may obtain a copy of the Invitation For Bids Documents by complying with the conditions set forth in the Notice of Solicitation. The deposit must be in the form of a check or money order made payable to the City of New York, and drawn upon a state or national bank or trust company, or a check of such bank or trust company signed by a duly authorized officer thereof.

(D) Return of Invitation For Bids Documents: All Invitation For Bids Documents must be returned to the Department upon request. If the bidder elects not to submit a bid thereunder, the

Invitation For Bids Documents shall be returned to the Department, along with a statement that no bid will be submitted.

(E) Return of Deposit: Such deposit will be returned within 30 days after the award of the contract or the rejection of all bids as set forth in the advertisement, provided the Invitation For Bids Documents are returned to the location specified in Attachment 1, in physical condition satisfactory to the Commissioner.

(F) Additional Copies: Additional copies of the Invitation For Bids Documents may be obtained, subject to the conditions set forth in the advertisement for bids.

5. Pre-Bid Conference

A pre-bid conference shall be held as set forth in Attachment 1. Nothing stated at the pre-bid conference shall change the terms or conditions of the Invitation For Bids Documents, unless a change is made by written amendment as provided in Section 9 below. Failure to attend a mandatory pre-bid conference shall constitute grounds for the rejection of the bid.

6. Agency Contact

Any questions or correspondence relating to this bid solicitation shall be addressed to the Agency Contact person specified in Attachment 1.

7. Bidder's Oath

(A) The bid shall be properly signed by an authorized representative of the bidder and the bid shall be verified by the written oath of the authorized representative who signed the bid, that the several matters stated and information furnished therein are in all aspects true.

(B) A materially false statement willfully or fraudulently made in connection with the bid or any of the forms completed and submitted with the bid may result in the termination of any Contract between the City and the Bidder. As a result, the Bidder may be barred from participating in future City contracts as well as be subject to possible criminal prosecution.

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

(A) Pre-Bidding (Investigation) Viewing of Site -Bidders must carefully view and examine the site of the proposed work, as well as its adjacent area, and seek other usual sources of information, for they will be conclusively presumed to have full knowledge of any and all conditions on, about or above the site relating to or affecting in any way the performance of the work to be done under the Contract which were or should have been indicated to a reasonably prudent bidder. To arrange a date for visiting the work site, bidders are to contact the Agency Contact person specified in Attachment 1.

(B) Should the contractor encounter during the progress of the work subsurface conditions at the site materially differing from any shown on the Contract Drawings or indicated in the Specifications or such subsurface conditions as could not reasonably have been anticipated by the contractor and were not anticipated by the City, which conditions will materially affect the cost of the work to be done under the

Contract, the attention of the Commissioner must be called immediately to such conditions before they are disturbed. The Commissioner shall thereupon promptly investigate the conditions. If he finds that they do so materially differ, or that they could not have been reasonably anticipated by the contractor and were not anticipated by the City, the Contract may be modified with his written approval.

9. Examination of Proposed Contract

(A) Request for Interpretation or Correction: Prospective bidders must examine the Contract Documents carefully and before bidding must request the Commissioner in writing for an interpretation or correction of every patent ambiguity, inconsistency or error therein which should have been discovered by a reasonably prudent bidder. Such interpretation or correction, as well as any additional contract provisions the Commissioner may decide to include, will be issued in writing by the Commissioner as an addendum to the Contract, which will be transmitted to each person recorded as having received a copy of the Contract Documents from the Department. Transmission of such addendum will be by mail, e-mail, facsimile or hand delivery. Such addendum will also be posted at the place where the Contract Documents are available for the inspection of prospective bidders. Upon transmission as provided for herein, such addendum shall become a part of the Contract Documents, and binding on all bidders, whether or not actual notice of such addendum is shown.

(B) Only Commissioner's Interpretation or Correction Binding: Only the written interpretation or correction so given by the Commissioner shall be binding, and prospective bidders are warned that no other officer, agent or employee of the City is authorized to give information concerning, or to explain or interpret, the Contract.

(C) Documents given to a subcontractor for the purpose of soliciting the subcontractor's bid shall include either a copy of the bid cover sheet or a separate information sheet setting forth the project name, the Contract number (if available), the contracting agency and the Project's location.

10. Form of Bid

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

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

11. Irrevocability of Bid

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

12. Acknowledgment of Amendments

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

13. Bid Samples and Descriptive Literature

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

14. Proprietary Information/Trade Secrets

(A) The bidder shall identify those portions of the bid which it deems to be confidential, proprietary information or trade secrets, and provide justification why such materials shall not be disclosed by the City. All such materials shall be clearly indicated by stamping the pages on which such information appears, at the top and bottom thereof with the word "Confidential". Such materials stamped "Confidential" must be easily separable from the non-confidential sections of the bid.

(B) All such materials so indicated shall be reviewed by the Agency and any decision not to honor a request for confidentiality shall be communicated in writing to the bidder. For those bids which are unsuccessful, all such confidential materials shall be returned to the bidder. Prices, makes and model or catalog numbers of the items offered, deliveries, and terms of payment shall be publicly available after bid opening, regardless of any designation of confidentiality made by the bidder.

15. Pre-Opening Modification or Withdrawal of Bids

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

16. Bid Evaluation and Award

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

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

17. Late Bids, Late Withdrawals and Late Modifications

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

18. Withdrawal of Bids.

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

19. Mistake in Bids

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

(B) Mistakes Discovered Before Award

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

- (a) The mistake is known or made known to the agency prior to the awarding of the Contract or within 3 days after the opening of the bid, whichever period is shorter; and
- (b) The price bid was based upon an error of such magnitude that enforcement would be unconscionable; and
- (c) The bid was submitted in good faith and the bidder submits credible evidence that the mistake was a clerical error as opposed to a judgment error; and
- (d) The error in the bid is actually due to an unintentional and substantial arithmetic error or an unintentional omission of a substantial quantity of work, labor, material or services made directly in the compilation of the bid, which unintentional arithmetic error or unintentional omission can be clearly shown by objective evidence drawn from inspection of the original work paper, documents, or materials used in the preparation of the bid sought to be withdrawn; and
- (e) It is possible to place the agency in the same position as existed prior to the bid.

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

therein is strictly prohibited.

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

20. Low Tie Bids

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

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

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

21. Rejection of Bids

(A) Rejection of Individual Bids: The Agency may reject a bid if:

- (1) The bidder fails to furnish any of the information required pursuant to Section 24 or 28 hereof; or if
- (2) The bidder is determined to be not responsible pursuant to the Procurement Policy Board Rules; or if
- (3) The bid is determined to be non-responsive pursuant to the Procurement Policy Board Rules; or if
- (4) The bid, in the opinion of the Agency Chief Contracting Officer, contains unbalanced bid prices and is thus non-responsive, unless the bidder can show that the prices are not unbalanced for the probable required quantity of items, or if the imbalance is corrected pursuant to Section 15.

(B) Rejection of All Bids: The Agency, upon written approval by the Agency Chief Contracting Officer, may reject all bids and may elect to resolicit bids if in its sole opinion it shall deem it in the best interest of the City so to do.

(C) Rejection of All Bids and Negotiation With All Responsible Bidders: The Agency Head may determine that it is appropriate to cancel the Invitation For Bids after bid opening and before award and to complete the acquisition by negotiation. This determination shall be based on one of the following reasons:

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

(D) When the Agency has determined that the Invitation for Bids is to be canceled and that use of negotiation is appropriate to complete the acquisition, the contracting officer may negotiate and award the Contract without issuing a new solicitation, subject to the following conditions:

- (1) prior notice of the intention to negotiate and a reasonable opportunity to negotiate have been given by the contracting officer to each responsible bidder that submitted a bid in response to the Invitation for Bids;
- (2) the negotiated price is the lowest negotiated price offered by a responsible bidder; and
- (3) the negotiated price is lower than the lowest rejected bid price of a responsible bidder that submitted a bid in response to the Invitation for Bids.

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

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

23. Affirmative Action and Equal Employment Opportunity

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

24. VENDEX Questionnaires

(A) Requirement: Pursuant to Administrative Code Section 6-116.2 and the PPB Rules, bidders may be obligated to complete and submit VENDEX Questionnaires. Generally, if this bid is \$100,000 or more, or if this bid when added to the sum total of all contracts, concessions and franchises the bidder has received from the City and any subcontracts received from City contractors over the past twelve months, equals or exceeds \$100,000, Vendex Questionnaires must be completed. If required, Vendex Questionnaires must be completed and submitted before any award of contract may be made or before approval is given for a proposed subcontractor. Non-compliance with these submission requirements may result in the disqualification of the bid, disapproval of a subcontractor, subsequent withdrawal of approval for the use of an approved subcontractor, or the cancellation of the contract after its award.

(B) Submission: Vendex Questionnaires must be submitted directly to the Mayor's Office of Contract Services, ATTN: Vendex, 253 Broadway, 9th Floor, New York, New York 10007. In addition, the bidder must submit a Confirmation of Vendex Compliance to the agency. A form for this confirmation is set forth in the Bid Booklet.

(C) Obtaining Forms: Vendex Questionnaires, as well as detailed instructions, may be obtained at www.nyc.gov/vendex. The bidder may also obtain Vendex forms and instructions by contacting the

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

25. Complaints About the Bid Process

The New York City Comptroller is charged with the audit of contracts in New York City. Any vendor who believes that there has been unfairness, favoritism or impropriety in the bid process should inform the Comptroller, Office of Contract Administration, One Centre Street, Room 835, New York, New York; telephone number (212)669-2797.

26. Bid, Performance and Payment Security

(A) Bid Security: Each bid must be accompanied by bid security in an amount and type specified in Attachment 1 (page A-1 of the Bid Booklet). The bid security shall assure the City of New York of the adherence of the bidder to its proposal, the execution of the Contract, and the furnishing of Performance and Payment Bonds by the bidder, if required in Attachment 1. Bid security shall be returned to the bidder as follows:

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

(B) Performance and Payment Security: Performance and Payment Security must be provided in an amount and type specified in Attachment 1 (page A-1 of the Bid Booklet). The performance and payment security shall be delivered by the contractor prior to or at the time of execution of the Contract. If a contractor fails to deliver the required performance and payment security, its bid security shall be enforced, and an award of Contract may be made to the next lowest responsible and responsive bidder, or the contract may be rebid.

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

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

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

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

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

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

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

27. Failure to Execute Contract

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

28. Bidder Responsibilities and Qualifications

(A) Bidders must include with their bids all information necessary for a determination of bidder responsibility, as set forth in the Specifications.

(B) The Agency may require any bidder or prospective bidder to furnish all books of account, records, vouchers, statements or other information concerning the bidder's financial status for examination as may be required by the Agency to ascertain the bidder's responsibility and capability to perform the Contract. If required, a bidder must also submit a sworn statement setting forth such information as the Agency may require concerning present and proposed plant and equipment, the personnel and qualifications of his working organizations, prior experience and performance record.

(C) Oral Examination on Qualifications: In addition thereto, and when directed by the Agency, the bidder, or a responsible officer, agent or employee of the bidder, must submit to an oral examination to be conducted by the Agency in relation to his proposed tentative plan and schedule of

operations, and such other matters as the Agency may deem necessary in order to determine the bidder's ability and responsibility to perform the work in accordance with the Contract. Each person so examined must sign and verify a stenographic transcript of such examination noting thereon such corrections as such person may desire to make.

(D) If the bidder fails or refuses to supply any of the documents or information set forth in paragraph (B) hereof or fails to comply with any of the requirements thereof, the Agency may reject the bid.

29. Employment Report

In accordance with Executive Order No. 50 (1980) as modified by Executive Order 108 (1986), the filing of a completed Employment Report (ER) is a requirement of doing business with the City of New York for construction contractors with contracts of \$1,000,000 or more and subcontractors with construction subcontracts of \$750,000 or more. The required forms and information are included in the Bid Booklet.

30. Labor Law Requirements

(A) General: The successful bidder will be required to comply strictly with all Federal, State and local labor laws and regulations.

(B) New York State Labor Law: This Contract is subject to New York State Labor Law Section 220, which requires that construction workers on the site be paid prevailing wages and supplements. The Contractor is reminded that all wage provisions of this Contract will be enforced strictly and failure to comply will be considered when evaluating performance. Noncompliance may result in the contractor being debarred by the City from future contracts. Complaints filed with the Comptroller may result in decisions which may debar a contractor from bidding contracts with any state governmental entity and other political subdivisions.

(C) Records: The Contractor is expected to submit accurate payroll reports and other required documents and verify attendance and job classifications being utilized in compliance with the law, Contract provisions and agency procedures.

31. Insurance

(A) Bidders are advised that the insurance requirements contained herein are regarded as material terms of the Contract. As required by Article 22 of the Contract, the contractor must effect and maintain with companies licensed and authorized to do business in the State of New York, the types of insurance set forth therein, when required by and in the amounts set forth in Schedule A of the General Conditions. Such required insurance must be provided from the date the contractor is ordered to commence work and up to the date of final acceptance of all required work.

(B) The contractor must, within ten days of receipt of the notice of award, submit the following insurance documentation: (a) original certificate of insurance for general liability in the amount required by Schedule A of the General Conditions, and (b) original certificates of insurance or other proof of coverage for workers' compensation and disability benefits, as required by Section 57 of the New York State Workers' Compensation Law and Section 220 of the Disability Benefits Law.

32. Lump Sum Contracts

(A) Comparison of Bids: Bids on Lump Sum Contracts will be compared on the basis of the lump sum price bid, adjusted for alternate prices bid, if any.

(B) Lump Sum Bids for "General Construction Work" which include excavation shall include all necessary excavation work defined in the Specifications as being included in the lump sum bid. The bidder shall also bid a unit price for the additional cost of excavating material which is defined in the Specifications as excavation for which additional payment will be made. The total estimated additional cost of removing such material will be taken as the quantity set forth in the Engineer's Estimate multiplied by the unit price bid. This total estimated cost of additional excavation shall be added to the lump sum bid for the General Construction Work for the purpose of comparing bids to determine the low bidder.

(C) Variations from Engineer's Estimate: The Engineer's Estimate of the quantity of excavation for which additional payment will be made is approximate only and is given solely to be used as a uniform basis for the comparison of bids and such estimate is not to be considered as part of this contract. The quantities actually required to complete the contract work may be more or less than the quantities in the Engineer's Estimate and, if so, no action for damages or for loss of profits shall accrue to the contractor by reason thereof.

33. Unit Price Contracts

(A) Comparison of Bids: Bids on Unit Price Contracts will be compared on the basis of a total estimated price, arrived at by taking the sum of the estimated quantities of such items, in accordance with the Engineer's Estimate of Quantities set forth in the Bid Schedule, multiplied by the corresponding unit prices, and including any lump sum bids on individual items.

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

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

34. Excise Tax

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

35. Licenses and Permits

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

36. Multiple Prime Contractors

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

37. Locally Based Enterprise Requirements (LBE)

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

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

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

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

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

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

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

- (a) the name and address of each LBE that will be given a subcontract,
- (b) the percentage, dollar amount and type of work to be subcontracted to the LBE, and
- (c) the dates when the LBE subcontract work will commence and end.

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

- (a) verification letters from each subcontractor listed in the "LBE Participation Schedule" stating that the LBE will enter into a formal agreement for work,
- (b) certification documents of any proposed LBE subcontractor which is not on the LBE certified list, and
- (c) copies of the certification letter of any proposed subcontractor which is an LBE.

(3) Documentation of good faith efforts to achieve the required LBE percentage shall include as appropriate but not limited to the following:

- (a) attendance at prebid meetings, when scheduled by the agency, to advise bidders of contract requirements;

- (b) advertisement where appropriate in general circulation media, trade association publications and small business media of the specific subcontracts that would be at least equal to the percentage goal for LBE utilization specified by the contractor;
- (c) written notification to association of small, minority and women contractors soliciting specific subcontractors;
- (d) written notification by certified mail to LBE firms that their interest in the contract is solicited for specific work items and their estimated values;
- (e) demonstration of efforts made to select portions of the work for performance by LBE firms in order to increase the likelihood of achieving the stated goal;
- (f) documented efforts to negotiate with LBE firms for specific subcontracts, including at a minimum:
 - (i) The names, address and telephone numbers of LBE firms that are contacted;
 - (ii) A description of the information provided to LBE firms regarding the plans and specifications for portions of the work to be performed;
 - (iii) Documentation showing that no reasonable price can be obtained from LBE firms;
 - (iv) A statement of why agreements with LBE firms were not reached;
- (g) a statement of the reason for rejecting any LBE firm which the contractor deemed to be unqualified; and
- (h) documentation of efforts made to assist the LBE firms contacted that needed assistance in obtaining required insurance.

(E) Unless otherwise waived by the Commissioner with the approval of the Office of Economic and Financial Opportunity, failure of a proposed contractor to provide the information required by paragraphs (C) and (D) above may render the bid non-responsive and the Contract may not be awarded to the bidder. If the contractor states that it will subcontract a specific portion of the work, but can demonstrate despite good faith efforts it cannot achieve its required LBE percentage for subcontracted work until after award of Contract, the Contract may be awarded, subject to a letter of compliance from the contractor stating that it will comply with Administrative Code Section 6-108.1 and subject to approval by the Commissioner. If the contractor has not met its required LBE percentage prior to award, the contractor shall demonstrate that a good faith effort has been made subsequent to award to obtain LBEs on each subcontract until it meets the required percentage.

(F) When a bidder indicates prior to award that no work will be subcontracted, no work may be subcontracted without the prior written approval of the Commissioner, which shall be granted only if the contractor in good faith seeks LBE subcontractors at least six weeks prior to the start of work.

(G) The contractor may not substitute or change any LBE which was identified prior to award of the contract without the written permission of the Commissioner. The contractor shall make a written application to the Commissioner for permission to make such substitution or change, explaining why the contractor needs to change its LBE subcontractor and how the contractor will meet its LBE subcontracting requirement. Copies of such application must be served on the originally identified LBE by certified mail return receipt requested, as well as the proposed substitute LBE. The Commissioner shall determine whether or not to grant the contractor's request for substitution.

38. Bid Submission Requirements

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

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

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

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

**FAILURE TO SUBMIT ITEMS (4) THROUGH (9)
MAY RESULT IN THE DISQUALIFICATION OF THE BID.**

39. Comptroller's Certificate

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

40. Procurement Policy Board Rules

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

41. DDC Safety Requirements

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

CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
SAFETY REQUIREMENTS

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**

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) including, but not limited to “Respiratory Protection” (29 CFR 1910.134), “Permit-Required Confined Spaces” (29 CFR 1910.146), and “Hazard Communication” (29 CFR 1910.1200);
- ❑ 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 753
- ❑ NYC Local Law No. 113 (2005) Noise Control Code

In addition, all regulations promulgated by the NYC Department of Transportation, including requirements for Maintenance and Protection of Traffic (MPT), are applicable when contained in contract specifications. While MPT is a significant component of work in our Infrastructure Division, it does not supersede or exempt Contractors from complying with other applicable health and safety standards (for example, excavating and trenching standards, operation of heavy equipment and compliance with City environmental and noise regulations).

II. PURPOSE

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

III. DEFINITIONS

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

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

Construction Safety Auditor: A representative of the QACS 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.

City of New York Department of Design and Construction: Safety Requirements
Technical Support Division – Bureau of Quality Assurance and Construction Safety

Construction Safety Unit: A part of QACS within the Division of Technical Support that assesses contractor safety on DDC jobsites and advises responsible parties of needed corrective actions.

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”).

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

Job Hazard Assessment (JHA): A process of identifying site-specific hazards that may be present during construction and establishing the means and methods to reduce or eliminate those hazards.

Jobsite Safety Coordinator: A person designated by the Contractor to be onsite during all activities. This individual shall have received, at a minimum, the OSHA 10-hour construction safety program. Other examples of acceptable training are the 30-hour OSHA Safety and Health Standards for the Construction Industry training program (OSHA 510) or a degree/certificate in a safety and health from a college-level curriculum. This person does not necessarily have to be dedicated full-time to site safety, but must have sufficient experience and authority to undertake corrective action and must qualify to be a competent person. For certain projects, as defined in NYC Construction Codes – Title 28, this person may be required to have a Site Safety Manager’s License issued by the NYC DOB.

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.

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 CM, 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 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 precautions 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.

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. Resident Engineer / Construction Project Manager / Construction 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 meeting.
- 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 Protocol.
- Gathers facts related to all accidents and prepares DDC Accident Reports.
- Notifies the Construction Safety Unit of outside regulatory agency inspections and forwards a copy of the inspection report within three days of its receipt.
- Monitors the conditions at the site for conformance with the 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 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 emergency condition and directs the contractor to provide such labor, materials, equipment and supervision to abate such conditions.
- Reports gross safety violations to the Construction Safety Unit immediately.

B. Contractors

- Complete a Safety Questionnaire and submit with its bid or as part of a pre-qualification package.
- Provide a Written Job Hazard Assessment (JHA) that identifies expected safety issues of the work to be performed. JHA shall be included with the Site Safety Plan submitted by the contractor.
- Submit a Site Safety Plan and Safety Program within 15 days of issuance of the Notice to Proceed, 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.
- Ensure that all employees are aware of the hazards associated with the project through formal and informal training and/or other communications. Conduct and document weekly safety meetings for the duration of the project. Documentation to be provided to the RE/CPM/CM on a monthly basis.
- Name a Construction Superintendent, if required.
- Name a Job Site Safety Coordinator. The Contractor will be required to identify the Job Site Safety Coordinator 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.
- As part of the Site Safety Plan, prepare a site specific MPT (if not otherwise provided in the contract documents) and comply with all of its provisions.

City of New York Department of Design and Construction: Safety Requirements
Technical Support Division – Bureau of Quality Assurance and Construction Safety

- 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 controls that will be used to protect workers, the general public and property. The Job Site Safety Coordinator will conduct this training prior to mobilization and provide documentation to the RE/CPM/CM.
- 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 conditions or hazards to the DDC RE/CPM/CM as soon as practical, but no more than 24 hours after discovery, and take action to remove or abate such conditions.
- Report any accident involving injuries to workers or the general public, as well as property damage, to the DDC RE/CPM/CM within two (2) hours.
- Notify the DDC RE/CPM/CM within two (2) hours of the start of an inspection by any regulatory agency personnel, including OSHA.
- Maintain all records pertaining to all required compliance documents and accident and injury reports.
- Respond to 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 and environmental 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 their workers' compensation experience modification rating and OSHA Incidence 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 update within 30 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 years; and
- Criteria 4: A fatality (worker or member of public) experienced on or near Contractor's worksite within the last three (3) years; and
- Criteria 5: An unacceptable rating by QACS based on past performance on DDC projects; and
- Criteria 6: Contractor has in place an acceptable corporate safety program and its employees shall have completed all documented relative safety training; and
- Criteria 7: Contractor shall provide OSHA Injury Records (currently OSHA 300 Log) 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 detail concerning the Contractor's safety experience. DDC may request the Contractor to provide copies of, among other things, OSHA records, OSHA and DOB citations, EPA citations and written Safety Programs.

VI. SAFETY PROGRAM AND SITE SAFETY PLAN

Within fifteen (15) days of issuance of the Notice to Proceed, 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 standard, and the Site Safety Plan shall identify hazards associated with the project, and include specific safety precautions 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.

The Site Safety Plan shall apply to all Contractor and subcontractor operations, and shall have at a minimum, the following elements. Each element shall be described in a separate section in the written document. It may be necessary to modify the basic format for certain unique or high-risk projects (such as tunnels or high-rise construction). The basic elements are as follows:

1. **Responsibility and Organization:** Identify the person or persons with authority and responsibility for implementing the Site Safety Plan. Provide an organization chart and define levels of authority and responsibility. Identify the Competent Person, the Construction Superintendent (if required), the Job Safety Coordinator and the Qualified Person required for this project.
2. **Communication:** Establish a system for communicating with employees and subcontractors on matters relating to worker and public safety and health and environmental protection, including provisions designed to encourage employees to inform the employer of hazards at the worksite without fear of reprisal. An emergency response notification protocol is to be established that also includes after hours contact numbers. The plan must also include provisions for weekly safety meetings held by the Job Site Safety Coordinator.
3. **Job Hazard Assessment:** A written document submitted by the contractor, used to identify expected job hazards and public safety risks and state the specific means and methods to reduce, control or eliminate those hazards. This part of the Site Safety Plan must also include how on-going evaluations of those risks and hazards will be carried out, including plans for periodic inspections to identify unsafe conditions, work practices and public safety hazards.
4. **Accident/Exposure Investigation:** Establish a procedure to investigate and report occupational and public injury or illness, property damage, vehicle accidents or other mishaps.
5. **Hazard Correction:** Establish means, methods and/or procedures for correcting unsafe or unhealthy conditions that might be exposing both the public and workers to hazards. Corrective actions must be taken immediately when observed or discovered. Should an imminent hazard exist which cannot be immediately abated without endangering employees, the public and/or property, remove or restrict all exposed persons from the area except those necessary to correct the existing condition. Employees necessary to correct the hazardous condition shall be provided the necessary safeguards. When corrective actions cannot be taken immediately, temporary measures should be taken until such time permanent measures are taken to eliminate the potential risks or hazards.
6. **Training:** Describe site-specific hazard training programs. In addition to the required safety orientation, additional site specific training, in the form of required weekly safety meetings, will be required. Contractors must also initiate training when: a) new employees are hired; b) employees are given new job assignments for which training has not been previously received; c) new substances, processes, procedures or equipment are introduced that might represent a new public or worker hazard; d) the employee is made aware of a new or previously unrecognized hazard; e) new supervisors are assigned to familiarize themselves with the safety and health hazards to which employees under their immediate direction and control may be exposed; and f) after a jobsite incident or accident has occurred.

City of New York Department of Design and Construction: Safety Requirements
Technical Support Division – Bureau of Quality Assurance and Construction Safety

7. Recordkeeping: Establish procedures to maintain records of scheduled and periodic inspections, weekly safety meetings, and training records. Updated records shall be maintained at the jobsite, accessible to the Construction Safety Auditors and/or Quality Assurance Auditors/RE/CPM, and retained in accordance with DDC policy.

The most critical component of the Site Safety Plan is the Job Hazard Assessment section. This section must address specific hazards that are anticipated throughout the project. Each Site Safety Plan must address, at a minimum:

- Public and pedestrian safety
- Fall protection
- Electrical hazards
- Scaffolding
- Fire protection
- Emergency notification & response
- Housekeeping / debris removal
- Dust control
- Maintenance and protection of traffic
- Trenching and excavating
- Heavy equipment operations
- Material / equipment storage
- Environmental contamination
- Sheeting and shoring
- Alcohol and Drug Abuse Policy

The following additional hazards must be addressed, if applicable, based on the contract safety specifications and/or the results of the JHA (the list is not all-inclusive):

- Basic Personal Protective Equipment
- Compressed Air
- Compressed Gas Cylinders
- Cranes, Derricks and Hoists
- Demolition
- Electrical safety
- Excavations and Trenching
- Fall Protection – Floor openings/Stairways
- Fall Protection – Guardrails Toe boards etc
- Fall Protection – Leading Edge
- Fall Protection – Personal Fall Protection Devices
- Fire Protection and Fire Prevention
- Hazard Communication (RIGHT TO KNOW)
- Hazardous Energy & Lock Out / Tag Out
- Housekeeping/ Sanitation
- Maintenance and Protection of Traffic (MPT)
- Man Lifts /Aerial Lifts
- Marine Operations
- Motor Vehicle Safety
- Overhead Power lines
- Permit Required Confined Space
- Portable Ladders
- Powered Actuated Tools
- Powered Material Handling Equipment
- Scaffolds – Mobile
- Scaffolds – Stationary
- Scaffolds – Suspended
- Slings
- Steel Erection

City of New York Department of Design and Construction: Safety Requirements
Technical Support Division – Bureau of Quality Assurance and Construction Safety

- Welding and Cutting (Hot Work)
- Airborne Contaminants – Particulates – General
- Asbestos
- Blood borne Pathogens
- Hearing Protection
- Lead in Construction
- Mercury in Construction
- PCB's
- Respiratory Protection
- Silica
- Thermal Stress
- West Nile Virus
- Rodents and Vermin
- Noise Mitigation Plan

Certain DDC programs, such as Job Order Contracting System (JOCS), may not necessarily require Site Safety Plans. The JOCS contractor will be required to submit a Safety Program. In addition, certain DDC Operating Units may establish program or client-specific safety requirements. The contractor's Site Safety Plan must address such program or client specific safety requirements.

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

As part of the construction kick-off meeting, a Site Safety Plan review will be part of the agenda. A QACS representative will participate in this meeting with the contractor 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 DDC personnel.

VIII. EVALUATION DURING WORK IN PROGRESS

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

- A. Use of a safety checklist by a representative of the 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 Superintendents or 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 forward them to the Construction Safety Unit on a weekly basis. Any critical deficiencies shall be immediately reported to QACS 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- QACS, or designee will meet with the Contractor's safety representative, the DDC project manager, the RE/CPM, or 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.

City of New York Department of Design and Construction: Safety Requirements
Technical Support Division – Bureau of Quality Assurance and Construction Safety

- 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 inform the Construction Safety Unit and ACCO Insurance and Risk Management Unit of all medical injuries or illnesses that require doctors' treatment resulting from an on-the-job incident within 24 hours of the occurrence. The Construction Safety Unit shall also be immediately informed of all fatalities, catastrophic accidents with more than one employee hospitalized, any injuries to members of the general public and major equipment damage (e.g., property damage, equipment rollovers, loads dropped from crane). QACS shall maintain a record of all contractor injuries and illnesses during the project and provide regular reports to the Agency.
- F. The Construction Safety Unit shall be immediately notified at the start of any NYS-DOL/ NYC-COSH/ OSHA/ EPA inspections. The Director of Quality Assurance & Construction Safety shall maintain a log of all contractor OSHA/EPA inspections and citations during the project.

IX. SAFETY PERFORMANCE EVALUATION

The contractor's safety record, including all DDC 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 will 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

DECEMBER 2013

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**CITY OF NEW YORK
STANDARD CONSTRUCTION CONTRACT**

TABLE OF CONTENTS

CHAPTER I

THE CONTRACT AND DEFINITIONS

ARTICLE 1.	THE CONTRACT	1
ARTICLE 2.	DEFINITIONS	1

CHAPTER II

THE WORK AND ITS PERFORMANCE

ARTICLE 3.	CHARACTER OF THE WORK	4
ARTICLE 4.	MEANS AND METHODS OF CONSTRUCTION	4
ARTICLE 5.	COMPLIANCE WITH LAWS	4
ARTICLE 6.	INSPECTION	9
ARTICLE 7.	PROTECTION OF WORK AND OF PERSONS AND PROPERTY; NOTICES AND INDEMNIFICATION	10

CHAPTER III

TIME PROVISIONS

ARTICLE 8.	COMMENCEMENT AND PROTECTION OF THE WORK	11
ARTICLE 9.	PROGRESS SCHEDULES	11
ARTICLE 10.	REQUESTS FOR INFORMATION OR APPROVAL	12
ARTICLE 11.	NOTICE OF CONDITIONS CAUSING DELAY AND DOCUMENTATION OF DAMAGES CAUSED BY DELAY	12
ARTICLE 12.	COORDINATION WITH OTHER CONTRACTORS	13
ARTICLE 13.	EXTENSION OF TIME FOR PERFORMANCE	14
ARTICLE 14.	COMPLETION AND FINAL ACCEPTANCE OF THE WORK	16
ARTICLE 15.	LIQUIDATED DAMAGES	17
ARTICLE 16.	OCCUPATION OR USE PRIOR TO COMPLETION	18

CHAPTER IV

SUBCONTRACTS AND ASSIGNMENTS

ARTICLE 17.	SUBCONTRACTS	18
ARTICLE 18.	ASSIGNMENTS	20

**CITY OF NEW YORK
STANDARD CONSTRUCTION CONTRACT**

TABLE OF CONTENTS

CHAPTER V

CONTRACTOR'S SECURITY AND GUARANTY

ARTICLE 19.	SECURITY DEPOSIT	20
ARTICLE 20.	PAYMENT GUARANTEE	20
ARTICLE 21.	RETAINED PERCENTAGE	22
ARTICLE 22.	INSURANCE	23
ARTICLE 23.	MONEY RETAINED AGAINST CLAIMS	28
ARTICLE 24.	MAINTENANCE AND GUARANTY	28

CHAPTER VI

CHANGES, EXTRA WORK AND DOCUMENTATION OF CLAIM

ARTICLE 25.	CHANGES	29
ARTICLE 26.	METHODS OF PAYMENT FOR OVERRUNS AND EXTRA WORK	30
ARTICLE 27.	RESOLUTION OF DISPUTES	32
ARTICLE 28.	RECORD KEEPING FOR EXTRA OR DISPUTED WORK	36
ARTICLE 29.	OMITTED WORK	36
ARTICLE 30.	NOTICE AND DOCUMENTATION OF COSTS AND DAMAGES; PRODUCTION OF FINANCIAL RECORDS	37

CHAPTER VII

**POWERS OF THE RESIDENT ENGINEER, THE ENGINEER
OR ARCHITECT AND THE COMMISSIONER**

ARTICLE 31.	THE RESIDENT ENGINEER	38
ARTICLE 32.	THE ENGINEER OR ARCHITECT OR PROJECT MANAGER	38
ARTICLE 33.	THE COMMISSIONER	39
ARTICLE 34.	NO ESTOPPEL	39

CHAPTER VIII

LABOR PROVISIONS

ARTICLE 35.	EMPLOYEES	39
ARTICLE 36.	NO DISCRIMINATION	40
ARTICLE 37.	LABOR LAW REQUIREMENTS	42
ARTICLE 38.	PAYROLL REPORTS	47
ARTICLE 39.	DUST HAZARDS	47

**CITY OF NEW YORK
STANDARD CONSTRUCTION CONTRACT**

TABLE OF CONTENTS

CHAPTER IX

PARTIAL AND FINAL PAYMENTS

ARTICLE 40.	CONTRACT PRICE	47
ARTICLE 41.	BID BREAKDOWN ON LUMP SUM	47
ARTICLE 42.	PARTIAL PAYMENTS	48
ARTICLE 43.	PROMPT PAYMENT	48
ARTICLE 44.	SUBSTANTIAL COMPLETION PAYMENT	49
ARTICLE 45.	FINAL PAYMENT	50
ARTICLE 46.	ACCEPTANCE OF FINAL PAYMENT	51
ARTICLE 47.	APPROVAL BY PUBLIC DESIGN COMMISSION	51

CHAPTER X

CONTRACTOR'S DEFAULT

ARTICLE 48.	COMMISSIONER'S RIGHT TO DECLARE CONTRACTOR IN DEFAULT	52
ARTICLE 49.	EXERCISE OF THE RIGHT TO DECLARE DEFAULT	53
ARTICLE 50.	QUITTING THE SITE	53
ARTICLE 51.	COMPLETION OF THE WORK	53
ARTICLE 52.	PARTIAL DEFAULT	53
ARTICLE 53.	PERFORMANCE OF UNCOMPLETED WORK	54
ARTICLE 54.	OTHER REMEDIES	54

CHAPTER XI

MISCELLANEOUS PROVISIONS

ARTICLE 55.	CONTRACTOR'S WARRANTIES	54
ARTICLE 56.	CLAIMS AND ACTIONS THEREON	55
ARTICLE 57.	INFRINGEMENT	55
ARTICLE 58.	NO CLAIM AGAINST OFFICERS, AGENTS OR EMPLOYEES	55
ARTICLE 59.	SERVICES OF NOTICES	55
ARTICLE 60.	UNLAWFUL PROVISIONS DEEMED STRICKEN FROM CONTRACT	56
ARTICLE 61.	ALL LEGAL PROVISIONS DEEMED INCLUDED	56
ARTICLE 62.	TAX EXEMPTION	56
ARTICLE 63.	INVESTIGATION(S) CLAUSE	57
ARTICLE 64.	TERMINATION BY THE CITY	59
ARTICLE 65.	CHOICE OF LAW, CONSENT TO JURISDICTION AND VENUE	62

**CITY OF NEW YORK
STANDARD CONSTRUCTION CONTRACT**

TABLE OF CONTENTS

CHAPTER XI (CONT'D)

MISCELLANEOUS PROVISIONS

ARTICLE 66.	PARTICIPATION IN AN INTERNATIONAL BOYCOTT	74
ARTICLE 67.	LOCALLY BASED ENTERPRISE PROGRAM	74
ARTICLE 68.	ANTITRUST	75
ARTICLE 69.	MACBRIDE PRINCIPLES PROVISIONS	75
ARTICLE 70	ELECTRONIC FILING/NYC DEVELOPMENT HUB	77
ARTICLE 71.	PROHIBITION OF TROPICAL HARDWOODS	77
ARTICLE 72.	CONFLICTS OF INTEREST	78
ARTICLE 73.	MERGER CLAUSE	78
ARTICLE 74.	STATEMENT OF WORK	78
ARTICLE 75.	COMPENSATION TO BE PAID TO CONTRACTOR	78
ARTICLE 76:	ELECTRONIC FUNDS TRANSFER	78
ARTICLE 77:	RECORDS RETENTION	79
ARTICLE 78:	PARTICIPATION BY MINORITY-OWNED AND WOMEN-OWNED BUSINESS ENTERPRISES IN CITY PROCUREMENT	79
SIGNATURES		87
ACKNOWLEDGMENT BY CORPORATION		88
ACKNOWLEDGMENT BY PARTNERSHIP		88
ACKNOWLEDGMENT BY INDIVIDUAL		88
ACKNOWLEDGMENT BY COMMISSIONER		88
AUTHORITY		89
COMPTROLLER'S CERTIFICATE		90
MAYOR'S CERTIFICATE		91
PERFORMANCE BOND #1		92
PERFORMANCE BOND #2		96
PAYMENT BOND		100

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 seven (7) **Days** after the commencement of such condition, the **Contractor** must notify the **Engineer** in writing of the existence, nature and effect of such condition upon the approved progress schedule and the **Work**, and must state why and in what respects, if any, the condition is causing or may cause a delay.

11.1.2 If the **Contractor** shall claim to be sustaining damages for delay as provided for in this Article 11, within forty-five (45) **Days** from the time such damages are first incurred, and every thirty (30) **Days** thereafter for as long as such damages are being incurred, the **Contractor** shall submit to the **Commissioner** verified written statements of the details and the amounts of such damages, together with documentary evidence of such damages, ("statement of delay damages") as further detailed in Article 11.6. The **Contractor** may submit any of the above statements within such additional time as may be granted by the **Commissioner** in writing upon written request therefor. On failure of the **Contractor** to strictly comply with all of the foregoing provisions, such claims shall be deemed waived and no right to recover on such claims shall exist. Damages that the **Contractor** may claim in any action arising under or by reason of this **Contract** shall not be different from or in excess of the statements made and documentation provided pursuant to this Article 11.

11.1.3 Within 60 days of submission of the final verified statement of claims pursuant to Article 44, the **Commissioner** shall make a determination as to whether a compensable delay has occurred and, if so, the amount of compensation due the **Contractor**. Notwithstanding the above, the **Commissioner** may make a determination as to whether a compensable delay has occurred at any time after the **Contractor's** first submission of a statement of delay damages provided, however, that the amount of compensation due to the **Contractor** will not be determined until the **Commissioner** determines that the **Work** is delayed after the date set for substantial completion.

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

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

11.4 Compensable Delays

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

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

11.4.1.2 Extended delays attributable to the **City** in the review or issuance of change orders, in shop drawing reviews and approvals or as a result of the cumulative impact of multiple change orders, which have a verifiable impact on **Project** costs.

11.4.1.3 The unavailability of the **Site** for an extended period of time that significantly affects the scheduled completion of the **Contract**.

- 11.4.1.4 The issuance by the **Engineer** of a stop work order relative to a substantial portion of the **Work** for a period exceeding thirty (30) **Days**, that was not brought about through any action or omission of the **Contractor**.
- 11.4.1.5 Differing site conditions that were neither known nor reasonably ascertainable on a pre-bid inspection of the **Site** or review of the bid documents or other publicly available sources, and that are not ordinarily encountered in the **Project's** geographical area or neighborhood or in the type of **Work** to be performed.
- 11.4.1.6 Delays caused by the **City's** bad faith or its willful, malicious, or grossly negligent conduct;
- 11.4.1.7 Delays not contemplated by the parties;
- 11.4.1.8 Delays so unreasonable that they constitute an intentional abandonment of the **Contract** by the **City**; and
- 11.4.1.9 Delays resulting from the **City's** breach of a fundamental obligation of the **Contract**.

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

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

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

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

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

11.5.3 Restraining orders, injunctions or judgments issued by a court which were caused by a Contractor's submission, action or inaction or by a Contractor's **Means and Methods of**

Construction, or by third parties, unless such order, injunction or judgment was the result of an action or omission by the **City**;

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

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

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

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

11.6 Required Content of Submission of Statement of Delay Damages

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

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

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

11.6.1.3 The amount of additional compensation sought and a breakdown of that amount into categories as described in Article 26.2, subject to the limitations set forth in Article 11.7.

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

11.7 Recoverable Costs

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

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

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

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

11.7.1.4 Insurance and bond costs;

11.7.1.5 Extended field office costs;

11.7.1.6 Extended **Site** overhead; and

11.7.1.7 Extended home office overhead.

11.7.2 **Recoverable Subcontractor Costs**. When the **Work** is performed by a **Subcontractor**, the **Contractor** may be paid the actual and necessary costs of such subcontracted **Work** as outlined above in Articles 11.7.1.1 through 11.7.1.6, and an

additional overhead of five (5%) percent of the costs outlined in Articles 11.7.1.1 through 11.7.1.3.

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

11.7.3.1 Profit, or loss of anticipated or unanticipated profit;

11.7.3.2 Consequential damages, including but not limited to interest on monies in dispute, including interest which is paid on such monies, loss of bonding capacity, bidding opportunities, or interest in investment, or any resulting insolvency;

11.7.3.3 Indirect costs or expenses of any nature;

11.7.3.4 Direct or indirect costs attributable to performance of **Work** where the **Contractor**, because of situations or conditions within its control, has not progressed the **Work** in a satisfactory manner; and

11.7.3.5 Attorneys' fees and dispute and claims preparation expenses.

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

11.9 If the parties agree, pursuant to Article 11.1.3 above, that a compensable delay has occurred and agree on the amount of compensation, payment may be made pursuant to a written change order. Payment pursuant to such change order is subject to pre-audit by the **Engineering Audit Officer**, and may be post-audited by the **Comptroller** and/or the **Agency**.

ARTICLE 12. COORDINATION WITH OTHER CONTRACTORS

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

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

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

the City for any damages relating to or arising out of any directions issued by the **Engineer** pursuant to this Article 12 (including but not limited to the failure of any **Other Contractor** to comply or promptly comply with such directions), or the failure of the **Engineer** to issue any directions, or the failure of any **Other Contractor** to coordinate its work, or the default in performance of any **Other Contractor**.

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

12.5 Should the **Contractor** sustain any damage through any act or omission of any **Other Contractor** having a contract with the **City** for the performance of work upon the **Site** or of work which may be necessary to be performed for the proper prosecution of the **Work** to be performed hereunder, or through any act or omission of a subcontractor of such **Other Contractor**, the **Contractor** shall have no claim against the **City** for such damage, but shall have a right to recover such damage from the **Other Contractor** under the provision similar to the following provisions which apply to this **Contract** and have been or will be inserted in the contracts with such **Other Contractors**:

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

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

ARTICLE 13. EXTENSION OF TIME FOR PERFORMANCE

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

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

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

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

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

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

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

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

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

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

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

13.8 Application for Extension of Time:

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

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

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

13.8.1(c) Original total bid price;

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

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

13.8.1(f) The extension of time requested.

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

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

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

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

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

13.9 Analysis and Approval of Time Extensions:

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

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

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

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

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

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

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

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

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

ARTICLE 14. COMPLETION AND FINAL ACCEPTANCE OF THE WORK

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

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

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

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

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

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

14.5 Request for Inspection: Inspection of the **Work** by the **Engineer** for the purpose of **Substantial Completion** or **Final Acceptance** shall be made within ten (10) **Days** after receipt of the **Contractor's** written request therefor.

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

14.7 Initiation of Inspection by the **Engineer**: If the **Contractor** does not request inspection or re-inspection of the **Work** for the purpose of **Substantial Completion** or **Final Acceptance**, the **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** shall inspect the part of the **Work** to be taken over, used, occupied, or operated, and will furnish the **Contractor** with a written statement of the **Work**, if any, which remains to be performed on such part. The **Contractor** shall not object to, nor interfere with, the **Commissioner's** decision to exercise the rights granted by Article 16. In the event the **Commissioner** takes over, uses, occupies, or operates any part of the **Work**:

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

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

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

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

CHAPTER IV SUBCONTRACTS AND ASSIGNMENTS

ARTICLE 17. SUBCONTRACTS

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

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

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

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

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.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 18. ASSIGNMENTS

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

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

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

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

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

**CHAPTER V
CONTRACTOR'S SECURITY AND GUARANTEE**

ARTICLE 19. SECURITY DEPOSIT

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

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

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

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

19.3.2 To indemnify the City against any and all claims.

ARTICLE 20. PAYMENT GUARANTEE

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

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

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

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

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

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

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

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

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

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

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

20.3.7 All demands made against the **City** by a beneficiary of this payment guarantee shall be presented to the **Engineer** along with all written documentation concerning the demand which the **Engineer** deems reasonably appropriate or necessary, which may include, but shall not be limited to: the subcontract; any invoices presented to the **Contractor** for payment; the notarized statement of the beneficiary that the demand is due and payable, that a request for payment has been made of the **Contractor** and that the demand has not been paid by the **Contractor** within the time allowed for such payment by the subcontract; and copies of any correspondence between the beneficiary and the **Contractor** concerning such demand. The **City** shall notify the **Contractor** that a demand has been made. The **Contractor** shall inform the **City** of any defenses to the demand and shall forward to the **City** any documents the **City** requests concerning the demand.

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

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

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

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

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

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

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

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

20.7 Nothing in this Article 20 shall relieve the **Contractor** of the obligation to pay the claims of all persons with valid and lawful claims against the **Contractor** relating to the **Work**.

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

20.9 The payment guarantee made pursuant to this Article 20 shall be construed in a manner consistent with Section 137 of the State Finance Law and shall afford to persons furnishing labor or materials to the **Contractor** or its **Subcontractors** in the prosecution of the **Work** under this **Contract** all of the rights and remedies afforded to such persons by such section, including but not limited to, the right

to commence an action against the **City** on the payment guarantee provided by this Article 20 within the one-year limitations period set forth in Section 137(4)(b).

ARTICLE 21. RETAINED PERCENTAGE

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

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

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

ARTICLE 22. INSURANCE

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

22.1.1 Commercial General Liability Insurance: The **Contractor** shall provide Commercial General Liability Insurance covering claims for property damage and/or bodily injury, including death, which may arise from any of the operations under this **Contract**. Coverage under this insurance shall be at least as broad as that provided by the latest edition of Insurance Services Office ("ISO") Form CG 0001. Such insurance shall be "occurrence" based rather than "claims-made" and include, without limitation, the following types of coverage: premises operations; products and completed operations; contractual liability (including the tort liability of another assumed in a contract); broad form property damage; independent contractors; explosion, collapse and underground (XCU); construction means and methods; and incidental malpractice. Such insurance shall contain a "per project" aggregate limit, as specified in Schedule A, that applies separately to operations under this **Contract**.

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

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

22.1.1(c) If the **Work** requires a permit from the Department of Buildings pursuant to 1 RCNY Section 101-08, at http://www.nyc.gov/html/dob/downloads/rules/1_RCNY_101-08.pdf, the **Contractor** shall provide Commercial General Liability Insurance with limits of at least those required by 1 RCNY section 101-08. If the **Work** does not require such a permit, the minimum limits shall be those provided for in Schedule A.

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

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

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

22.1.4 Builders Risk Insurance: If specified in Schedule A of the General Conditions, the **Contractor** shall provide Builders Risk Insurance on a completed value form for the total value of the **Work** through **Substantial Completion** of the **Work** in its entirety. Such insurance shall be provided on an All Risk basis and include coverage, without limitation, for windstorm (including named windstorm), storm surge, flood and earth movement. Unless waived by the **Commissioner**, it shall include coverage for ordinance and law, demolition and increased costs of construction, debris removal, pollutant clean up and removal, and expediting costs. Such insurance shall cover, without limitation, (a) all buildings and/or structures involved in the **Work**, as well as temporary structures at the **Site**, and (b) any property that is intended to become a permanent part of such building or structure, whether such property is on the **Site**, in transit or in temporary storage. Policies shall name the **Contractor** as Named Insured and list the **City** as both an Additional Insured and a Loss Payee as its interest may appear.

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

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

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

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

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

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

22.1.7 **Marine Insurance:**

22.1.7(a) **Marine Protection and Indemnity Insurance:** If specified in Schedule A of the General Conditions or if the **Contractor** engages in marine operations in the execution of any part of the **Work**, the **Contractor** shall maintain, or cause the **Subcontractor** doing such **Work** to maintain, Marine Protection and Indemnity Insurance with coverage at least as broad as Form SP-23. The insurance shall provide coverage for the **Contractor** or **Subcontractor** (whichever is doing this **Work**) and for the **City** (together with its officials and employees) and any other entity specified in Schedule A as an Additional Insured for bodily injury and property damage arising from marine operations under this **Contract**. Coverage shall include, without limitation, injury or death of crew members (if not fully provided through other insurance), removal of wreck, damage to piers, wharves and other fixed or floating objects and loss of or damage to any other vessel or craft, or to property on such other vessel or craft.

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

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

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

22.2 General Requirements for Insurance Coverage and Policies:

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

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

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

22.2.4 The **City's** limits of coverage for all types of insurance required pursuant to Schedule A of the General Conditions shall be the greater of (i) the minimum limits set forth in Schedule A or (ii) the limits provided to the **Contractor** as Named Insured under all primary, excess, and umbrella policies of that type of coverage.

22.2.5 The **Contractor** may satisfy its insurance obligations under this Article 22 through primary policies or a combination of primary and excess/umbrella policies, so long as all policies provide the scope of coverage required herein.

22.2.6 Policies of insurance provided pursuant to this Article 22 shall be primary and non-contributing to any insurance or self-insurance maintained by the **City**.

22.3 Proof of Insurance:

22.3.1 For all types of insurance required by Article 22.1 and Schedule A, except for insurance required by Articles 22.1.4 and 22.1.7, the **Contractor** shall file proof of insurance in accordance with this Article 22.3 within ten (10) **Days** of award. For insurance provided pursuant to Articles 22.1.4 and 22.1.7, proof shall be filed by a date specified by the **Commissioner** or ten (10) **Days** prior to the commencement of the portion of the **Work** covered by such policy, whichever is earlier.

22.3.2 For Workers' Compensation Insurance provided pursuant to Article 22.1.2, the **Contractor** shall submit one of the following forms: C-105.2 Certificate of Workers' Compensation Insurance; U-26.3 - State Insurance Fund Certificate of Workers' Compensation Insurance; Request for WC/DB Exemption (Form CE-200); equivalent or successor forms used by the New York State Workers' Compensation Board; or other proof of insurance in a form acceptable to the **Commissioner**. For Disability Benefits Insurance provided pursuant to Article 22.1.2, the Contractor shall submit DB-120.1 - Certificate Of Insurance Coverage Under The NYS Disability Benefits Law, Request for WC/DB Exemption (Form CE-200); equivalent or successor forms used by the New York State Workers' Compensation Board; or other proof of insurance in a form acceptable to the **Commissioner**. ACORD forms are not acceptable.

22.3.3 For policies provided pursuant to all of Article 22.1 other than Article 22.1.2, the **Contractor** shall submit one or more Certificates of Insurance on forms acceptable to the **Commissioner**. All such Certificates of Insurance shall certify (a) the issuance and effectiveness of such policies of insurance, each with the specified minimum limits (b) for insurance secured pursuant to Article 22.1.1 that the **City** and any other entity specified in Schedule A is an Additional Insured with coverage at least as broad as the most recent edition of ISO Forms CG 20 10, CG 20 37, and CG 20 26, as applicable; (c) in the event insurance is required pursuant to Article 22.1.6 and/or Article 22.1.7, that the **City** is an Additional Insured thereunder; (d) the company code issued to the insurance company by the National Association of Insurance Commissioners (the NAIC number); and (e) the number assigned to the **Contract** by the **City**. All such Certificates of Insurance shall be accompanied by either a duly executed "Certification by Broker" in the form contained in Part III of Schedule A or copies of all policies referenced in such Certificate of Insurance as certified by an authorized representative of the issuing insurance carrier. If any policy is not available at the time of submission, certified binders may be submitted until such time as the policy is available, at which time a certified copy of the policy shall be submitted.

22.3.4 Documentation confirming renewals of insurance shall be submitted to the **Commissioner** prior to the expiration date of coverage of policies required under this **Contract**. Such proofs of insurance shall comply with the requirements of Articles 22.3.2 and 22.3.3.

22.3.5 The **Contractor** shall be obligated to provide the **City** with a copy of any policy of insurance provided pursuant to this Article 22 upon the demand for such policy by the **Commissioner** or the **City** Corporation Counsel.

22.4 Operations of the Contractor:

22.4.1 The **Contractor** shall not commence the **Work** unless and until all required certificates have been submitted to and accepted by the **Commissioner**. Acceptance by the **Commissioner** of a certificate does not excuse the **Contractor** from securing insurance

consistent with all provisions of this Article 22 or of any liability arising from its failure to do so.

22.4.2 The **Contractor** shall be responsible for providing continuous insurance coverage in the manner, form, and limits required by this **Contract** and shall be authorized to perform **Work** only during the effective period of all required coverage.

22.4.3 In the event that any of the required insurance policies lapse, are revoked, suspended or otherwise terminated, for whatever cause, the **Contractor** shall immediately stop all **Work**, and shall not recommence **Work** until authorized in writing to do so by the **Commissioner**. Upon quitting the **Site**, except as otherwise directed by the **Commissioner**, the **Contractor** shall leave all plant, materials, equipment, tools, and supplies on the **Site**. **Contract** time shall continue to run during such periods and no extensions of time will be granted. The **Commissioner** may also declare the **Contractor** in default for failure to maintain required insurance.

22.4.4 In the event the **Contractor** receives notice, from an insurance company or other person, that any insurance policy required under this Article 22 shall be cancelled or terminated (or has been cancelled or terminated) for any reason, the **Contractor** shall immediately forward a copy of such notice to both the **Commissioner** and the New York City Comptroller, attn: Office of Contract Administration, Municipal Building, One Centre Street, room 1005, New York, New York 10007. Notwithstanding the foregoing, the **Contractor** shall ensure that there is no interruption in any of the insurance coverage required under this Article 22.

22.4.5 Where notice of loss, damage, occurrence, accident, claim or suit is required under an insurance policy maintained in accordance with this Article 22, the **Contractor** shall notify in writing all insurance carriers that issued potentially responsive policies of any such event relating to any operations under this **Contract** (including notice to Commercial General Liability insurance carriers for events relating to the **Contractor's** own employees) no later than 20 days after such event. For any policy where the **City** is an Additional Insured, such notice shall expressly specify that "this notice is being given on behalf of the City of New York as Insured as well as the Named Insured." Such notice shall also contain the following information: the number of the insurance policy, the name of the named insured, the date and location of the damage, occurrence, or accident, and the identity of the persons or things injured, damaged or lost. The **Contractor** shall simultaneously send a copy of such notice to the City of New York c/o Insurance Claims Specialist, Affirmative Litigation Division, New York City Law Department, 100 Church Street, New York, New York 10007.

22.4.6 In the event of any loss, accident, claim, action, or other event that does or can give rise to a claim under any insurance policy required under this Article 22, the **Contractor** shall at all times fully cooperate with the **City** with regard to such potential or actual claim.

22.5 **Subcontractor Insurance:** In the event the **Contractor** requires any **Subcontractor** to procure insurance with regard to any operations under this **Contract** and requires such **Subcontractor** to name the **Contractor** as an **Additional Insured** thereunder, the **Contractor** shall ensure that the **Subcontractor** name the **City**, including its officials and employees, as an **Additional Insured** with coverage at least as broad as the most recent edition of ISO Form CG 20 26.

22.6 Wherever reference is made in Article 7 or this Article 22 to documents to be sent to the **Commissioner** (e.g., notices, filings, or submissions), such documents shall be sent to the address set forth in Schedule A of the General Conditions. In the event no address is set forth in Schedule A, such documents are to be sent to the **Commissioner's** address as provided elsewhere in this **Contract**.

22.7 Apart from damages or losses covered by insurance provided pursuant to Articles 22.1.2, 22.1.3, or 22.1.5, the **Contractor** waives all rights against the **City**, including its officials and employees, for any damages or losses that are covered under any insurance required under this Article 22 (whether or not such insurance is actually procured or claims are paid thereunder) or any other insurance applicable to the operations of the **Contractor** and/or its employees, agents, or **Subcontractors**.

22.8 In the event the **Contractor** utilizes a self-insurance program to satisfy any of the requirements of this Article 22, the **Contractor** shall ensure that any such self-insurance program provides the **City** with all rights that would be provided by traditional insurance under this Article 22, including but not limited to the defense and indemnification obligations that insurers are required to undertake in liability policies.

22.9 Materiality/Non-Waiver: The **Contractor's** failure to secure policies in complete conformity with this Article 22, or to give an insurance company timely notice of any sort required in this **Contract** or to do anything else required by this Article 22 shall constitute a material breach of this **Contract**. Such breach shall not be waived or otherwise excused by any action or inaction by the **City** at any time.

22.10 Pursuant to General Municipal Law Section 108, this **Contract** shall be void and of no effect unless **Contractor** maintains Workers' Compensation Insurance for the term of this **Contract** to the extent required and in compliance with the New York State Workers' Compensation Law.

22.11 Other Remedies: Insurance coverage provided pursuant to this Article 22 or otherwise shall not relieve the **Contractor** of any liability under this **Contract**, nor shall it preclude the **City** from exercising any rights or taking such other actions available to it under any other provisions of this **Contract** or Law.

ARTICLE 23. MONEY RETAINED AGAINST CLAIMS

23.1 If any claim shall be made by any person or entity (including **Other Contractors** with the **City** on this **Project**) against the **City** or against the **Contractor** and the **City** for any of the following:

- (a) An alleged loss, damage, injury, theft or vandalism of any of the kinds referred to in Articles 7 and 12, plus the reasonable costs of defending the **City**, which in the opinion of the **Comptroller** may not be paid by an insurance company (for any reason whatsoever); or
- (b) An infringement of copyrights, patents or use of patented articles, tools, etc., as referred to in Article 57; or
- (c) Damage claimed to have been caused directly or indirectly by the failure of the **Contractor** to perform the **Work** in strict accordance with this **Contract**,

the amount of such claim, or so much thereof as the **Comptroller** may deem necessary, may be withheld by the **Comptroller**, as security against such claim, from any money due hereunder. The **Comptroller**, in his/her discretion, may permit the **Contractor** to substitute other satisfactory security in lieu of the monies so withheld.

23.2 If an action on such claim is timely commenced and the liability of the **City**, or the **Contractor**, or both, shall have been established therein by a final judgment of a court of competent jurisdiction, or if such claim shall have been admitted by the **Contractor** to be valid, the **Comptroller**

shall pay such judgment or admitted claim out of the monies retained by the **Comptroller** under the provisions of this Article 23, and return the balance, if any, without interest, to the **Contractor**.

ARTICLE 24. MAINTENANCE AND GUARANTY

24.1 The **Contractor** shall promptly repair, replace, restore or rebuild, as the **Commissioner** may determine, any finished **Work** in which defects of materials or workmanship may appear or to which damage may occur because of such defects, during the one (1) year period subsequent to the date of **Substantial Completion** (or use and occupancy in accordance with Article 16), except where other periods of maintenance and guaranty are provided for in Schedule A.

24.2 As security for the faithful performance of its obligations hereunder, the **Contractor**, upon filing its requisition for payment on **Substantial Completion**, shall deposit with the **Commissioner** a sum equal to one (1%) percent of the price (or the amount fixed in Schedule A of the General Conditions) in cash or certified check upon a state or national bank and trust company or a check of such bank and trust company signed by a duly authorized officer thereof and drawn to the order of the **Comptroller**, or obligations of the **City**, which the **Comptroller** may approve as of equal value with the sum so required.

24.3 In lieu of the above, the **Contractor** may make such security payment to the **City** by authorizing the **Commissioner** in writing to deduct the amount from the **Substantial Completion** payment which shall be deemed the deposit required above.

24.4 If the **Contractor** has faithfully performed all of its obligations hereunder the **Commissioner** shall so certify to the **Comptroller** within five (5) **Days** after the expiration of one (1) year from the date of **Substantial Completion** and acceptance of the **Work** or within thirty (30) **Days** after the expiration of the guarantee period fixed in the **Specifications**. The security payment shall be repaid to the **Contractor** without interest within thirty (30) **Days** after certification by the **Commissioner** to the **Comptroller** that the **Contractor** has faithfully performed all of its obligations hereunder.

24.5 Notice by the **Commissioner** to the **Contractor** to repair, replace, rebuild or restore such defective or damaged **Work** shall be timely, pursuant to this article, if given not later than ten (10) **Days** subsequent to the expiration of the one (1) year period or other periods provided for herein.

24.6 If the **Contractor** shall fail to repair, replace, rebuild or restore such defective or damaged **Work** promptly after receiving such notice, the **Commissioner** shall have the right to have the **Work** done by others in the same manner as provided for in the completion of a defaulted **Contract**, under Article 51.

24.7 If the security payment so deposited is insufficient to cover the cost of such **Work**, the **Contractor** shall be liable to pay such deficiency on demand by the **Commissioner**.

24.8 The **Engineer's** certificate setting forth the fair and reasonable cost of repairing, replacing, rebuilding or restoring any damaged or defective **Work** when performed by one other than the **Contractor**, shall be binding and conclusive upon the **Contractor** as to the amount thereof.

24.9 The **Contractor** shall obtain all manufacturers' warranties and guaranties of all equipment and materials required by this **Contract** in the name of the **City** and shall deliver same to the **Commissioner**. All of the **City's** rights and title and interest in and to said manufacturers' warranties and guaranties may be assigned by the **City** to any subsequent purchasers of such equipment and materials or lessees of the premises into which the equipment and materials have been installed.

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

ARTICLE 25. CHANGES

25.1 Changes may be made to this **Contract** only as duly authorized in writing by the **Commissioner** in accordance with the **Law** and this **Contract**. All such changes, modifications, and amendments will become a part of the **Contract**. **Work** so ordered shall be performed by the **Contractor**.

25.2 **Contract** changes will be made only for **Work** necessary to complete the **Work** included in the original scope of the **Contract** and/or for non-material changes to the scope of the **Contract**. Changes are not permitted for any material alteration in the scope of **Work** in the **Contract**.

25.3 The **Contractor** shall be entitled to a price adjustment for **Extra Work** performed pursuant to a written change order. Adjustments to price shall be computed in one or more of the following ways:

25.3.1 By applicable unit prices specified in the **Contract**; and/or

25.3.2 By agreement of a fixed price; and/or

25.3.3 By time and material records; and/or

25.3.4 In any other manner approved by the **CCPO**.

25.4 All payments for change orders are subject to pre-audit by the **Engineering Audit Officer** and may be post-audited by the **Comptroller** and/or the **Agency**.

ARTICLE 26. METHODS OF PAYMENT FOR OVERRUNS AND EXTRA WORK

26.1 **Overrun of Unit Price Item:** An overrun is any quantity of a unit price item which the **Contractor** is directed to provide which is in excess of one hundred twenty-five (125%) percent of the estimated quantity for that item set forth in the bid schedule.

26.1.1 For any unit price item, the **Contractor** will be paid at the unit price bid for any quantity up to one hundred twenty-five (125%) percent of the estimated quantity for that item set forth in the bid schedule. If during the progress of the **Work**, the actual quantity of any unit price item required to complete the **Work** approaches the estimated quantity for that item, and for any reason it appears that the actual quantity of any unit price item necessary to complete the **Work** will exceed the estimated quantity for that item by twenty-five (25%) percent, the **Contractor** shall immediately notify the **Engineer** of such anticipated overrun. The **Contractor** shall not be compensated for any quantity of a unit price item provided which is in excess of one hundred twenty-five (125%) percent of the estimated quantity for that item set forth in the bid schedule without written authorization from the **Engineer**.

26.1.2 If the actual quantity of any unit price item necessary to complete the **Work** will exceed one hundred twenty five (125%) percent of the estimated quantity for that item set forth in the bid schedule, the **City** reserves the right and the **Contractor** agrees to negotiate a new unit price for such item. In no event shall such negotiated new unit price exceed the unit bid price. If the **City** and **Contractor** cannot agree on a new unit price, then the **City** shall order the **Contractor** and the **Contractor** agrees to provide additional quantities of the

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

26.2 Extra Work: For **Extra Work** where payment is by agreement on a fixed price in accordance with Article 25.3.2, the price to be paid for such **Extra Work** shall be based on the fair and reasonable estimated cost of the items set forth below. For **Extra Work** where payment is based on time and material records in accordance with Article 25.3.3, the price to be paid for such **Extra Work** shall be the actual and reasonable cost of the items set forth below, calculated in accordance with the formula specified therein, if any.

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

26.2.2 Necessary direct labor, including payroll taxes (subject to statutory wage caps) and supplemental benefits; plus

26.2.3 Sales and personal property taxes, if any, required to be paid on materials not incorporated into such **Extra Work**; plus

26.2.4 Reasonable rental value of **Contractor**-owned (or **Subcontractor**-owned, as applicable), necessary plant and equipment other than **Small Tools**, plus fuel/energy costs. Except for fuel costs for pick-up trucks which shall be reimbursed based on a consumption of five (5) gallons per shift, fuel costs shall be reimbursed based on actual costs or, in the absence of auditable documentation, the following fuel consumption formula per operating hour: $(.035) \times (\text{HP rating}) \times (\text{Fuel cost/gallon})$. Reasonable rental value is defined as the lower of either seventy-five percent of the monthly prorated rental rates established in "The AED Green Book, Rental Rates and Specifications for Construction Equipment" published by Equipment Watch (the "Green Book"), or seventy-five percent of the monthly prorated rental rates established in the "Rental Rate Blue Book for Construction Equipment" published by Equipment Watch (the "Blue Book") (the applicable Blue Book rate being for rental only without the addition of any operational costs listed in the Blue Book). The reasonable rental value is deemed to be inclusive of all operating costs except for fuel/energy consumption and equipment operator's wages/costs. For multiple shift utilization, reimbursement shall be calculated as follows: first shift shall be seventy-five (75%) percent of such rental rates; second shift shall be sixty (60%) percent of the first shift rate; and third shift shall be forty (40%) percent of the first shift rate. Equipment on standby shall be reimbursed at one-third (1/3) the prorated monthly rental rate. **Contractor**-owned (or **Subcontractor**-owned, as applicable) equipment includes equipment from rental companies affiliated with or controlled by the **Contractor** (or **Subcontractor**, as applicable), as determined by the **Commissioner**. In establishing cost reimbursement for non-operating **Contractor**-owned (or **Subcontractor**-owned, as applicable) equipment (scaffolding, sheeting systems, road plates, etc.), the City may restrict reimbursement to a purchase-salvage/life cycle basis if less than the computed rental costs; plus

26.2.5 Necessary installation and dismantling of such plant and equipment, including transportation to and from the Site, if any, provided that, in the case of non-**Contractor**-owned (or non-**Subcontractor**-owned, as applicable) equipment rented from a third party, the cost of installation and dismantling are not allowable if such costs are included in the rental rate; plus

26.2.6 Necessary fees charged by governmental entities; plus

26.2.7 Necessary construction-related service fees charged by non-governmental entities, such as landfill tipping fees; plus

26.2.8 Reasonable rental costs of non-**Contractor**-owned (or non-**Subcontractor**-owned, as applicable) necessary plant and equipment other than **Small Tools**, plus fuel/energy costs. Except for fuel costs for pick-up trucks which shall be reimbursed based on a consumption of five (5) gallons per shift, fuel costs shall be reimbursed based on actual costs or, in the absence of auditable documentation, the following fuel consumption formula per hour of operation: $(.035) \times (\text{HP rating}) \times (\text{Fuel cost/gallon})$. In lieu of renting, the **City** reserves the right to direct the purchase of non-operating equipment (scaffolding, sheeting systems, road plates, etc.), with payment on a purchase-salvage/life cycle basis, if less than the projected rental costs; plus

26.2.9 Workers' Compensation Insurance, and any insurance coverage expressly required by the **City** for the performance of the **Extra Work** which is different than the types of insurance required by Article 22 and Schedule A of the General Conditions. The cost of Workers' Compensation Insurance is subject to applicable payroll limitation caps and shall be based upon the carrier's Manual Rate for such insurance derived from the applicable class Loss Cost ("LC") and carrier's Lost Cost Multiplier ("LCM") approved by the New York State Department of Financial Services, and with the exception of experience rating, rate modifiers as promulgated by the New York Compensation Insurance Rating Board ("NYCIRB"); plus

26.2.10 Additional costs incurred as a result of the **Extra Work** for performance and payment bonds; plus

26.2.11 Twelve percent (12%) percent of the total of items in Articles 26.2.1 through 26.2.5 as compensation for overhead, except that no percentage for overhead will be allowed on **Payroll Taxes** or on the premium portion of overtime pay or on sales and personal property taxes. Overhead shall include without limitation, all costs and expenses in connection with administration, management superintendence, small tools, and insurance required by Schedule A of the General Conditions other than Workers' Compensation Insurance; plus

26.2.12 Ten (10%) percent of the total of items in Articles 26.2.1 through 26.2.5, plus the items in Article 26.2.11, as compensation for profit, except that no percentage for profit will be allowed on **Payroll Taxes** or on the premium portion of overtime pay or on sales and personal property taxes; plus

26.2.13 Five (5%) percent of the total of items in Articles 26.2.6 through 26.2.10 as compensation for overhead and profit.

26.3 Where the **Extra Work** is performed in whole or in part by other than the **Contractor's** own forces pursuant to Article 26.2, the **Contractor** shall be paid, subject to pre-audit by the **Engineering Audit Officer**, the cost of such **Work** computed in accordance with Article 26.2 above, plus an additional allowance of five (5%) percent to cover the **Contractor's** overhead and profit.

26.4 Where a change is ordered, involving both **Extra Work** and omitted or reduced **Contract Work**, the **Contract** price shall be adjusted, subject to pre-audit by the **EAO**, in an amount based on the difference between the cost of such **Extra Work** and of the omitted or reduced **Work**.

26.5 Where the **Contractor** and the **Commissioner** can agree upon a fixed price for **Extra Work** in accordance with Article 25.3.2 or another method of payment for **Extra Work** in accordance with Article

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

ARTICLE 27. RESOLUTION OF DISPUTES

27.1 All disputes between the **City** and the **Contractor** of the kind delineated in this Article 27.1 that arise under, or by virtue of, this **Contract** shall be finally resolved in accordance with the provisions of this Article 27 and the **PPB Rules**. This procedure for resolving all disputes of the kind delineated herein shall be the exclusive means of resolving any such disputes.

27.1.1 This Article 27 shall not apply to disputes concerning matters dealt with in other sections of the **PPB Rules**, or to disputes involving patents, copyrights, trademarks, or trade secrets (as interpreted by the courts of New York State) relating to proprietary rights in computer software.

27.1.2 This Article 27 shall apply only to disputes about the scope of **Work** delineated by the **Contract**, the interpretation of **Contract** documents, the amount to be paid for **Extra Work** or disputed work performed in connection with the **Contract**, the conformity of the **Contractor's Work** to the **Contract**, and the acceptability and quality of the **Contractor's Work**; such disputes arise when the **Engineer**, **Resident Engineer**, **Engineering Audit Officer**, or other designee of the **Commissioner** makes a determination with which the **Contractor** disagrees.

27.2 All determinations required by this Article 27 shall be made in writing clearly stated, with a reasoned explanation for the determination based on the information and evidence presented to the party making the determination. Failure to make such determination within the time required by this Article 27 shall be deemed a non-determination without prejudice that will allow application to the next level.

27.3 During such time as any dispute is being presented, heard, and considered pursuant to this Article 27, the **Contract** terms shall remain in force and the **Contractor** shall continue to perform **Work** as directed by the **ACCO** or the **Engineer**. Failure of the **Contractor** to continue **Work** as directed shall constitute a waiver by the **Contractor** of its claim.

27.4 Presentation of Disputes to **Commissioner**.

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

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

27.4.1 **Commissioner Inquiry.** The **Commissioner** shall examine the material and may, in his or her discretion, convene an informal conference with the **Contractor**, the **ACCO**, and the **Engineer, Resident Engineer, Engineering Audit Officer**, or other designee of the **Commissioner** to resolve the issue by mutual consent prior to reaching a determination. The **Commissioner** may seek such technical or other expertise as he or she shall deem appropriate, including the use of neutral mediators, and require any such additional material from either or both parties as he or she deems fit. The **Commissioner's** ability to render, and the effect of, a decision hereunder shall not be impaired by any negotiations in connection with the dispute presented, whether or not the **Commissioner** participated therein. The **Commissioner** may or, at the request of any party to the dispute, shall compel the participation of any **Other Contractor** with a contract related to the **Work** of this **Contract**, and that **Contractor** shall be bound by the decision of the **Commissioner**. Any **Other Contractor** thus brought into the dispute resolution proceeding shall have the same rights and obligations under this Article 27 as the **Contractor** initiating the dispute.

27.4.2 **Commissioner Determination.** Within thirty (30) **Days** after the receipt of all materials and information, or such longer time as may be agreed to by the parties, the **Commissioner** shall make his or her determination and shall deliver or send a copy of such determination to the **Contractor**, the **ACCO**, and **Engineer, Resident Engineer, Engineering Audit Officer**, or other designee of the **Commissioner**, as applicable, together with a statement concerning how the decision may be appealed.

27.4.3 **Finality of Commissioner's Decision.** The **Commissioner's** decision shall be final and binding on all parties, unless presented to the Contract Dispute Resolution Board pursuant to this Article 27. The **City** may not take a petition to the Contract Dispute Resolution Board. However, should the **Contractor** take such a petition, the **City** may seek, and the Contract Dispute Resolution Board may render, a determination less favorable to the **Contractor** and more favorable to the **City** than the decision of the **Commissioner**.

27.5 **Presentation of Dispute to the Comptroller.** Before any dispute may be brought by the **Contractor** to the Contract Dispute Resolution Board, the **Contractor** must first present its claim to the **Comptroller** for his or her review, investigation, and possible adjustment.

27.5.1 **Time, Form, and Content of Notice.** Within thirty (30) **Days** of its receipt of a decision by the **Commissioner**, the **Contractor** shall submit to the **Comptroller** and to the **Commissioner** a Notice of Claim regarding its dispute with the **Agency**. The Notice of Claim shall consist of (i) a brief written statement of the substance of the dispute, the amount of money, if any, claimed and the reason(s) the **Contractor** contends the dispute was wrongly decided by the **Commissioner**; (ii) a copy of the written decision of the **Commissioner**; and (iii) a copy of all materials submitted by the **Contractor** to the **Agency**, including the Notice of Dispute. The **Contractor** may not present to the **Comptroller** any material not presented to the **Commissioner**, except at the request of the **Comptroller**.

27.5.2 **Response.** Within thirty (30) **Days** of receipt of the Notice of Claim, the **Agency** shall make available to the **Comptroller** a copy of all material submitted by the **Agency** to the **Commissioner** in connection with the dispute. The **Agency** may not present to the

Comptroller any material not presented to the **Commissioner** except at the request of the **Comptroller**.

27.5.3 Comptroller Investigation. The **Comptroller** may investigate the claim in dispute and, in the course of such investigation, may exercise all powers provided in Sections 7-201 and 7-203 of the Administrative Code. In addition, the **Comptroller** may demand of either party, and such party shall provide, whatever additional material the **Comptroller** deems pertinent to the claim, including original business records of the **Contractor**. Willful failure of the **Contractor** to produce within fifteen (15) **Days** any material requested by the **Comptroller** shall constitute a waiver by the **Contractor** of its claim. The **Comptroller** may also schedule an informal conference to be attended by the **Contractor**, **Agency** representatives, and any other personnel desired by the **Comptroller**.

27.5.4 Opportunity of Comptroller to Compromise or Adjust Claim. The **Comptroller** shall have forty-five (45) **Days** from his or her receipt of all materials referred to in Article 27.5.3 to investigate the disputed claim. The period for investigation and compromise may be further extended by agreement between the **Contractor** and the **Comptroller**, to a maximum of ninety (90) **Days** from the **Comptroller's** receipt of all materials. The **Contractor** may not present its petition to the Contract Dispute Resolution Board until the period for investigation and compromise delineated in this Article 27.5.4 has expired. In compromising or adjusting any claim hereunder, the **Comptroller** may not revise or disregard the terms of the **Contract** between the parties.

27.6 Contract Dispute Resolution Board. There shall be a Contract Dispute Resolution Board composed of:

27.6.1 The chief administrative law judge of the Office of Administrative Trials and Hearings (OATH) or his/her designated OATH administrative law judge, who shall act as chairperson, and may adopt operational procedures and issue such orders consistent with this Article 27 as may be necessary in the execution of the Contract Dispute Resolution Board's functions, including, but not limited to, granting extensions of time to present or respond to submissions;

27.6.2 The **CCPO** or his/her designee; any designee shall have the requisite background to consider and resolve the merits of the dispute and shall not have participated personally and substantially in the particular matter that is the subject of the dispute or report to anyone who so participated; and

27.6.3 A person with appropriate expertise who is not an employee of the **City**. This person shall be selected by the presiding administrative law judge from a prequalified panel of individuals, established and administered by OATH with appropriate background to act as decision-makers in a dispute. Such individual may not have a contract or dispute with the **City** or be an officer or employee of any company or organization that does, or regularly represents persons, companies, or organizations having disputes with the **City**.

27.7 Petition to the Contract Dispute Resolution Board. In the event the claim has not been settled or adjusted by the **Comptroller** within the period provided in this Article 27, the **Contractor**, within thirty (30) **Days** thereafter, may petition the Contract Dispute Resolution Board to review the **Commissioner's** determination.

27.7.1 Form and Content of Petition by Contractor. The **Contractor** shall present its dispute to the Contract Dispute Resolution Board in the form of a petition, which shall

include (i) a brief written statement of the substance of the dispute, the amount of money, if any, claimed, and the reason(s) the **Contractor** contends the dispute was wrongly decided by the **Commissioner**; (ii) a copy of the written Decision of the **Commissioner**, (iii) copies of all materials submitted by the **Contractor** to the Agency; (iv) a copy of the written decision of the **Comptroller**, if any, and (v) copies of all correspondence with, or written material submitted by the **Contractor**, to the **Comptroller**. The **Contractor** shall concurrently submit four (4) complete sets of the Petition: one set to the City Corporation Counsel (Attn: Commercial and Real Estate Litigation Division) and three (3) sets to the Contract Dispute Resolution Board at OATH's offices with proof of service on the City Corporation Counsel. In addition, the **Contractor** shall submit a copy of the written statement of the substance of the dispute, cited in (i) above, to both the **Commissioner** and the **Comptroller**.

27.7.2 **Agency Response.** Within thirty (30) **Days** of its receipt of the Petition by the City Corporation Counsel, the **Agency** shall respond to the brief written statement of the **Contractor** and make available to the Contract Dispute Resolution Board all material it submitted to the **Commissioner** and **Comptroller**. Three (3) complete copies of the **Agency** response shall be provided to the Contract Dispute Resolution Board and one to the **Contractor**. Extensions of time for submittal of the **Agency** response shall be given as necessary upon a showing of good cause or, upon consent of the parties, for an initial period of up to thirty (30) **Days**.

27.7.3 **Further Proceedings.** The Contract Dispute Resolution Board shall permit the **Contractor** to present its case by submission of memoranda, briefs, and oral argument. The Contract Dispute Resolution Board shall also permit the **Agency** to present its case in response to the **Contractor** by submission of memoranda, briefs, and oral argument. If requested by the City Corporation Counsel, the **Comptroller** shall provide reasonable assistance in the preparation of the **Agency's** case. Neither the **Contractor** nor the **Agency** may support its case with any documentation or other material that was not considered by the **Comptroller**, unless requested by the Contract Dispute Resolution Board. The Contract Dispute Resolution Board, in its discretion, may seek such technical or other expert advice as it shall deem appropriate and may seek, on its own or upon application of a party, any such additional material from any party as it deems fit. The Contract Dispute Resolution Board, in its discretion, may combine more than one dispute between the parties for concurrent resolution.

27.7.4 **Contract Dispute Resolution Board Determination.** Within forty-five (45) **Days** of the conclusion of all written submissions and oral arguments, the Contract Dispute Resolution Board shall render a written decision resolving the dispute. In an unusually complex case, the Contract Dispute Resolution Board may render its decision in a longer period, not to exceed ninety (90) **Days**, and shall so advise the parties at the commencement of this period. The Contract Dispute Resolution Board's decision must be consistent with the terms of the **Contract**. Decisions of the Contract Dispute Resolution Board shall only resolve matters before the Contract Dispute Resolution Board and shall not have precedential effect with respect to matters not before the Contract Dispute Resolution Board.

27.7.5 **Notification of Contract Dispute Resolution Board Decision.** The Contract Dispute Resolution Board shall send a copy of its decision to the **Contractor**, the **ACCO**, the Engineer, the **Comptroller**, the City Corporation Counsel, the **CCPO**, and the **PPB**. A decision in favor of the **Contractor** shall be subject to the prompt payment provisions of the **PPB Rules**. The Required Payment Date shall be thirty (30) **Days** after the date the parties are formally notified of the Contract Dispute Resolution Board's decision.

27.7.6 Finality of Contract Dispute Resolution Board Decision. The Contract Dispute Resolution

Board's decision shall be final and binding on all parties. Any party may seek review of the Contract Dispute Resolution Board's decision solely in the form of a challenge, filed within four (4) months of the date of the Contract Dispute Resolution Board's decision, in a court of competent jurisdiction of the State of New York, County of New York pursuant to Article 78 of the Civil Practice Law and Rules. Such review by the court shall be limited to the question of whether or not the Contract Dispute Resolution Board's decision was made in violation of lawful procedure, was affected by an error of Law, or was arbitrary and capricious or an abuse of discretion. No evidence or information shall be introduced or relied upon in such proceeding that was not presented to the Contract Dispute Resolution Board in accordance with this Article 27.

27.8 Any termination, cancellation, or alleged breach of the Contract prior to or during the pendency of any proceedings pursuant to this Article 27 shall not affect or impair the ability of the Commissioner or Contract Dispute Resolution Board to make a binding and final decision pursuant to this Article 27.

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

28.1 While the Contractor or any of its Subcontractors is performing Work on a time and material basis or Extra Work on a time and material basis ordered by the Commissioner under Article 25, or where the Contractor believes that it or any of its Subcontractors is performing Extra Work but a final determination by Agency has not been made, or the Contractor or any of its Subcontractors is performing disputed Work (whether on or off the Site), or complying with a determination or order under protest in accordance with Articles 11, 27, and 30, in each such case the Contractor shall furnish the Resident Engineer daily with three (3) copies of written statements signed by the Contractor's representative at the Site showing:

28.1.1 The name, trade, and number of each worker employed on such Work or engaged in complying with such determination or order, the number of hours employed, and the character of the Work each is doing; and

28.1.2 The nature and quantity of any materials, plant and equipment furnished or used in connection with the performance of such Work or compliance with such determination or order, and from whom purchased or rented.

28.2 A copy of such statement will be countersigned by the Resident Engineer, noting thereon any items not agreed to or questioned, and will be returned to the Contractor within two (2) Days after submission.

28.3 The Contractor and its Subcontractors, when required by the Commissioner, or the Comptroller, shall also produce for inspection, at the office of the Contractor or Subcontractor, any and all of its books, bid documents, financial statements, vouchers, records, daily job diaries and reports, and cancelled checks, and any other documents relating to showing the nature and quantity of the labor, materials, plant and equipment actually used in the performance of such Work, or in complying with such determination or order, and the amounts expended therefor, and shall permit the Commissioner and the Comptroller to make such extracts therefrom, or copies thereof, as they or either of them may desire.

28.4 In connection with the examination provided for herein, the Commissioner, upon demand therefor, will produce for inspection by the Contractor such records as the Agency may have with

respect to such **Extra Work** or disputed **Work** performed under protest pursuant to order of the **Commissioner**, except those records and reports which may have been prepared for the purpose of determining the accuracy and validity of the **Contractor's** claim.

28.5 Failure to comply strictly with these requirements shall constitute a waiver of any claim for extra compensation or damages on account of the performance of such **Work** or compliance with such determination or order.

ARTICLE 29. OMITTED WORK

29.1 If any **Contract Work** in a lump sum **Contract**, or if any part of a lump sum item in a unit price, lump sum, or percentage-bid **Contract** is omitted by the **Commissioner** pursuant to Article 33, the **Contract** price, subject to audit by the EAO, shall be reduced by a pro rata portion of the lump sum bid amount based upon the percent of **Work** omitted subject to Article 29.4. For the purpose of determining the pro rata portion of the lump sum bid amount, the bid breakdown submitted in accordance with Article 41 shall be considered, but shall not be the determining factor.

29.2 If the whole of a lump sum item or units of any other item is so omitted by the **Commissioner** in a unit price, lump sum, or percentage-bid **Contract**, then no payment will be made therefor except as provided in Article 29.4.

29.3 For units that have been ordered but are only partially completed, the unit price shall be reduced by a pro rata portion of the unit price bid based upon the percentage of **Work** omitted subject to Article 29.4.

29.4 In the event the **Contractor**, with respect to any omitted **Work**, has purchased any non-cancelable material and/or equipment that is not capable of use except in the performance of this **Contract** and has been specifically fabricated for the sole purpose of this **Contract**, but not yet incorporated into the **Work**, the **Contractor** shall be paid for such material and/or equipment in accordance with Article 64.2.1(b); provided, however, such payment is contingent upon the **Contractor's** delivery of such material and/or equipment in acceptable condition to a location designated by the **City**.

29.5 The **Contractor** agrees to make no claim for damages or for loss of overhead and profit with regard to any omitted **Work**.

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

30.1 If the **Contractor** shall claim to be sustaining damages by reason of any act or omission of the **City** or its agents, it shall submit to the **Commissioner** within forty-five (45) **Days** from the time such damages are first incurred, and every thirty (30) **Days** thereafter for as long as such damages are incurred, verified statements of the details and the amounts of such damages, together with documentary evidence of such damages. The **Contractor** may submit any of the above statements within such additional time as may be granted by the **Commissioner** in writing upon written request therefor. Failure of the **Commissioner** to respond in writing to a written request for additional time within thirty (30) **Days** shall be deemed a denial of the request. On failure of the **Contractor** to strictly comply with the foregoing provisions, such claims shall be deemed waived and no right to recover on such claims shall exist. Damages that the **Contractor** may claim in any action or dispute resolution procedure arising under or by reason of this **Contract** shall not be different from or in excess of the statements and documentation made pursuant to this Article 30.

30.2 In addition to the foregoing statements, the **Contractor** shall, upon notice from the **Commissioner**, produce for examination at the **Contractor's** office, by the **Engineer, Architect or Project Manager**, all of its books of account, bills, invoices, payrolls, subcontracts, time books, daily reports, bank deposit books, bank statements, check books, and cancelled checks, showing all of its acts and transactions in connection with or relating to or arising by reason of this **Contract**, and submit itself and persons in its employment, for examination under oath by any person designated by the **Commissioner** or **Comptroller** to investigate claims made or disputes against the **City** under this **Contract**. At such examination, a duly authorized representative of the **Contractor** may be present.

30.3 In addition to the statements required under Article 28 and this Article 30, the **Contractor** and/or its **Subcontractor** shall, within thirty (30) **Days** upon notice from the **Commissioner** or **Comptroller**, produce for examination at the **Contractor's** and/or **Subcontractor's** office, by a representative of either the **Commissioner** or **Comptroller**, all of its books of account, bid documents, financial statements, accountant workpapers, bills, invoices, payrolls, subcontracts, time books, daily reports, bank deposit books, bank statements, check books, and cancelled checks, showing all of its acts and transactions in connection with or relating to or arising by reason of this **Contract**. Further, the **Contractor** and/or its **Subcontractor** shall submit any person in its employment, for examination under oath by any person designated by the **Commissioner** or **Comptroller** to investigate claims made or 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.

ARTICLE 36. NO DISCRIMINATION

36.1 The **Contractor** specifically agrees, as required by Labor Law Section 220-e, as amended, that:

36.1.1 In the hiring of employees for the performance of **Work** under this **Contract** or any subcontract hereunder, neither the **Contractor, Subcontractor**, nor any person acting on behalf of such **Contractor** or **Subcontractor**, shall by reason of race, creed, color or national origin discriminate against any citizen of the State of New York who is qualified and available to perform the **Work** to which the employment relates;

36.1.2 Neither the **Contractor, Subcontractor**, nor any person on its behalf shall, in any manner, discriminate against or intimidate any employee hired for the performance of **Work** under this **Contract** on account of race, creed, color or national origin;

36.1.3 There may be deducted from the amount payable to the **Contractor** by the **City** under this **Contract** a penalty of fifty (\$50.00) dollars for each person for each **Day** during which such person was discriminated against or intimidated in violation of the provisions of this **Contract**; and

36.1.4 This **Contract** may be cancelled or terminated by the **City** and all moneys due or to become due hereunder may be forfeited, for a second or any subsequent violation of the terms or conditions of this Article 36.

36.1.5 This Article 36 covers all construction, alteration and repair of any public building or public work occurring in the State of New York and the manufacture, sale, and distribution of materials, equipment, and supplies to the extent that such operations are performed within the State of New York pursuant to this **Contract**.

36.2 The **Contractor** specifically agrees, as required by Section 6-108 of the Administrative Code, as amended, that:

36.2.1 It shall be unlawful for any person engaged in the construction, alteration or repair of buildings or engaged in the construction or repair of streets or highways pursuant to a **Contract** with the **City** or engaged in the manufacture, sale or distribution of materials, equipment or supplies pursuant to a **Contract** with the **City** to refuse to employ or to refuse to continue in any employment any person on account of the race, color or creed of such person.

36.2.2 It shall be unlawful for any person or any servant, agent or employee of any person, described in Article 36.1.2, to ask, indicate or transmit, orally or in writing, directly or indirectly, the race, color or creed or religious affiliation of any person employed or seeking employment from such person, firm or corporation.

36.2.3 Breach of the foregoing provisions shall be deemed a violation of a material provision of this **Contract**.

36.2.4 Any person, or the employee, manager or owner of or officer of such firm or corporation who shall violate any of the provisions of this Article 36.2 shall, upon conviction thereof, be punished by a fine of not more than one hundred (\$100.00) dollars or by imprisonment for not more than thirty (30) **Days**, or both.

36.3 This **Contract** is subject to the requirements of Executive Order No. 50 (1980) ("E.O. 50"), as revised, and the rules and regulations promulgated thereunder. No contract will be awarded unless and until these requirements have been complied with in their entirety. By signing this **Contract**, the **Contractor** agrees that it:

36.3.1 Will not engage in any unlawful discrimination against any employee or applicant for employment because of race, creed, color, national origin, sex, age, disability, marital status or sexual orientation with respect to all employment decisions including, but not limited to, recruitment, hiring, upgrading, demotion, downgrading, transfer, training, rates of pay or other forms of compensation, layoff, termination, and all other terms and conditions of employment; and

36.3.2 Will not engage in any unlawful discrimination in the selection of **Subcontractors** on the basis of the owner's race, color, creed, national origin, sex, age, disability, marital status or sexual orientation; and

36.3.3 Will state in all solicitations or advertisements for employees placed by or on behalf of the **Contractor** that all qualified applicants will receive consideration for employment without unlawful discrimination based on race, creed, color, national origin, sex, age, citizens status, disability, marital status, sexual orientation, or that it is an equal employment opportunity employer; and

36.3.4 Will send to each labor organization or representative of workers with which it has a collective bargaining agreement or other contract or memorandum of understanding, written notification of its equal employment opportunity commitments under E.O. 50 and the rules and regulations promulgated thereunder; and

36.3.5 Will furnish, before the award of the **Contract**, all information and reports, including an employment report, that are required by E.O. 50, the rules and regulations promulgated thereunder, and orders of the **City** Department of Business Services, Division of Labor Services (**DLS**) and will permit access to its books, records, and accounts by the **DLS** for the purposes of investigation to ascertain compliance with such rules, regulations, and orders.

36.4 The **Contractor** understands that in the event of its noncompliance with the nondiscrimination clauses of this **Contract** or with any of such rules, regulations, or orders, such noncompliance shall constitute a material breach of this **Contract** and noncompliance with E.O. 50 and the rules and regulations promulgated thereunder. After a hearing held pursuant to the rules of the **DLS**, the Director of the **DLS** may direct the **Commissioner** to impose any or all of the following sanctions:

36.4.1 Disapproval of the **Contractor**; and/or

36.4.2 Suspension or termination of the **Contract**; and/or

36.4.3 Declaring the **Contractor** in default; and/or

36.4.4 In lieu of any of the foregoing sanctions, the Director of the **DLS** may impose an employment program.

In addition to any actions taken under this **Contract**, failure to comply with E.O. 50 and the rules and regulations promulgated thereunder, in one or more instances, may result in a **City Agency** declaring the **Contractor** to be non-responsible in future procurements. The **Contractor** further agrees that it will refrain from entering into any **Contract** or **Contract** modification subject to E.O. 50 and the rules and regulations promulgated thereunder with a **Subcontractor** who is not in compliance with the requirements of E.O. 50 and the rules and regulations promulgated thereunder.

36.5 The **Contractor** specifically agrees, as required by Section 6-123 of the Administrative Code, that:

36.5.1 The **Contractor** will not engage in any unlawful discriminatory practice in violation of Title 8 of the Administrative Code; and

36.5.2 Any failure to comply with this Article 36.5 may subject the **Contractor** to the remedies set forth in Section 6-123 of the Administrative Code, including, where appropriate, sanctions such as withholding of payment, imposition of an employment program, finding the **Contractor** to be in default, cancellation of the **Contract**, or any other sanction or remedy provided by **Law** or **Contract**.

ARTICLE 37. LABOR LAW REQUIREMENTS

37.1 The **Contractor** shall strictly comply with all applicable provisions of the Labor Law, as amended. Such compliance is a material term of this **Contract**.

37.2 The **Contractor** specifically agrees, as required by Labor Law Sections 220 and 220-d, as amended, that:

37.2.1 **Hours of Work:** No laborer, worker, or mechanic in the employ of the **Contractor**, **Subcontractor** or other person doing or contracting to do the whole or a part of the **Work** contemplated by this **Contract** shall be permitted or required to work more than eight (8) hours in any one (1) **Day**, or more than five (5) **Days** in any one (1) week, except as provided in the Labor Law and in cases of extraordinary emergency including fire, flood, or danger to life or property, or in the case of national emergency when so proclaimed by the President of the United States of America.

37.2.2 In situations in which there are not sufficient laborers, workers, and mechanics who may be employed to carry on expeditiously the **Work** contemplated by this **Contract** as a result of such restrictions upon the number of hours and **Days** of labor, and the immediate commencement or prosecution or completion without undue delay of the **Work** is necessary for the preservation of the **Site** and/or for the protection of the life and limb of the persons using the same, such laborers, workers, and mechanics shall be permitted or required to

work more than eight (8) hours in any one (1) **Day**; or five (5) **Days** in any one (1) week; provided, however, that upon application of any **Contractor**, the **Commissioner** shall have first certified to the Commissioner of Labor of the State of New York (hereinafter "Commissioner of Labor") that such public **Work** is of an important nature and that a delay in carrying it to completion would result in serious disadvantage to the public; and provided, further, that such Commissioner of Labor shall have determined that such an emergency does in fact exist as provided in Labor Law Section 220.2.

37.2.3 Failure of the **Commissioner** to make such a certification to the Commissioner of Labor shall not entitle the **Contractor** to damages for delay or for any cause whatsoever.

37.2.4 Prevailing Rate of Wages: The wages to be paid for a legal day's **Work** to laborers, workers, or mechanics employed upon the **Work** contemplated by this **Contract** or upon any materials to be used thereon shall not be less than the "prevailing rate of wage" as defined in Labor Law Section 220, and as fixed by the **Comptroller** in the attached Schedule of Wage Rates and in updated schedules thereof. The prevailing wage rates and supplemental benefits to be paid are those in effect at the time the **Work** is being performed.

37.2.5 Requests for interpretation or correction in the Information for Bidders includes all requests for clarification of the classification of trades to be employed in the performance of the **Work** under this **Contract**. In the event that a trade not listed in the **Contract** is in fact employed during the performance of this **Contract**, the **Contractor** shall be required to obtain from the **Agency** the prevailing wage rates and supplementary benefits for the trades used and to complete the performance of this **Contract** at the price at which the **Contract** was awarded.

37.2.6 Minimum Wages: Except for employees whose wage is required to be fixed pursuant to Labor Law Section 220, all persons employed by the **Contractor** and any **Subcontractor** in the manufacture or furnishing of the supplies, materials, or equipment, or the furnishing of work, labor, or services, used in the performance of this **Contract**, shall be paid, without subsequent deduction or rebate unless expressly authorized by **Law**, not less than the sum mandated by **Law**.

37.3 Working Conditions: No part of the **Work**, labor or services shall be performed or rendered by the **Contractor** in any plants, factories, buildings or surroundings or under working conditions which are unsanitary or hazardous or dangerous to the health and safety of employees engaged in the performance of this **Contract**. Compliance with the safety, sanitary, and factory inspection **Laws** of the state in which the **Work** is to be performed shall be prima facie evidence of compliance with this Article 37.3.

37.4 Prevailing Wage Enforcement: The **Contractor** agrees to pay for all costs incurred by the **City** in enforcing prevailing wage requirements, including the cost of any investigation conducted by or on behalf of the **Agency** or the **Comptroller**, where the **City** discovers a failure to comply with any of the requirements of this Article 37 by the **Contractor** or its **Subcontractor(s)**. The **Contractor** also agrees that, should it fail or refuse to pay for any such investigation, the **Agency** is hereby authorized to deduct from a **Contractor's** account an amount equal to the cost of such investigation.

37.4.1 The Labor Law Section 220 and Section 220-d, as amended, provide that this **Contract** shall be forfeited and no sum paid for any **Work** done hereunder on a second conviction for willfully paying less than:

37.4.1(a) The stipulated prevailing wage scale as provided in Labor Law section 220, as amended, or

37.4.1(b) The stipulated minimum hourly wage scale as provided in Labor Law section 220-d, as amended.

37.4.2 For any breach or violation of either working conditions (Article 37.3) or minimum wages (Article 37.2.6) provisions, the party responsible therefor shall be liable to the City for liquidated damages, which may be withheld from any amounts due on any contracts with the City of such party responsible, or may be recovered in actions brought by the City Corporation Counsel in the name of the City, in addition to damages for any other breach of this Contract, for a sum equal to the amount of any underpayment of wages due to any employee engaged in the performance of this Contract. In addition, the Commissioner shall have the right to cancel contracts and enter into other contracts for the completion of the original contract, with or without public letting, and the original Contractor shall be liable for any additional cost. All sums withheld or recovered as deductions, rebates, refunds, or underpayment of wages hereunder, shall be held in a special deposit account and shall be paid without interest, on order of the Comptroller, directly to the employees who have been paid less than minimum rates of pay as set forth herein and on whose account such sums were withheld or recovered, provided that no claims by employees for such payments shall be entertained unless made within two (2) years from the date of actual notice to the Contractor of the withholding or recovery of such sums by the City.

37.4.3 A determination by the Comptroller that a Contractor and/or its Subcontractor willfully violated Labor Law Section 220 will be forwarded to the City's five District Attorneys for review.

37.4.4 The Contractor's or Subcontractor's noncompliance with this Article 37.4 and Labor Law Section 220 may result in an unsatisfactory performance evaluation and the Comptroller may also find and determine that the Contractor or Subcontractor willfully violated the New York Labor Law.

37.4.4(a) An unsatisfactory performance evaluation for noncompliance with this Article 37.4 may result in a determination that the Contractor is a non-responsible bidder on subsequent procurements with the City and thus a rejection of a future award of a contract with the City, as well as any other sanctions provided for by Law.

37.4.4(b) Labor Law Section 220-b, as amended, provides that when two (2) final determinations have been rendered against a Contractor or Subcontractor within any consecutive six (6) year period determining that such Contractor or Subcontractor has willfully failed to pay the prevailing rate of wages or to provide supplements in accordance with the Labor Law and this Article 37.4, whether such failures were concurrent or consecutive and whether or not such final determinations concerning separate public works projects are rendered simultaneously, such Contractor or Subcontractor shall be ineligible to submit a bid on or be awarded any public works contract with the City for a period of five (5) years from the second final determination. If the final determination involves the falsification of payroll records or the kickback of wages or supplements, the Contractor or Subcontractor shall be ineligible to submit a bid on or be awarded any public works contract with the City for a period of five (5) years from the first final determination.

37.4.4(c) Labor Law Section 220, as amended, provides that the Contractor or Subcontractor found to have violated this Article 37.4 may be directed to make payment of wages or supplements including interest found to be due, and the Contractor or Subcontractor may be directed to make payment of a further sum as

a civil penalty in an amount not exceeding twenty-five (25%) percent of the total amount found to be due.

37.5 The **Contractor** and its **Subcontractors** shall within ten (10) **Days** after mailing of a Notice of Award or written order, post in prominent and conspicuous places in each and every plant, factory, building, and structure where employees of the **Contractor** and its **Subcontractors** engaged in the performance of this **Contract** are employed, notices furnished by the **City**, in relation to prevailing wages and supplements, minimum wages, and other stipulations contained in Sections 220 and 220-h of the Labor Law, and the **Contractor** and its **Subcontractors** shall continue to keep such notices posted in such prominent and conspicuous places until **Final Acceptance** of the supplies, materials, equipment, or **Work**, labor, or services required to be furnished or rendered under this **Contract**.

37.6 The **Contractor** shall strictly comply with all of the provisions of Articles 37.6.1 through 37.6.5, and provide for all workers, laborers or mechanics in its employ, the following:

37.6.1 **Notices Posted At Site:** Post, in a location designated by the **City**, schedules of prevailing wages and supplements for this **Project**, a copy of all re-determinations of such schedules for the **Project**, the Workers' Compensation Law Section 51 notice, all other notices required by **Law** to be posted at the **Site**, the **City** notice that this **Project** is a public works project on which each worker is entitled to receive the prevailing wages and supplements for the occupation at which he or she is working, and all other notices which the **City** directs the **Contractor** to post. The **Contractor** shall provide a surface for such notices which is satisfactory to the **City**. The **Contractor** shall maintain and keep current such notices in a legible manner and shall replace any notice or schedule which is damaged, defaced, illegible or removed for any reason. The **Contractor** shall post such notices before commencing any **Work** on the **Site** and shall maintain such notices until all **Work** on the **Site** is complete; and

37.6.2 **Daily Site Sign-in Sheets:** Maintain daily **Site** sign-in sheets, and require that **Subcontractors** maintain daily **Site** sign-in sheets for its employees, which include blank spaces for an employee's name to be both printed and signed, job title, date started and Social Security number, the time the employee began work and the time the employee left work, until **Final Acceptance** of the supplies, materials, equipment, or **Work**, labor, or services to be furnished or rendered under this **Contract** unless exception is granted by the **Comptroller** upon application by the **Agency**. In the alternative, subject to the approval of the **CCPO**, the **Contractor** and **Subcontractor** may maintain an electronic or biometric sign-in system, which provides the information required by this Article 37.6.2; and

37.6.3 **Individual Employee Information Notices:** Distribute a notice to each worker, laborer or mechanic employed under this **Contract**, in a form provided by the **Agency**, that this **Project** is a public works project on which each worker, laborer or mechanic is entitled to receive the prevailing rate of wages and supplements for the occupation at which he or she is working. If the total cost of the **Work** under this **Contract** is at least two hundred fifty thousand (\$250,000) dollars, such notice shall also include a statement that each worker, laborer or mechanic must be certified prior to performing any **Work** as having successfully completed a course in construction safety and health approved by the United States Department of Labor's Occupational Safety and Health Administration that is at least ten (10) hours in duration. Such notice shall be distributed to each worker before he or she starts performing any **Work** of this **Contract** and with the first paycheck after July first of each year. "Worker, laborer or mechanic" includes employees of the **Contractor** and all **Subcontractors** and all employees of suppliers entering the **Site**. At the time of distribution, the **Contractor** shall have each worker, laborer or mechanic sign a statement, in a form provided by the **Agency**, certifying that the worker has received the notice required by this

Article 37.6.3, which signed statement shall be maintained with the payroll records required by this Contract; and

37.6.3(a) The **Contractor** and each **Subcontractor** shall notify each worker, laborer or mechanic employed under this **Contract** in writing of the prevailing rate of wages for their particular job classification. Such notification shall be given to every worker, laborer, and mechanic on their first pay stub and with every pay stub thereafter; and

37.6.4 **Site Laminated Identification Badges:** The **Contractor** shall provide laminated identification badges which include a photograph of the worker's, laborer's or mechanic's face and indicate the worker's, laborer's or mechanic's name, trade, employer's name, and employment starting date (month/day/year). Further, the **Contractor** shall require as a condition of employment on the **Site**, that each and every worker, laborer or mechanic wear the laminated identification badge at all times and that it may be seen by any representative of the **City**. The **Commissioner** may grant a written waiver from the requirement that the laminated identification badge include a photograph if the **Contractor** demonstrates that the identity of an individual wearing a laminated identification badge can be easily verified by another method; and

37.6.5 **Language Other Than English Used On Site:** Provide the **ACCO** notice when three (3) or more employees (worker and/or laborer and/or mechanic) on the **Site**, at any time, speak a language other than English. The **ACCO** will then provide the **Contractor** the notices described in Article 37.6.1 in that language or languages as may be required. The **Contractor** is responsible for all distributions under this Article 37; and

37.6.6 **Provision of Records:** The **Contractor** and **Subcontractor(s)** shall produce within five (5) **Days** on the **Site** of the **Work** and upon a written order of the **Engineer**, the **Commissioner**, the **ACCO**, the **Agency EAO**, or the **Comptroller**, such records as are required to be kept by this Article 37.6; and

37.6.7 The **Contractor** and **Subcontractor(s)** shall pay employees by check or direct deposit. If this **Contract** is for an amount greater than one million (\$1,000,000) dollars, checks issued by the **Contractor** to covered employees shall be generated by a payroll service or automated payroll system (an in-house system may be used if approved by the **Agency**). For any subcontract for an amount greater than seven hundred fifty thousand (\$750,000) dollars, checks issued by a **Subcontractor** to covered employees shall be generated by a payroll service or automated payroll system (an in-house system may be used if approved by the **Agency**); and

37.6.8 The failure of the **Contractor** or **Subcontractor(s)** to comply with the provisions of Articles 37.6.1 through 37.6.7 may result in the **Commissioner** declaring the **Contractor** in default and/or the withholding of payments otherwise due under the **Contract**.

37.7 The **Contractor** and its **Subcontractors** shall keep such employment and payroll records as are required by Section 220 of the Labor Law. The failure of the **Contractor** or **Subcontractor(s)** to comply with the provisions of this Article 37.7 may result in the **Commissioner** declaring the **Contractor** in default and/or the withholding of payments otherwise due under the **Contract**.

37.8 At the time the **Contractor** makes application for each partial payment and for final payment, the **Contractor** shall submit to the **Commissioner** a written payroll certification, in the form provided by this **Contract**, of compliance with the prevailing wage, minimum wage, and other provisions and stipulations required by Labor Law Section 220 and of compliance with the training requirements of

Labor Law Section 220-h set forth in Article 35.2. This certification of compliance shall be a condition precedent to payment and no payment shall be made to the **Contractor** unless and until each such certification shall have been submitted to and received by the **Commissioner**.

37.9 This **Contract** is executed by the **Contractor** with the express warranty and representation that the **Contractor** is not disqualified under the provisions of Section 220 of the Labor Law from the award of the **Contract**.

37.10 Any breach or violation of any of the foregoing shall be deemed a breach or violation of a material provision of this **Contract**, and grounds for cancellation thereof by the **City**.

ARTICLE 38. PAYROLL REPORTS

38.1 The **Contractor** and its **Subcontractor(s)** shall maintain on the **Site** during the performance of the **Work** the original payrolls or transcripts thereof which the **Contractor** and its **Subcontractor(s)** are required to maintain and shall submit such original payrolls or transcripts, subscribed and affirmed by it as true, within thirty (30) **Days** after issuance of its first payroll, and every thirty (30) **Days** thereafter, pursuant to Labor Law Section 220(3-a)(a)(iii). The **Contractor** and **Subcontractor(s)** shall submit such original payrolls or transcripts along with each and every payment requisition. If payment requisitions are not submitted at least once a month, the **Contractor** and its **Subcontractor(s)** shall submit original payrolls and transcripts both along with its payment requisitions and independently of its payment requisitions.

38.2 The **Contractor** shall maintain payrolls or transcripts thereof for six (6) years from the date of completion of the **Work** on this **Contract**. If such payrolls and transcripts are maintained outside of New York City after the completion of the **Work** and their production is required pursuant to this Article 38, the **Contractor** shall produce such records in New York City upon request by the **City**.

38.3 The **Contractor** and **Subcontractor(s)** shall comply with any written order, direction, or request made by the **Engineer**, the **Commissioner**, the **ACCO**, the **Agency EAO**, the **Agency Labor Law Investigator(s)**, or the **Comptroller**, to provide to the requesting party any of the following information and/or records within five (5) **Days** of such written order, direction, or request:

38.3.1 Such original payrolls or transcripts thereof subscribed and affirmed by it as true and the statements signed by each worker pursuant to this Chapter VIII; and/or

38.3.2 Attendance sheets for each **Day** on which any employee of the **Contractor** and/or any of the **Subcontractor(s)** performed **Work** on the **Site**, which attendance sheet shall be in a form acceptable to the **Agency** and shall provide information acceptable to the **Agency** to identify each such employee; and/or

38.3.3 Any other information to satisfy the **Engineer**, the **Commissioner**, the **ACCO**, the **Agency EAO**, the **Agency Labor Law Investigator(s)** or the **Comptroller**, that this Chapter VIII and the Labor Law, as to the hours of employment and prevailing rates of wages and/or supplemental benefits, are being observed.

38.4 The failure of the **Contractor** or **Subcontractor(s)** to comply with the provisions of Articles 38.1 and/or 38.2 may result in the **Commissioner** declaring the **Contractor** in default and/or the withholding of payments otherwise due under the **Contract**.

ARTICLE 39. DUST HAZARDS

39.1 Should a harmful dust hazard be created in performing the **Work** of this **Contract**, for the elimination of which appliances or methods have been approved by the Board of Standards and Appeals of the City of New York, such appliances and methods shall be installed, maintained, and effectively operated during the continuance of such harmful dust hazard. Failure to comply with this provision after notice shall make this **Contract** voidable at the sole discretion of the **City**.

CHAPTER IX PARTIAL AND FINAL PAYMENTS

ARTICLE 40. CONTRACT PRICE

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

ARTICLE 41. BID BREAKDOWN ON LUMP SUM

41.1 Within fifteen (15) **Days** after the commencement date specified in the **Notice to Proceed** or **Order to Work**, unless otherwise directed by the **Resident Engineer**, the **Contractor** shall submit to the **Resident Engineer** a breakdown of its bid price, or of lump sums bid for items of the **Contract**, showing the various operations to be performed under the **Contract**, as directed in the progress schedule required under Article 9, and the value of each of such operations, the total of such items to equal the lump sum price bid. Said breakdown must be approved in writing by the **Resident Engineer**.

41.2 No partial payment will be approved until the **Contractor** submits a bid breakdown that is acceptable to the **Resident Engineer**.

41.3 The **Contractor** shall also submit such other information relating to the bid breakdown as directed by the **Resident Engineer**. Thereafter, the breakdown may be used only for checking the **Contractor's** applications for partial payments hereunder, but shall not be binding upon the **City**, the **Commissioner**, or the **Engineer** for any purpose whatsoever.

ARTICLE 42. PARTIAL PAYMENTS

42.1 From time to time as the **Work** progresses satisfactorily, but not more often than once each calendar month (except where the **Commissioner** approves in writing the submission of invoices on a more frequent basis and for invoices relating to **Work** performed pursuant to a change order), the **Contractor** may submit to the **Engineer** a requisition for a partial payment in the prescribed form, which shall contain an estimate of the quantity and the fair value of the **Work** done during the payment period.

42.2 Partial payments may be made for materials, fixtures, and equipment in advance of their actual incorporation in the **Work**, as the **Commissioner** may approve, and upon the terms and conditions set forth in the General Conditions.

42.3 The **Contractor** shall also submit to the **Commissioner** in connection with every application for partial payment a verified statement in the form prescribed by the **Comptroller** setting forth the information required under Labor Law Section 220-a.

42.4 Within thirty (30) **Days** after receipt of a satisfactory payment application, and within sixty (60) **Days** after receipt of a satisfactory payment application in relation to **Work** performed pursuant to a change order, the **Engineer** will prepare and certify, and the **Commissioner** will approve, a voucher for a partial payment in the amount of such approved estimate, less any and all deductions authorized to be made by the **Commissioner** under the terms of this **Contract** or by **Law**.

ARTICLE 43. PROMPT PAYMENT

43.1 The Prompt Payment provisions of the **PPB** Rules in effect at the time of the bid will be applicable to payments made under this **Contract**. The provisions require the payment to the **Contractor** of interest on payments made after the required payment date, except as set forth in the **PPB** Rules.

43.2 The **Contractor** shall submit a proper invoice to receive payment, except where the **Contract** provides that the **Contractor** will be paid at predetermined intervals without having to submit an invoice for each scheduled payment.

43.3 Determination of interest due will be made in accordance with the **PPB** Rules.

43.4 If the **Contractor** is paid interest, the proportionate share(s) of that interest shall be forwarded by the **Contractor** to its **Subcontractor(s)**.

43.5 The **Contractor** shall pay each **Subcontractor** or **Materialman** not later than seven (7) **Days** after receipt of payment out of amounts paid to the **Contractor** by the **City** for **Work** performed by the **Subcontractor** or **Materialman** under this **Contract**.

43.5.1 If **Contractor** fails to make any payment to any **Subcontractor** or **Materialman** within seven (7) **Days** after receipt of payment by the **City** pursuant to this Article 43.5, then the **Contractor** shall pay interest on amounts due to such **Subcontractor** or **Materialman** at the rate of interest in effect on the date such payment is made by the **Contractor** computed in accordance with Section 756-b (1)(b) of the New York General Business Law. Accrual of interest shall commence on the **Day** immediately following the expiration of the seventh **Day** following receipt of payment by the **Contractor** from the **City** and shall end on the date on which payment is made.

43.6 The **Contractor** shall include in each of its subcontracts a provision requiring each **Subcontractor** to make payment to each of its **Subcontractors** or **Materialmen** for **Work** performed under this **Contract** in the same manner and within the same time period set forth above.

ARTICLE 44. SUBSTANTIAL COMPLETION PAYMENT

44.1 The **Contractor** shall submit with the **Substantial Completion** requisition:

44.1.1 A final verified statement of any pending Article 27 disputes in accordance with the **PPB** Rules and this **Contract** and any and all alleged claims against the **City**, in any way connected with or arising out of this **Contract** (including those as to which details may have been furnished pursuant to Articles 11, 27, 28, and 30) setting forth with respect to each

such claim the total amount thereof, the various items of labor and materials included therein, and the alleged value of each item; and if the alleged claim be one for delay, the alleged cause of each such delay, the period or periods of time, giving the dates when the **Contractor** claims the performance of the **Work** or a particular part thereof was delayed, and an itemized statement and breakdown of the amount claimed for each such delay.

44.1.1(a) With respect to each such claim, the **Commissioner**, the **Comptroller** and, in the event of litigation, the City Corporation Counsel shall have the same right to inspect, and to make extracts or copies of, the **Contractor's** books, vouchers, records, etc., as is referred to in Articles 11, 27, 28, and 30. Nothing contained in this Article 44.1.1(a) is intended to or shall relieve the **Contractor** from the obligation of complying strictly with Articles 11, 27, 28, and 30. The **Contractor** is warned that unless such claims are completely set forth as herein required, the **Contractor** upon acceptance of the **Substantial Completion** payment pursuant to this Article 44, will have waived any such claims.

44.1.2 A **Final Approved Punch List**.

44.1.3 Where required, a request for an extension of time to achieve **Substantial Completion** or final extension of time.

44.2 The **Commissioner** shall issue a voucher calling for payment of any part or all of the balance due for **Work** performed under the **Contract**, including monies retained under Article 21, less any and all deductions authorized to be made by the **Commissioner**, under this **Contract** or by **Law**, and less twice the amount the **Commissioner** considers necessary to ensure the completion of the balance of the **Work** by the **Contractor**. Such a payment shall be considered a partial and not a final payment. No **Substantial Completion** payment shall be made under this Article 44 where the **Contractor** failed to complete the **Work** within the time fixed for such completion in the Schedule A of the General Conditions, or within the time to which completion may have been extended, until an extension or extensions of time for the completion of **Work** have been acted upon pursuant to Article 13.

44.3 No further partial payments shall be made to the **Contractor** after **Substantial Completion**, except the **Substantial Completion** payment and payment pursuant to any **Contractor's** requisition that were properly filed with the **Commissioner** prior to the date of **Substantial Completion**; however, the **Commissioner** may grant a waiver for further partial payments after the date of **Substantial Completion** to permit payments for change order **Work** and/or release of retainage and deposits pursuant to Articles 21 and 24. Such waiver shall be in writing.

44.4 The **Contractor** acknowledges that nothing contained in this Article 44 is intended to or shall in any way diminish the force and effect of Article 13.

ARTICLE 45. FINAL PAYMENT

45.1 After completion and **Final Acceptance** of the **Work**, the **Contractor** shall submit all required certificates and documents, together with a requisition for the balance claimed to be due under the **Contract**, less the amount authorized to be retained for maintenance under Article 24. Such submission shall be within 90 days of the date of the **Commissioner's** written determination of **Final Acceptance**, or within such additional time as may be granted by the **Commissioner** in writing. If the **Contractor** fails to submit all required certificates and documents within the time allowed, no payment of the balance claimed shall be made to the **Contractor** and the **Contractor** shall be deemed to have forfeited its right to

payment of any balance claimed. A verified statement similar to that required in connection with applications for partial payments shall also be submitted to the **Commissioner**.

45.2 Amended Verified Statement of Claims: The **Contractor** shall also submit with the final requisition any amendments to the final verified statement of any pending dispute resolution procedures in accordance with the **PPB** Rules and this **Contract** and any and all alleged claims against the **City**, in any way connected with or arising out of this **Contract** (including those as to which details may have been furnished pursuant to Articles 11, 27, 28, and 30) that have occurred subsequent to **Substantial Completion**, setting forth with respect to each such claim the total amount thereof, the various items of labor and materials included therein, and the alleged value of each such item; and if the alleged claim be one for delay, the alleged cause of each such delay, the period or periods of time, giving the dates when the **Contractor** claims the performance of the **Work** or a particular part thereof was delayed, and an itemized statement and breakdown of the amount claimed for each such delay. With reference to each such claim, the **Commissioner**, the **Comptroller** and, in the event of litigation, the **City Corporation Counsel** shall have the same right to inspect, and to make extracts or copies of, the **Contractor's** books, vouchers, records, etc., as is referred to in Articles 11, 27, 28, and 30. Nothing contained in this Article 45.2, is intended to or shall relieve the **Contractor** from the obligation of complying strictly with Articles 11, 27, 28, and 30. The **Contractor** is warned that unless such claims are completely set forth as herein required, the **Contractor**, upon acceptance of the Final Payment pursuant to Article 46, will have waived any such claims.

45.3 Preparation of Final Voucher: Upon determining the balance due hereunder other than on account of claims, the **Engineer** will prepare and certify, for the **Commissioner's** approval, a voucher for final payment in that amount less any and all deductions authorized to be made by the **Commissioner** under this **Contract** or by **Law**. In the case of a lump sum **Contract**, the **Commissioner** shall certify the voucher for final payment within thirty (30) **Days** from the date of completion and acceptance of the **Work**, provided all requests for extensions of time have been acted upon.

45.3.1 All prior certificates and vouchers upon which partial payments were made, being merely estimates made to enable the **Contractor** to prosecute the **Work** more advantageously, shall be subject to correction in the final voucher, and the certification of the **Engineer** thereon and the approval of the **Commissioner** thereof, shall be conditions precedent to the right of the **Contractor** to receive any money hereunder. Such final voucher shall be binding and conclusive upon the **Contractor**.

45.3.2 Payment pursuant to such final voucher, less any deductions authorized to be made by the **Commissioner** under this **Contract** or by **Law**, shall constitute the final payment, and shall be made by the **Comptroller** within thirty (30) **Days** after the filing of such voucher in his/her office.

45.4 The **Contractor** acknowledges that nothing contained in this Article 45 is intended to or shall in any way diminish the force and effect of Article 13.

ARTICLE 46. ACCEPTANCE OF FINAL PAYMENT

46.1 The acceptance by the **Contractor**, or by anyone claiming by or through it, of the final payment, whether such payment be made pursuant to any judgment of any court, or otherwise, shall constitute and operate as a release of the **City** from any and all claims of and liability to the **Contractor** for anything heretofore done or furnished for the **Contractor** relating to or arising out of this **Contract** and the **Work** done hereunder, and for any prior act, neglect or default on the part of the **City** or any of its officials, agents or employees, excepting only a claim against the **City** for the amounts deducted or retained in accordance with the terms and provisions of this **Contract** or by **Law**, and excepting any

claims, not otherwise waived, or any pending dispute resolution procedures which are contained in the verified statement filed with the **Contractor's** substantial and final requisitions pursuant to Articles 44 and 45.

46.2 The **Contractor** is warned that the execution by it of a release, in connection with the acceptance of the final payment, containing language purporting to reserve claims other than those herein specifically excepted from the operation of this Article 46, or those for amounts deducted by the **Commissioner** from the final requisition or from the final payment as certified by the **Engineer** and approved by the **Commissioner**, shall not be effective to reserve such claims, anything stated to the **Contractor** orally or in writing by any official, agent or employee of the **City** to the contrary notwithstanding.

46.3 Should the **Contractor** refuse to accept the final payment as tendered by the **Comptroller**, it shall constitute a waiver of any right to interest thereon.

46.4 The **Contractor**, however, shall not be barred by this Article 46 from commencing an action for breach of **Contract** to the extent permitted by **Law** and by the terms of the **Contract** for any claims that are contained in the verified statement filed with the **Contractor's** substantial and final requisitions pursuant to Articles 44 and 45 or that arose after submission of the final payment requisition, provided that a detailed and verified statement of claim is served upon the contracting **Agency** and **Comptroller** not later than forty (40) **Days** after the making of such final payment by electronic funds transfer (EFT) or the mailing of such final payment. The statement shall specify the items upon which the claim will be based and any such claim shall be limited to such items.

ARTICLE 47. APPROVAL BY PUBLIC DESIGN COMMISSION

47.1 All works of art, including paintings, mural decorations, stained glass, statues, bas-reliefs, and other sculptures, monuments, fountains, arches, and other structures of a permanent character intended for ornament or commemoration, and every design of the same to be used in the performance of this **Contract**, and the design of all bridges, approaches, buildings, gates, fences, lamps, or structures to be erected, pursuant to the terms of this **Contract**, shall be submitted to the Art Commission, d/b/a the Public Design Commission of the City of New York, and shall be approved by the Public Design Commission prior to the erection or placing in position of the same. The final payment shall not become due or payable under this **Contract** unless and until the Public Design Commission shall certify that the design for the **Work** herein contracted for has been approved by the said Public Design Commission, and that the same has been executed in substantial accordance with the design so approved, pursuant to the provisions of Chapter 37, Section 854 of the City Charter, as amended.

CHAPTER X CONTRACTOR'S DEFAULT

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

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

48.1.1 The **Contractor** fails to commence **Work** when notified to do so by the **Commissioner**; or
if

48.1.2 The **Contractor** shall abandon the **Work**; or if

48.1.3 The **Contractor** shall refuse to proceed with the **Work** when and as directed by the **Commissioner**; or if

48.1.4 The **Contractor** shall, without just cause, reduce its working force to a number which, if maintained, would be insufficient, in the opinion of the **Commissioner**, to complete the **Work** in accordance with the progress schedule; or if

48.1.5 The **Contractor** shall fail or refuse to increase sufficiently such working force when ordered to do so by the **Commissioner**; or if

48.1.6 The **Contractor** shall sublet, assign, transfer, convert or otherwise dispose of this **Contract** other than as herein specified; or sell or assign a majority interest in the **Contractor**; or if

48.1.7 The **Contractor** fails to secure and maintain all required insurance; or if

48.1.8 A receiver or receivers are appointed to take charge of the **Contractor's** property or affairs; or if

48.1.9 The **Commissioner** shall be of the opinion that the **Contractor** is or has been unnecessarily or unreasonably or willfully delaying the performance and completion of the **Work**, or the award of necessary subcontracts, or the placing of necessary material and equipment orders; or if

48.1.10 The **Commissioner** shall be of the opinion that the **Contractor** is or has been willfully or in bad faith violating any of the provisions of this **Contract**; or if

48.1.11 The **Commissioner** shall be of the opinion that the **Work** cannot be completed within the time herein provided therefor or within the time to which such completion may have been extended; provided, however, that the impossibility of timely completion is, in the **Commissioner's** opinion, attributable to conditions within the **Contractor's** control; or if

48.1.12 The **Work** is not completed within the time herein provided therefor or within the time to which the **Contractor** may be entitled to have such completion extended; or if

48.1.13 Any statement or representation of the **Contractor** in the **Contract** or in any document submitted by the **Contractor** with respect to the **Work**, the **Project**, or the **Contract** (or for purposes of securing the **Contract**) was untrue or incorrect when made; or if

48.1.14 The **Contractor** or any of its officers, directors, partners, five (5%) percent shareholders, principals, or other persons substantially involved in its activities, commits any of the acts or omissions specified as the grounds for debarment in the **PPB Rules**.

48.2 Before the **Commissioner** shall exercise his/her right to declare the **Contractor** in default, the **Commissioner** shall give the **Contractor** an opportunity to be heard, upon not less than two (2) **Days** notice.

ARTICLE 49. EXERCISE OF THE RIGHT TO DECLARE DEFAULT

49.1 The right to declare the **Contractor** in default for any of the grounds specified or referred to in Article 48 shall be exercised by sending the **Contractor** a notice, signed by the **Commissioner**, setting forth the ground or grounds upon which such default is declared (hereinafter referred to as a "Notice of Default").

49.2 The **Commissioner's** determination that the **Contractor** is in default shall be conclusive, final, and binding on the parties and such a finding shall preclude the **Contractor** from commencing a plenary action for any damages relating to the **Contract**. If the **Contractor** protests the determination of the **Commissioner**, the **Contractor** may commence an action in a court of competent jurisdiction of the State of New York under Article 78 of the New York Civil Practice Law and Rules.

ARTICLE 50. QUITTING THE SITE

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

ARTICLE 51. COMPLETION OF THE WORK

51.1 The **Commissioner**, after declaring the **Contractor** in default, may then have the **Work** completed by such means and in such manner, by contract with or without public letting, or otherwise, as he/she may deem advisable, utilizing for such purpose such of the **Contractor's** plant, materials, equipment, tools, and supplies remaining on the **Site**, and also such **Subcontractors**, as he/she may deem advisable.

51.2 After such completion, the **Commissioner** shall make a certificate stating the expense incurred in such completion, which shall include the cost of re-letting and also the total amount of liquidated damages (at the rate provided for in the **Contract**) from the date when the **Work** should have been completed by the **Contractor** in accordance with the terms hereof to the date of actual completion of the **Work**. Such certificate shall be binding and conclusive upon the **Contractor**, its sureties, and any person claiming under the **Contractor**, as to the amount thereof.

51.3 The expense of such completion, including any and all related and incidental costs, as so certified by the **Commissioner**, and any liquidated damages assessed against the **Contractor**, shall be charged against and deducted out of monies which are earned by the **Contractor** prior to the date of default. Should the expense of such completion, as certified by the **Commissioner**, exceed the total sum which would have been payable under the **Contract** if it had been completed by the **Contractor**, any excess shall be paid by the **Contractor**.

ARTICLE 52. PARTIAL DEFAULT

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

Contractor(s) or persons whom the **Commissioner** may engage to complete the **Work** as to which the **Contractor** was declared in default.

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

ARTICLE 53. PERFORMANCE OF UNCOMPLETED WORK

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

ARTICLE 54. OTHER REMEDIES

54.1 In addition to the right to declare the **Contractor** in default pursuant to this Chapter X, the **Commissioner** shall have the absolute right, in his/her sole discretion and without a hearing, to complete or cause to be completed in the same manner as described in Articles 51 and 53, any or all unsatisfactory or uncompleted punch list **Work** that remains after the completion date specified in the **Final Approved Punch List**. A written notice of the exercise of this right shall be sent to the **Contractor** who shall immediately quit the **Site** in accordance with the provisions of Article 50.

54.2 The expense of completion permitted under Article 54.1, including any and all related and incidental costs, as so certified by the **Commissioner**, shall be charged against and deducted out of monies which have been earned by the **Contractor** prior to the date of the exercise of the right set forth in Article 54.1; the balance of such monies, if any, subject to the other provisions of this **Contract**, to be paid to the **Contractor** without interest after such completion. Should the expense of such completion, as certified by the **Commissioner**, exceed the total sum which would have been payable under the **Contract** if it had been completed by the **Contractor**, any excess shall be paid by the **Contractor**.

54.3 The previous provisions of this Chapter X shall be in addition to any and all other remedies available under **Law** or in equity.

54.4 The exercise by the **City** of any remedy set forth herein shall not be deemed a waiver by the **City** of any other legal or equitable remedy contained in this **Contract** or provided under **Law**.

**CHAPTER XI
MISCELLANEOUS PROVISIONS**

ARTICLE 55. CONTRACTOR'S WARRANTIES

55.1 In consideration of, and to induce, the award of this **Contract** to the **Contractor**, the **Contractor** represents and warrants:

55.1.1 That it is financially solvent, sufficiently experienced and competent to perform the **Work**; and

55.1.2 That the facts stated in its bid and the information given by it pursuant to the Information for Bidders is true and correct in all respects; and

55.1.3 That it has read and complied with all requirements set forth in the **Contract**.

ARTICLE 56. CLAIMS AND ACTIONS THEREON

56.1 Any claim, that is not subject to dispute resolution under the **PPB** Rules or this **Contract**, against the **City** for damages for breach of **Contract** shall not be made or asserted in any action, unless the **Contractor** shall have strictly complied with all requirements relating to the giving of notice and of information with respect to such claims, as herein before provided.

56.2 Nor shall any action be instituted or maintained on any such claims unless such action is commenced within six (6) months after **Substantial Completion**; except that:

56.2.1 Any claims arising out of events occurring after **Substantial Completion** and before **Final Acceptance** of the **Work** shall be asserted within six (6) months of **Final Acceptance** of the **Work**;

56.2.2 Any claims for monies deducted, retained or withheld under the provisions of this **Contract** shall be asserted within six (6) months after the date when such monies otherwise become due and payable hereunder; and

56.2.3 If the **Commissioner** exercises his/her right to terminate the **Contract** pursuant to Article 64, any such action shall be commenced within six (6) months of the date the **Commissioner** exercises said right.

ARTICLE 57. INFRINGEMENT

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

ARTICLE 58. NO CLAIM AGAINST OFFICIALS, AGENTS OR EMPLOYEES

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

ARTICLE 59. SERVICE OF NOTICES

59.1 The **Contractor** hereby designates the business address, fax number, and email address specified in its bid, as the place where all notices, directions or other communications to the **Contractor** may be delivered, or to which they may be mailed. Any notice, direction, or communication from either party to the other shall be in writing and shall be deemed to have been given when (i) delivered personally; (ii) sent by certified mail, return receipt requested; (iii) delivered by overnight or same day courier service in a properly addressed envelope with confirmation; or (iv) sent by fax or email and, unless receipt of the fax or e-mail is acknowledged by the recipient by fax or e-mail, deposited in a post office box regularly maintained by the United States Postal Service in a properly addressed, postage pre-paid envelope.

59.2 **Contractor's** notice address, email address, or fax number may be changed at any time by an instrument in writing, executed and acknowledged by the **Contractor**, and delivered to the **Commissioner**.

59.3 Nothing herein contained shall, however, be deemed to preclude or render inoperative the service of any notice, direction or other communication upon the **Contractor** personally, or, if the **Contractor** is a corporation, upon any officer thereof.

ARTICLE 60. UNLAWFUL PROVISIONS DEEMED STRICKEN FROM CONTRACT

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

ARTICLE 61. ALL LEGAL PROVISIONS DEEMED INCLUDED

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

ARTICLE 62. TAX EXEMPTION

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

though it is consumed, is not incorporated into the completed **Work** (consumable supplies) and tangible personal property that the **Contractor** is required to remove from the **Site** during or upon completion of the **Work**. The **Contractor** and its **Subcontractors** and **Materialmen** shall be responsible for and pay any and all applicable taxes, including sales and compensating use taxes, on such leased tools, machinery, equipment or other property and upon all such consumable supplies and tangible personal property that the **Contractor** is required to remove from the **Site** during or upon completion of the **Work**.

62.2 The **Contractor** agrees to sell and the **City** agrees to purchase all tangible personal property, other than consumable supplies and other tangible personal property that the **Contractor** is required to remove from the **Site** during or upon completion of the **Work**, that is required, necessary or proper for or incidental to the construction of the **Project** covered by this **Contract**. The sum paid under this **Contract** for such tangible personal property shall be in full payment and consideration for the sale of such tangible personal property.

62.2.1 The **Contractor** agrees to construct the **Project** and to perform all **Work**, labor and services rendered, necessary, proper or incidental thereto for the sum shown in the bid for the performance of such **Work**, labor, and services, and the sum so paid pursuant to this **Contract** for such **Work**, labor, and services, shall be in full consideration for the performance by the **Contractor** of all its duties and obligations under this **Contract** in connection with said **Work**, labor, and services.

62.3 20 NYCRR Section 541.3(d) provides that a **Contractor's** purchases of tangible personal property that is either incorporated into real property owned by a governmental entity or purchased for and sold to a governmental entity are exempt from sales and use tax. The **City** shall not pay sales tax for any such tangible personal property that it purchases from the **Contractor** pursuant to the **Contract**. With respect to such tangible personal property, the **Contractor**, at the request of the **City**, shall furnish to the **City** such bills of sale and other instruments as may be required by the **City**, properly executed, acknowledged and delivered assuring to the **City** title to such tangible personal property, free of liens and/or encumbrances, and the **Contractor** shall mark or otherwise identify all such tangible personal property as the property of the **City**.

62.4 Title to all tangible personal property to be sold by the **Contractor** to the **City** pursuant to the provisions of the **Contract** shall immediately vest in and become the sole property of the **City** upon delivery of such tangible personal property to the **Site**. Notwithstanding such transfer of title, the **Contractor** shall have the full and continuing responsibility to install such tangible personal property in accordance with the provisions of this **Contract**, protect it, maintain it in a proper condition and forthwith repair, replace and make good any damage thereto, theft or disappearance thereof, and furnish additional tangible personal property in place of any that may be lost, stolen or rendered unusable, without cost to the **City**, until such time as the **Work** covered by the **Contract** is fully accepted by the **City**. Such transfer of title shall in no way affect any of the **Contractor's** obligations hereunder. In the event that, after title has passed to the **City**, any of the tangible personal property is rejected as being defective or otherwise unsatisfactory, title to all such tangible personal property shall be deemed to have been transferred back to the **Contractor**.

62.5 The purchase by **Subcontractors** or **Materialmen** of tangible personal property to be sold hereunder shall be a purchase or procurement for resale to the **Contractor** (either directly or through other **Subcontractors**) and therefore not subject to the aforesaid sales and compensating use taxes, provided that the subcontracts and purchase agreements provide for the resale of such tangible personal property and that such subcontracts and purchase agreements are in a form similar to this **Contract** with respect to the separation of the sale of consumable supplies and tangible personal property that the **Contractor** is required to remove from the **Site** during or upon completion of the **Work** from the **Work** and labor, services, and any other matters to be provided, and provided further that the subcontracts and

purchase agreements provide separate prices for tangible personal property and all other services and matters. Such separation shall actually be followed in practice, including the separation of payments for tangible personal property from the payments for other **Work** and labor and other things to be provided.

62.6 The **Contractor** and its **Subcontractors** and **Materialmen** shall furnish a **Contractor Exempt Purchase Certificate** to all persons, firms or corporations from which they purchase tangible personal property for the performance of the **Work** covered by this **Contract**.

62.7 In the event any of the provisions of this Article 62 shall be deemed to be in conflict with any other provisions of this **Contract** or create any ambiguity, then the provisions of this Article 62 shall control.

ARTICLE 63. INVESTIGATION(S) CLAUSE

63.1 The parties to this **Contract** agree to cooperate fully and faithfully with any investigation, audit or inquiry conducted by a United States, a State of New York (State) or a **City** governmental agency or authority that is empowered directly or by designation to compel the attendance of witnesses and to examine witnesses under oath, or conducted by the Inspector General of a governmental agency that is a party in interest to the transaction, submitted bid, submitted proposal, contract, lease, permit or license that is the subject of the investigation, audit or inquiry.

63.2 If any person who has been advised that his/her statement, and any information from such statement, will not be used against him/her in any subsequent criminal proceeding refuses to testify before a grand jury or other governmental agency or authority empowered directly or by designation to compel the attendance of witnesses and to examine witnesses under oath concerning the award of or performance under any transaction, agreement, lease, permit, contract, or license entered into with the **City**, the State, or any political subdivision or public authority thereof, or the Port Authority of New York and New Jersey, or any local development corporation within the **City**, or any public benefit corporation organized under the **Laws** of the State of New York, or;

63.3 If any person refuses to testify for a reason other than the assertion of his/her privilege against self incrimination in an investigation, audit or inquiry conducted by a **City** or State governmental agency or authority empowered directly or by designation to compel the attendance of witnesses and to take testimony under oath, or by the Inspector General of the governmental agency that is a party in interest in, and is seeking testimony concerning the award of, or performance under any transaction, agreement, lease, permit, contract, or license entered into with the **City**, the State, or any political subdivision thereof or any local development corporation within the **City**, then;

63.4 The **Commissioner** whose **Agency** is a party in interest to the transaction, submitted bid, submitted proposal, contract, lease, permit, or license shall convene a hearing, upon not less than five (5) **Days'** written notice to the parties involved to determine if any penalties should attach for the failure of a person to testify.

63.5 If any non-governmental party to the hearing requests an adjournment, the **Commissioner** who convened the hearing may, upon granting the adjournment, suspend any contract, lease, permit, or license, pending the final determination pursuant to Article 63.7 without the **City** incurring any penalty or damages for delay or otherwise.

63.6 The penalties which may attach after a final determination by the **Commissioner** may include but shall not exceed:

63.6.1 The disqualification for a period not to exceed five (5) years from the date of an adverse determination for any person, or any entity of which such person was a member at the time the testimony was sought, from submitting bids for, or transacting business with, or entering into or obtaining any contract, lease, permit or license with or from the City; and/or

63.6.2 The cancellation or termination of any and all such existing City contracts, leases, permits or licenses that the refusal to testify concerns and that have not been assigned as permitted under this Contract, nor the proceeds of which pledged, to an unaffiliated and unrelated institutional lender for fair value prior to the issuance of the notice scheduling the hearing, without the City incurring any penalty or damages on account of such cancellation or termination; monies lawfully due for goods delivered, work done, rentals, or fees accrued prior to the cancellation or termination shall be paid by the City.

63.7 The Commissioner shall consider and address in reaching his/her determination and in assessing an appropriate penalty the factors in Articles 63.7.1 and 63.7.2. The Commissioner may also consider, if relevant and appropriate, the criteria established in Articles 63.7.3 and 63.7.4, in addition to any other information which may be relevant and appropriate:

63.7.1 The party's good faith endeavors or lack thereof to cooperate fully and faithfully with any governmental investigation or audit, including but not limited to the discipline, discharge, or disassociation of any person failing to testify, the production of accurate and complete books and records, and the forthcoming testimony of all other members, agents, assignees or fiduciaries whose testimony is sought.

63.7.2 The relationship of the person who refused to testify to any entity that is a party to the hearing, including but not limited to, whether the person whose testimony is sought has an ownership interest in the entity and/or the degree of authority and responsibility the person has within the entity.

63.7.3 The nexus of the testimony sought to the subject entity and its contracts, leases, permits or licenses with the City.

63.7.4 The effect a penalty may have on an unaffiliated and unrelated party or entity that has a significant interest in an entity subject to penalties under Article 63.6, provided that the party or entity has given actual notice to the Commissioner upon the acquisition of the interest, or at the hearing called for in Article 63.4, gives notice and proves that such interest was previously acquired. Under either circumstance the party or entity shall present evidence at the hearing demonstrating the potential adverse impact a penalty will have on such person or entity.

63.8 Definitions:

63.8.1 The term "license" or "permit" as used in this Article 63 shall be defined as a license, permit, franchise or concession not granted as a matter of right.

63.8.2 The term "person" as used in this Article 63 shall be defined as any natural person doing business alone or associated with another person or entity as a partner, director, officer, principal or employee.

63.8.3 The term "entity" as used in this Article 63 shall be defined as any firm, partnership, corporation, association, joint venture, or person that receives monies, benefits, licenses, leases, or permits from or through the City or otherwise transacts business with the City.

63.8.4 The term "member" as used in this Article 63 shall be defined as any person associated with another person or entity as a partner, director, officer, principal or employee.

63.9 In addition to and notwithstanding any other provision of this **Contract**, the **Commissioner** may in his/her sole discretion terminate this **Contract** upon not less than three (3) **Days**' written notice in the event the **Contractor** fails to promptly report in writing to the **Commissioner** of the Department of Investigations ("DOI") of the **City** any solicitation of money, goods, requests for future employment or other benefit or thing of value, by or on behalf of any employee of the **City** or other person, firm, corporation or entity for any purpose which may be related to the procurement or obtaining of this **Contract** by the **Contractor**, or affecting the performance of this **Contract**.

ARTICLE 64. TERMINATION BY THE CITY

64.1 In addition to termination pursuant to any other article of this **Contract**, the **Commissioner** may, at any time, terminate this **Contract** by written notice to the **Contractor**. In the event of termination, the **Contractor** shall, upon receipt of such notice, unless otherwise directed by the **Commissioner**:

64.1.1 Stop **Work** on the date specified in the notice;

64.1.2 Take such action as may be necessary for the protection and preservation of the **City's** materials and property;

64.1.3 Cancel all cancelable orders for material and equipment;

64.1.4 Assign to the **City** and deliver to the **Site** or another location designated by the **Commissioner**, any non-cancelable orders for material and equipment that is not capable of use except in the performance of this **Contract** and has been specifically fabricated for the sole purpose of this **Contract** and not incorporated in the **Work**;

64.1.5 Take no action which will increase the amounts payable by the **City** under this **Contract**.

64.2 In the event of termination by the **City** pursuant to this Article 64, payment to the **Contractor** shall be in accordance with Articles 64.2.1, 64.2.2 or 64.2.3, to the extent that each respective article applies.

64.2.1 Lump Sum Contracts or Items: On all lump sum **Contracts**, or on lump sum items in a **Contract**, the **City** will pay the **Contractor** the sum of the amounts described in Articles 64.2.1(a) and 64.2.1(b), less all payments previously made pursuant to this **Contract**. On lump sum **Contracts** only, the **City** will also pay the **Contractor** an additional sum as provided in Article 64.2.1(c).

64.2.1(a) For **Work** completed prior to the notice of termination, the **Contractor** shall be paid a pro rata portion of the lump sum bid amount, plus approved change orders, based upon the percent completion of the **Work**, as determined by the **Commissioner**. For the purpose of determining the pro rata portion of the lump sum bid amount to which the **Contractor** is entitled, the bid breakdown submitted in accordance with Article 41 shall be considered, but shall not be dispositive. The **Commissioner's** determination hereunder shall be final, binding, and conclusive.

64.2.1(b) For non-cancelable material and equipment that is not capable of use except in the performance of this **Contract** and has been specifically fabricated for the sole purpose of this **Contract**, but not yet incorporated in the **Work**, the **Contractor** shall be paid the lesser of the following, less salvage value:

64.2.1(b)(i) The Direct Cost, as defined in Article 64.2.4; or

64.2.1(b)(ii) The fair and reasonable value, if less than Direct Cost, of such material and equipment, plus necessary and reasonable delivery costs.

64.2.1(b)(iii) In addition, the **Contractor** shall be paid five (5%) percent of the amount described in Article 64.2.1(b)(i) or Article 64.2.1(b)(ii), whichever applies.

64.2.1(c) Except as otherwise provided in Article 64.2.1(d), on all lump sum **Contracts**, the **Contractor** shall be paid the percentage indicated below applied to the difference between the total lump sum bid amount and the total of all payments made prior to the notice of termination plus all payments allowed pursuant to Articles 64.2.1(a) and 64.2.1(b):

64.2.1(c)(i) Five (5%) percent of the first five million (\$5,000,000) dollars; and

64.2.1(c)(ii) Three (3%) percent of any amount between five million (\$5,000,000) dollars and fifteen million (\$15,000,000) dollars; plus

64.2.1(c)(iii) One (1%) percent of any amount over fifteen million (\$15,000,000) dollars.

64.2.1(d) In the event the **City** terminates a lump sum **Contract** pursuant to this Article 64 within ninety (90) **Days** after registration of the **Contract** with the **Comptroller**, the **Contractor** shall be paid one (1%) percent of the difference between the lump sum bid amount and the total of all payments made pursuant to this Article 64.2.

64.2.2 Unit Price Contracts or Items: On all unit price **Contracts**, or on unit price items in a **Contract**, the **City** will pay the **Contractor** the sum of the amounts described in Articles 64.2.2(a) and 64.2.2(b), less all payments previously made pursuant to this **Contract**:

64.2.2(a) For all completed units, the unit price stated in the **Contract**, and

64.2.2(b) For units that have been ordered but are only partially completed, the **Contractor** will be paid:

64.2.2(b)(i) A pro rata portion of the unit price stated in the **Contract** based upon the percent completion of the unit and

64.2.2(b)(ii) For non-cancelable material and equipment, payment will be made pursuant to Article 64.2.1(b).

64.2.3 Time and Materials Contracts or Items Based on Time and Material Records: On all **Contracts** or items in a **Contract** where payment for the **Work** is based on time and

material records, the **Contractor** shall be paid in accordance with Article 26, less all payments previously made pursuant to this **Contract**.

64.2.4 Direct Costs: Direct Costs as used in this Article 64.2 shall mean:

64.2.4(a) The actual purchase price of material and equipment, plus necessary and reasonable delivery costs,

64.2.4(b) The actual cost of labor involved in construction and installation at the **Site**, and

64.2.4(c) The actual cost of necessary bonds and insurance purchased pursuant to requirements of this **Contract** less any amounts that have been or should be refunded by the **Contractor's** sureties or insurance carriers.

64.2.4(d) Direct Costs shall not include overhead.

64.3 In no event shall any payments under this Article 64 exceed the **Contract** price for such items.

64.4 All payments pursuant to Article 64 shall be in the nature of liquidated damages and shall be accepted by the **Contractor** in full satisfaction of all claims against the **City**.

64.5 The **City** may deduct or set off against any sums due and payable pursuant to this Article 64, any deductions authorized by this **Contract** or by **Law** (including but not limited to liquidated damages) and any claims it may have against the **Contractor**. The **City's** exercise of the right to terminate the **Contract** pursuant to this Article 64 shall not impair or otherwise effect the **City's** right to assert any claims it may have against the **Contractor** in a plenary action.

64.6 Where the **Work** covered by the **Contract** has been substantially completed, as determined in writing by the **Commissioner**, termination of the **Work** shall be handled as an omission of **Work** pursuant to Articles 29 and 33, in which case a change order will be issued to reflect an appropriate reduction in the **Contract** sum, or if the amount is determined after final payment, such amount shall be paid by the **Contractor**.

ARTICLE 65. CHOICE OF LAW, CONSENT TO JURISDICTION AND VENUE

65.1 This **Contract** shall be deemed to be executed in the **City** regardless of the domicile of the **Contractor**, and shall be governed by and construed in accordance with the **Laws** of the State of New York and the **Laws** of the United States, where applicable.

65.2 The parties agree that any and all claims asserted against the **City** arising under this **Contract** or related thereto shall be heard and determined in the courts of the State of New York ("New York State Courts") located in the **City** and County of New York. To effect this **Contract** and intent, the **Contractor** agrees:

65.2.1 If the **City** initiates any action against the **Contractor** in Federal court or in a New York State Court, service of process may be made on the **Contractor** either in person, wherever such **Contractor** may be found, or by registered mail addressed to the **Contractor** at its address as set forth in this **Contract**, or to such other address as the **Contractor** may provide to the **City** in writing; and

65.2.2 With respect to any action between the **City** and the **Contractor** in a New York State Court, the **Contractor** hereby expressly waives and relinquishes any rights it might otherwise have:

65.2.2(a) To move to dismiss on grounds of forum non conveniens;

65.2.2(b) To remove to Federal Court; and

65.2.2(c) To move for a change of venue to a New York State Court outside New York County.

65.2.3 With respect to any action brought by the **City** against the **Contractor** in a Federal Court located in the **City**, the **Contractor** expressly waives and relinquishes any right it might otherwise have to move to transfer the action to a Federal Court outside the **City**.

65.2.4 If the **Contractor** commences any action against the **City** in a court located other than in the **City** and County of New York, upon request of the **City**, the **Contractor** shall either consent to a transfer of the action to a New York State Court of competent jurisdiction located in the **City** and County of New York or, if the Court where the action is initially brought will not or cannot transfer the action, the **Contractor** shall consent to dismiss such action without prejudice and may thereafter reinstate the action in a New York State Court of competent jurisdiction in New York County.

65.3 If any provision(s) of this Article 65 is held unenforceable for any reason, each and all other provision(s) shall nevertheless remain in full force and effect.

ARTICLE 66. PARTICIPATION IN AN INTERNATIONAL BOYCOTT

66.1 The **Contractor** agrees that neither the **Contractor** nor any substantially owned affiliated company is participating or shall participate in an international boycott in violation of the provisions of the Federal Export Administration Act of 1979, as amended, or the regulations of the United States Department of Commerce (Commerce Department) promulgated thereunder.

66.2 Upon the final determination by the Commerce Department or any other agency of the United States as to, or conviction of the **Contractor** or a substantially-owned affiliated company thereof for participation in an international boycott in violation of the provisions of the Export Administration Act of 1979, as amended, or the regulations promulgated thereunder, the **Comptroller** may, at his/her option, render forfeit and void this **Contract**.

66.3 The **Contractor** shall comply in all respects, with the provisions of Section 6-114 of the Administrative Code and the rules and regulations issued by the **Comptroller** thereunder.

ARTICLE 67. LOCALLY BASED ENTERPRISE PROGRAM

67.1 This **Contract** is subject to the requirements of Section 6-108.1 of the Administrative Code and regulations promulgated thereunder. No construction contract shall be awarded unless and until these requirements have been complied with in their entirety; however, compliance with this Article 67 is not required if the Agency sets Subcontractor Participation Goals for Minority- and Women-Owned Business Enterprises (M/WBEs).

67.2 Unless specifically waived by the **Commissioner** with the approval of the Division of Economic and Financial Opportunity of the **City Department of Business Services**, if any portion of the **Contract** is subcontracted, not less than ten (10%) percent of the total dollar amount of the **Contract** shall be awarded to locally based enterprises (LBEs); except that where less than ten (10%) percent of the total dollar amount of the **Contract** is subcontracted, such lesser percentage shall be so awarded.

67.3 The **Contractor** shall not require performance and payment bonds from LBE **Subcontractors**.

67.4 If the **Contractor** has indicated prior to award that no **Work** will be subcontracted, no **Work** shall be subcontracted without the prior approval of the **Commissioner**, which shall be granted only if the **Contractor** makes a good faith effort beginning at least six (6) weeks before the **Work** is to be performed to obtain LBE **Subcontractors** to perform the **Work**.

67.5 If the **Contractor** has not identified sufficient LBE **Subcontractors** prior to award, it shall sign a letter of compliance stating that it complies with Section 6-108.1 of the Administrative Code, recognizes that achieving the LBE requirement is a condition of its **Contract**, and shall submit documentation demonstrating its good faith efforts to obtain LBEs. After award, the **Contractor** shall begin to solicit LBE's to perform subcontracted **Work** at least six (6) weeks before the date such **Work** is to be performed and shall demonstrate that a good faith effort has been made to obtain LBEs on each subcontract until it meets the required percentage.

67.6 Failure of the **Contractor** to comply with the requirements of Section 6-108.1 of the Administrative Code and the regulations promulgated thereunder shall constitute a material breach of this **Contract**. Remedy for such breach may include the imposition of any or all of the following sanctions:

67.6.1 Reducing the **Contractor's** compensation by an amount equal to the dollar value of the percentage of the LBE subcontracting requirement not complied with;

67.6.2 Declaring the **Contractor** in default;

67.6.3 If the **Contractor** is an LBE, de-certifying and declaring the **Contractor** ineligible to participate in the LBE program for a period of up to three (3) years.

ARTICLE 68. ANTITRUST

68.1 The **Contractor** hereby assigns, sells, and transfers to the **City** all right, title, and interest in and to any claims and causes of action arising under the antitrust **Laws** of New York State or of the United States relating to the particular goods or services purchased or procured by the **City** under this **Contract**.

ARTICLE 69. MacBRIDE PRINCIPLES PROVISIONS

69.1 Notice To All Prospective **Contractors**:

69.1.1 Local Law No. 34 of 1991 became effective on September 10, 1991 and added Section 6-115.1 of the Administrative Code. The local **Law** provides for certain restrictions on **City Contracts** to express the opposition of the people of the **City** to employment discrimination practices in Northern Ireland to promote freedom of work-place opportunity.

69.1.2 Pursuant to Section 6-115.1, prospective **Contractors** for **Contracts** to provide goods or services involving an expenditure of an amount greater than ten thousand

(\$10,000.) dollars, or for construction involving an amount greater than fifteen thousand (\$15,000.) dollars, are asked to sign a rider in which they covenant and represent, as a material condition of their **Contract**, that any business operations in Northern Ireland conducted by the **Contractor** and any individual or legal entity in which the **Contractor** holds a ten (10%) percent or greater ownership interest in the **Contractor** will be conducted in accordance with the MacBride Principles of nondiscrimination in employment.

69.1.3 Prospective **Contractors** are not required to agree to these conditions. However, in the case of **Contracts** let by competitive sealed bidding, whenever the lowest responsible bidder has not agreed to stipulate to the conditions set forth in this notice and another bidder who has agreed to stipulate to such conditions has submitted a bid within five (5%) percent of the lowest responsible bid for a **Contract** to supply goods, services or 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 assess, identify, and actively recruit employees from under-represented religious groups with potential for further advancement; and

69.3.1(i) appoint a senior management staff member to oversee affirmative action efforts and develop a timetable to ensure their full implementation.

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

ARTICLE 70. ELECTRONIC FILING/NYC DEVELOPMENT HUB

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

ARTICLE 71. PROHIBITION OF TROPICAL HARDWOODS

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

ARTICLE 72. CONFLICTS OF INTEREST

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

ARTICLE 73. MERGER CLAUSE

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

ARTICLE 74. STATEMENT OF WORK

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

ARTICLE 75. COMPENSATION TO BE PAID TO CONTRACTOR

75.1 The City will pay and the Contractor will accept in full consideration for the performance of the Contract, subject to additions and deductions as provided herein, the total sum of: see below Dollars, (\$ 41,455,755.11), 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.

Forty One Million, Four Hundred Fifty Five Thousand, Seven Hundred Fifty Five Dollars
11/100

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 payment in the following circumstances: (i) for individuals or classes of individuals for whom compliance imposes a hardship; (ii) for classifications or types of checks; or (iii) in other circumstances as may be necessary in the interest of the City.

ARTICLE 77. RECORDS RETENTION

77.1 The Contractor agrees to retain all books, records, and other documents relevant to this Contract for six years after the final payment or termination of this Contract, whichever is later. City, state, and federal auditors and any other persons duly authorized by the City shall have full access to and the right to examine any such books, records, and other documents during the retention period.

ARTICLE 78. PARTICIPATION BY MINORITY-OWNED AND WOMEN-OWNED BUSINESS ENTERPRISES IN CITY PROCUREMENT

NOTICE TO ALL PROSPECTIVE CONTRACTORS

ARTICLE I. M/WBE PROGRAM

Local Law No. 129 of 2005 added and Local Law 1 of 2013 amended Section 6-129 of the Administrative Code of the City of New York (hereinafter "Section 6-129"). Section 6-129 establishes the program for participation in City procurement ("M/WBE Program") by minority-owned business enterprises ("MBEs") and women-owned business enterprises ("WBEs"), certified in accordance with Section 1304 of the New York City Charter. As stated in Section 6-129, the intent of the program is to address the impact of discrimination on the City's procurement process, and to promote the public interest in avoiding fraud and favoritism in the procurement process, increasing competition for City business, and lowering contract costs. The contract provisions contained herein are pursuant to Section 6-129, and the rules of the Department of Small Business Services ("DSBS") promulgated thereunder.

If this Contract is subject to the M/WBE Program established by Section 6-129, the specific requirements of MBE and/or WBE participation for this Contract are set forth in Schedule B of the Contract (entitled the "M/WBE Utilization Plan"), and are detailed below. The Contractor must comply with all applicable MBE and WBE requirements for this Contract.

All provisions of Section 6-129 are hereby incorporated in the Contract by reference and all terms used herein that are not defined herein shall have the meanings given such terms in Section 6-129. Article I, Part A, below, sets forth provisions related to the participation goals for construction, standard and professional services contracts. Article I, Part B, below, sets forth miscellaneous provisions related to the M/WBE Program.

PART A

PARTICIPATION GOALS FOR CONSTRUCTION, STANDARD AND PROFESSIONAL SERVICES CONTRACTS OR TASK ORDERS

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

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

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

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

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

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

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

(ii) **Participation Goals** on a Master Services Agreement will be established for individual Task Orders issued after the Master Services Agreement is awarded. If **Participation Goals** have been established on a Task Order, a contractor shall be required to submit a Schedule B – M/WBE Utilization Plan For Independently Registered Task Orders That Are Issued Pursuant to Master Services Agreements, Part II (see Pages 2-4) indicating: (a) whether the contractor is an MBE or WBE, or qualified joint venture; (b) the percentage of work it intends to award to direct subcontractors; and (c) in cases where the contractor intends to award direct subcontracts, a description of the type and dollar value of work designated for participation by MBEs and/or WBEs, and the time frames in which such work is scheduled to begin and end. The contractor must engage in good faith efforts to meet the **Participation Goals** as established for the Task Order unless Agency has granted the contractor a pre-award waiver of the Participation Goals in accordance with Section 6-129 and Part A, Section 10 below.

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

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

6. MBE and WBE firms must be certified by DSBS in order for the Contractor to credit such firms' participation toward the attainment of the **Participation Goals**. Such certification must occur prior to the

firms' commencement of work. A list of MBE and WBE firms may be obtained from the DSBS website at www.nyc.gov/buycertified, 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 poped@ddc.nyc.gov or via facsimile at (718) 391-1886. Bidders, proposers, or contractors, as applicable, who have submitted requests will receive an Agency response by no later than two (2) calendar days prior to the due date for bids, proposals, or Task Orders; provided, however, that if that date would fall on a weekend or holiday, an Agency response will be provided by close-of-business on the business day before such weekend or holiday date.

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

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

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

- (i) The Contractor advertised opportunities to participate in the Contract, where appropriate, in general circulation media, trade and professional association publications and small business media, and publications of minority and women's business organizations;
- (ii) The Contractor provided notice of specific opportunities to participate in the Contract, in a timely manner, to minority and women's business organizations;
- (iii) The Contractor sent written notices, by certified mail or facsimile, in a timely manner, to advise MBEs or WBEs that their interest in the Contract was solicited;
- (iv) The Contractor made efforts to identify portions of the work that could be substituted for portions originally designated for participation by MBEs and/or WBEs in the **M/WBE Utilization Plan**, and for which the Contractor claims an inability to retain MBEs or WBEs;
- (v) The Contractor held meetings with MBEs and/or WBEs prior to the date their bids or proposals were due, for the purpose of explaining in detail the scope and requirements of the work for which their bids or proposals were solicited;
- (vi) The Contractor made efforts to negotiate with MBEs and/or WBEs as relevant to perform specific subcontracts, or act as suppliers or service providers;
- (vii) Timely written requests for assistance made by the Contractor to Agency's **M/WBE liaison officer** and to DSBS;
- (viii) Description of how recommendations made by DSBS and Agency were acted upon and an explanation of why action upon such recommendations did not lead to the desired level of participation of MBEs and/or WBEs.

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

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

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

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

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

PART B: MISCELLANEOUS

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

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

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

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

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

ARTICLE II. ENFORCEMENT

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

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

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

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

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


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

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


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

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

THE CITY OF NEW YORK

By: 
Deputy Commissioner

CONTRACTOR: Maspetts Supply Co., LLC

By: 
(Member of Firm or Officer of Corporation)

Title: Member

(Where Contractor is a Corporation, add):
Attest:

Secretary

(Seal)

ACKNOWLEDGEMENT OF PRINCIPAL, IF A CORPORATION

State of New York County of Queens ss:

On this _____ day of _____, _____, before me personally came _____ to me known who, being by me duly sworn did depose and say that he resides at _____ that he is the _____ of the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation, and that he signed his name thereto by like order.

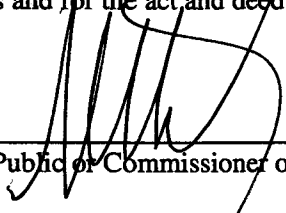
Notary Public or Commissioner of Deeds

ACKNOWLEDGEMENT OF PRINCIPAL, IF A PARTNERSHIP

State of New York County of Queens ss:

On this 13th day of June, 2014 before me personally appeared Harvey Blott to me known, and known to me to be one of the members of the firm of Maspeeth Supply Co., LLC described in and who executed the foregoing instrument; and he acknowledged to me that he executed the same as and for the act and deed of said firm.

VICTORIA AYO-VAUGHAN
Notary Public, State of New York
Registration #01AY5014042
Qualified In Queens County
Commission Expires July 15, 2015



Notary Public or Commissioner of Deeds

ACKNOWLEDGEMENT OF PRINCIPAL, IF AN INDIVIDUAL

State of _____ County of _____ ss:

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

Notary Public or Commissioner of Deeds

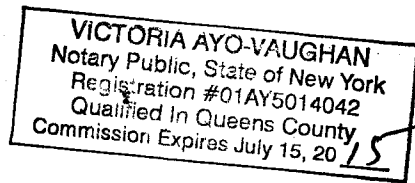
ACKNOWLEDGEMENT BY COMMISSIONER

State of New York County of Queens ss:

On this 13th day of June, 2014 before me personally came Eric MacFarlane to me known, and known to be the Deputy Commissioner of the Department of Design and Construction of The City of New York, the person described as such in and who as such executed the foregoing instrument and acknowledged to me that he executed the same as Deputy Commissioner for the purposes therein mentioned.



Notary Public or Commissioner of Deeds



AUTHORITY

MAYOR'S CERTIFICATE NO. CBX
BUDGET DIRECTOR'S CERTIFICATE NO.

DATED
DATED

APPROPRIATION
COMMISSIONER'S CERTIFICATE

In conformity with the provisions of Section 6-101 of the Administrative Code of the City of New York, it is hereby certified that the estimated cost of the work, materials and supplies required by the within Contract, amounting to

~~Forty One Million, Four Hundred~~
~~Fifty Five Thousand, Seven~~
~~Hundred Fifty five Dollars~~ 11/100
Dollars (\$ 4,455,755) 11/100

is chargeable to the fund of the Department of Design and Construction entitled Code

VARIOUS

Department of Design and Construction

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


Deputy Commissioner

COMPTROLLER'S CERTIFICATE

The City of New York _____

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

\$ _____

Comptroller

Performance Bond #2 (Pages 96 to 99): Use if the total contract price is more than \$5 Million.

BOND NO. 015042922

PERFORMANCE BOND #2 (Page 1)

Four (4) Executed Originals

PERFORMANCE BOND #2

KNOW ALL PERSONS BY THESE PRESENTS:

That we, Maspeth Supply Co., LLC

of 55-14 48th Street

Maspeth, NY 11378

hereinafter referred to as the "Principal,"

and, Liberty Mutual Insurance Company

114 West 47th Street

New York, NY 10036

hereinafter referred to as the "Surety" ("Sureties") are held and firmly bound to THE CITY OF NEW YORK, hereinafter referred to as the "City" or to its successors and assigns in the penal sum of Forty-One Million Four Hundred Fifty-Five Thousand Seven Hundred

Fifty-Five and 11/100

(\$ 41,455,755.11) Dollars, lawful money of the United States for the payment of which said sum of money well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal is about to enter, or has entered, into a Contract in writing with the City for

Contract No. 8502010HW0008C; Project No. HWQ411B

Reconstruction of Albert Road Area, Queens.

a copy of which Contract is annexed to and hereby made a part of this bond as though herein set forth in full;

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



Performance Bond #2 (Pages 96 to 99): 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

(Seal) 11th day of June 20 14

Maspeth Supply Co., LLC (L.S.)

Principal

(Seal)

By: [Signature]

Surety

By: _____

Liberty Mutual Insurance Company

(Seal)

Surety

By: [Signature]

Raymond C. Carman, Attorney-in-Fact

(Seal)

Surety

By: _____

(Seal)

Surety

By: _____

(Seal)

Surety

By: _____

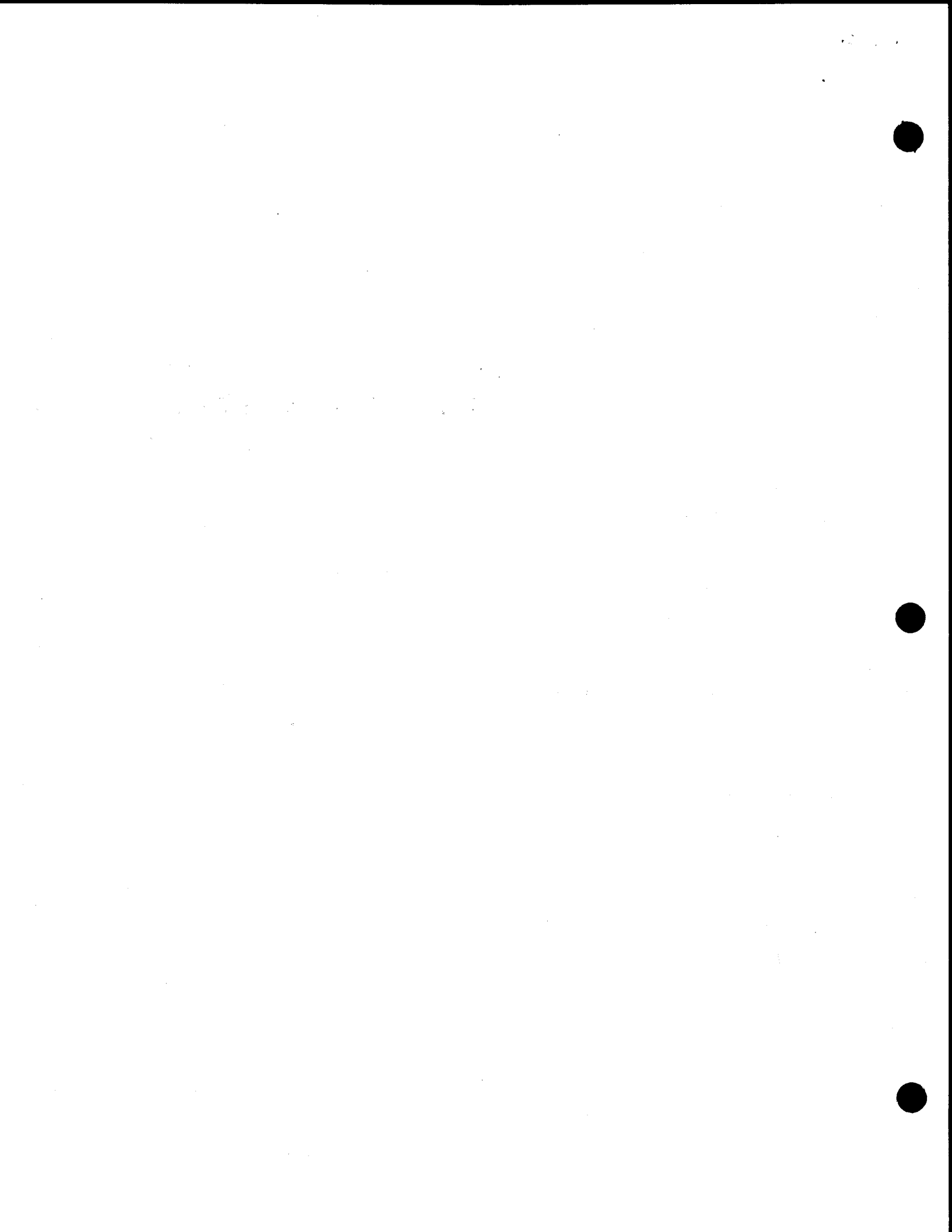
Bond Premium Rate Scaled

Bond Premium Cost \$319,718.00

If the Contractor (Principal) is a partnership, the bond should be signed by each of the individuals who are partners.

If the Contractor (Principal) is a corporation, the bond should be signed in its correct corporate name by a duly authorized officer, agent, or attorney-in-fact.

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



Performance Bond #2 (Pages 96 to 99): Use if the total contract price is more than \$5 Million.

PERFORMANCE BOND #2 (Page 4)

ACKNOWLEDGMENT OF PRINCIPAL IF A CORPORATION

State of _____ County of _____ ss:

On this _____ day of _____, 20 _____ before me personally came _____, to me known, who, being by me duly sworn did depose and say that he resides at _____

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

Notary Public or Commissioner of Deeds.

ACKNOWLEDGMENT OF PRINCIPAL IF A PARTNERSHIP

State of New York County of Queens ss:

On this 12 day of JUNE, 20 14 before me personally came HARVEY BLATT, to me known, who, being by me duly sworn did depose and say that he/she resides at FLAMMEN

New York; that he/she is Member partner of RESPECT SUPPLY CO INC, a limited/general partnership existing under the laws of the State of NEW YORK, the partnership described in and which executed the foregoing instrument; and that he/she signed his/her name to the foregoing instrument as the duly authorized and binding act of said partnership.

**Keith Solomon
Notary Public
State of New York
Reg # 01806216332**

Notary Public or Commissioner of Deeds My Commission Expires 12-28-20 17

ACKNOWLEDGMENT OF PRINCIPAL IF AN INDIVIDUAL

State of _____ County of _____ ss:

On this _____ day of _____, 20 _____ before me personally came _____, to me known, who, being by me duly sworn did depose and say that he/she resides at _____

_____ and that he/she is the individual whose name is subscribed to the within instrument and acknowledged to me that by his/her signature on the instrument, said individual executed the instrument.

Notary Public or Commissioner of Deeds

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

Affix Acknowledgments and Justification of Sureties.

Notary Public
State of New York
Exp. 01/20/2025
Katie Solomon
12000 Broadway, Suite 13-28, NY

Individual Acknowledgment

State of _____

County of _____

On this _____ day of _____, 20____, before me personally came _____ to me known, and known to me _____ to be the individual in and who executed the foregoing instrument, and acknowledged to me that he/she executed the same.

My commission expires _____ Notary Public

Corporation Acknowledgment

State of _____

County of _____

On the _____ day of _____, _____ before me personally came _____ to me known; who being by me duly sworn, did depose and say that he/she/they reside(s) in _____ that he/she/they is (are) the _____ of the _____, the corporation described in and which executed the above instrument; that he/she/they know(s) the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by authority of the board of directors of said corporation, and that he/she/they signed his/her/their name(s) thereto by like authority.

My commission expires _____ Notary Public

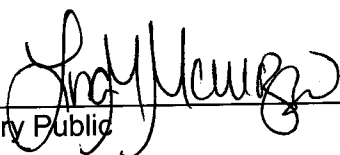
Surety Acknowledgment

State of New York

County of Nassau

On the 11 day of June, 2014 personally came Raymond C. Carman to me known , who being by me duly sworn did depose and say that he/she is an Attorney-in-Fact of Liberty Mutual Insurance Company in and which executed the above Instrument know(s) the corporate seal of said corporation; that the seal affixed to the within instrument is such corporate seal, and that he/she/they signed the said instrument and affixed the said seal as Attorney-in-fact by authority of the Board of Directors of said corporation and by authority of this office under the standing resolution thereof.

My commission expires _____


Notary Public

Lisa M. Marrazzo
Notary Public, State of New York
No. 01MA6065631
Qualified in Suffolk County
Certified in Nassau County
Commission Expires October, 22, 2017



Faint, illegible text at the bottom of the page, possibly bleed-through from the reverse side.

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

5526034

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. _____

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

Liberty Mutual Insurance Company
Peerless Insurance Company

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That American Fire & Casualty Company and The Ohio Casualty Insurance Company are corporations duly organized under the laws of the State of Ohio, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, that Peerless Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, 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, **D. J. SCOTTO; DOROTHY SCOTTO; LISA MARRAZZO; RAYMOND C. CARMAN; THERESA A. LANFRANCO**.....

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

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 20th day of August, 2012.



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

By: Gregory W. Davenport
Gregory W. Davenport, Assistant Secretary

STATE OF WASHINGTON ss
COUNTY OF KING

On this 20th day of August, 2012, before me personally appeared Gregory W. Davenport, who acknowledged himself to be the Assistant Secretary of American Fire and Casualty Company, Liberty Mutual Insurance Company, The Ohio Casualty Company, Peerless Insurance Company and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Seattle, Washington, on the day and year first above written.



By: KD Riley
KD Riley, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, West American Insurance Company and Peerless 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 Gregory W. Davenport, Assistant Secretary to appoint such attorney-in-fact 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, David M. Carey, the undersigned, Assistant Secretary, of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, West American Insurance Company and Peerless 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 11th day of June, 2014.



By: David M. Carey
David M. Carey, Assistant Secretary

Not valid for mortgage, note, letter of credit, bank deposit, currency rate, interest rate or equal value guarantees.

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.





LIBERTY MUTUAL INSURANCE COMPANY
 FINANCIAL STATEMENT — DECEMBER 31, 2013

Assets		Liabilities	
Cash and Bank Deposits	\$1,118,180,550	Unearned Premiums	\$5,940,431,054
*Bonds -- U.S Government	1,888,225,943	Reserve for Claims and Claims Expense	17,305,063,560
*Other Bonds	12,039,490,815	Funds Held Under Reinsurance Treaties	212,659,311
*Stocks	9,030,962,112	Reserve for Dividends to Policyholders	1,226,236
Real Estate	251,301,907	Additional Statutory Reserve	63,348,980
Agents' Balances or Uncollected Premiums	4,781,042,931	Reserve for Commissions, Taxes and Other Liabilities	5,826,683,629
Accrued Interest and Rents	149,855,386	Total	\$29,349,412,770
Other Admitted Assets	<u>15,216,749,451</u>	Special Surplus Funds	\$55,686,852
		Capital Stock	11,250,000
		Paid in Surplus	7,898,288,167
		Unassigned Surplus	7,161,171,306
Total Admitted Assets	<u>\$44,475,809,095</u>	Surplus to Policyholders	<u>15,126,396,325</u>
		Total Liabilities and Surplus	<u>\$44,475,809,095</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, 2013, to the best of my knowledge and belief.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation at Seattle, Washington, this 20th day of March, 2014.

T. Mikolajewski

Assistant Secretary



Payment Bond (Pages 100 to 103): Use for any contract for which a Payment Bond is required.

BOND NO. 015042922

PAYMENT BOND (Page 1)

Four (4) Executed Originals

PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS, That we, Maspeth Supply Co., LLC
of 55-14 48th Street

Maspeth, NY 11378

hereinafter referred to as the "Principal", and Liberty Mutual Insurance Company

114 West 47th Street

New York, NY 10036

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

Forty-One Million Four Hundred Fifty-Five Thousand

Seven Hundred Fifty-Five and 11/100

41,455,755.11
(\$) Dollars, lawful money of the United States, for the payment of which said sum of money well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

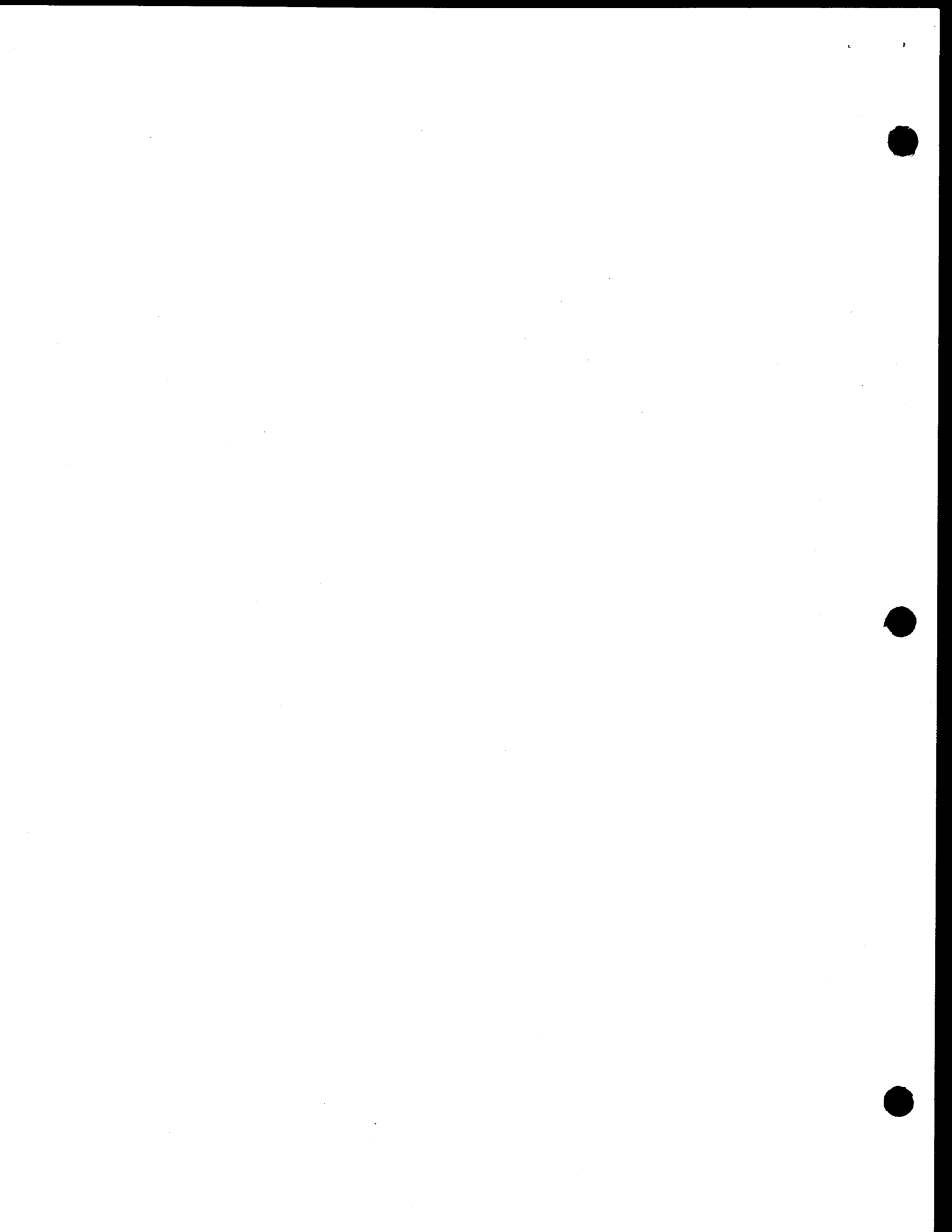
WHEREAS, the Principal is about to enter, or has entered, into a Contract in writing with the City for
Contract PIN No. 8502010HW0008C; Project No. HWQ411B

Reconstruction of Albert Road Area - Queens.

a copy of which Contract is annexed to and hereby made a part of this bond as though herein set forth in full;

NOW, THEREFORE, the conditions of this obligation are such that if the Principal, his or its representatives or assigns and other Subcontractors to whom Work under this Contract is sublet and his or their successors and assigns shall promptly pay or cause to be paid all lawful claims for

(a) Wages and compensation for labor performed and services rendered by all persons engaged in the prosecution of the Work under said Contract, and any amendment or extension thereof or addition thereto, whether such persons be agents servants or employees of the Principal or any such Subcontractor, including all persons so engaged who perform the work of laborers or mechanics at or in the vicinity of the site



Payment Bond (Pages 100 to 103): Use for any contract for which a Payment Bond is required.

PAYMENT BOND (Page 2)

of the Project regardless of any contractual relationship between the Principal or such Subcontractors, or his or their successors or assigns, on the one hand and such laborers or mechanics on the other, but not including office employees not regularly stationed at the site of the project; and

(b) Materials and supplies (whether incorporated in the permanent structure or not), as well as teams, fuels, oils, implements or machinery furnished, used or consumed by said Principal or any subcontractor at or in the vicinity of the site of the Project in the prosecution of the Work under said Contract and any amendment or extension thereof or addition thereto; then this obligation shall be void, otherwise to remain in full force and effect.

This bond is subject to the following additional conditions, limitations and agreements:

(a) The Principal and Surety (Sureties) agree that this bond shall be for the benefit of any materialmen or laborer having a just claim, as well as the City itself.

(b) All persons who have performed labor, rendered services or furnished materials and supplies, as aforesaid, shall have a direct right of action against the Principal and his, its or their successors and assigns, and the Surety (Sureties) herein, or against either or both or any of them and their successors and assigns. Such persons may sue in their own name, and may prosecute the suit to judgment and execution without the necessity of joining with any other persons as party plaintiff.

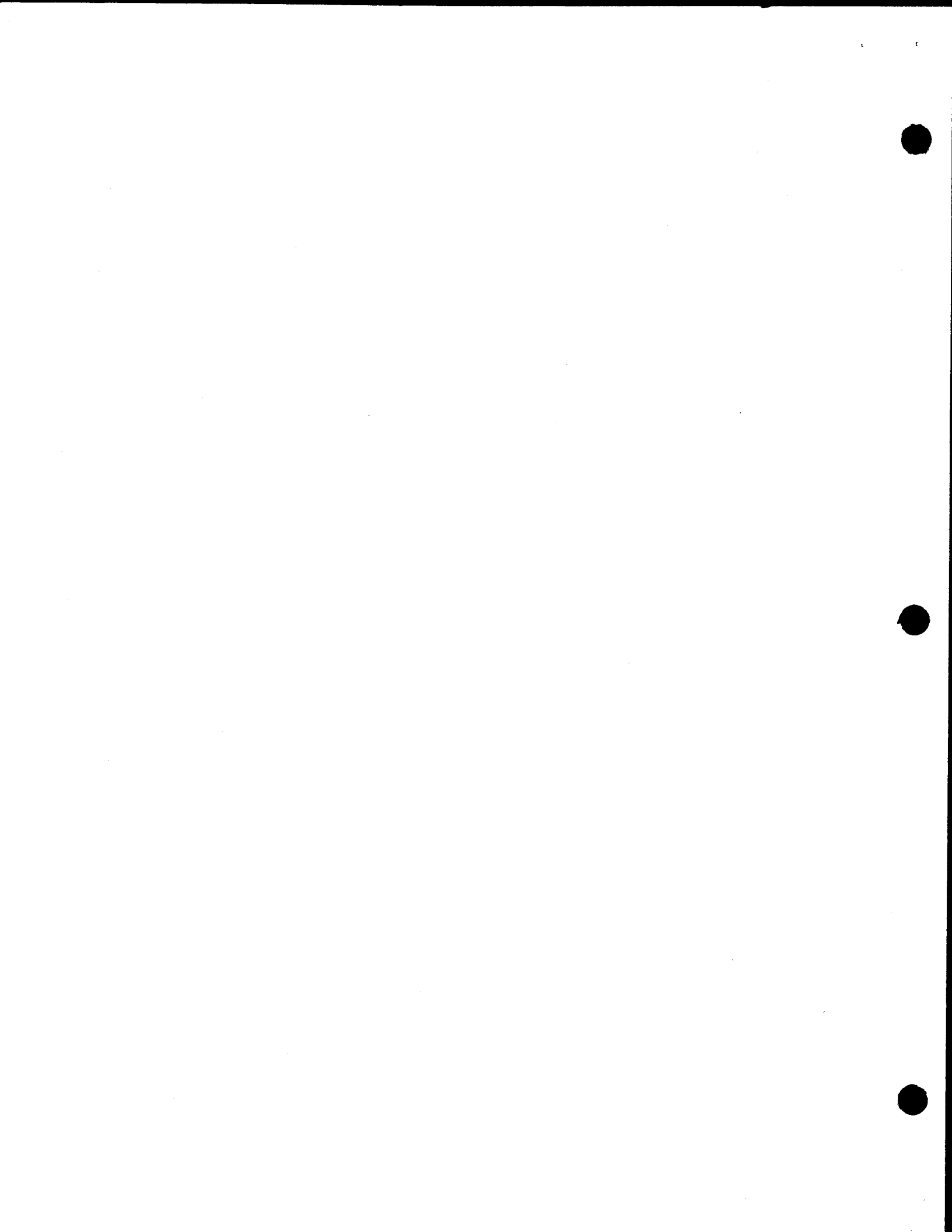
(c) The Principal and Surety (Sureties) agree that neither of them will hold the City liable for any judgment for costs of otherwise, obtained by either or both of them against a laborer or materialman in a suit brought by either a laborer or materialman under this bond for moneys allegedly due for performing work or furnishing material.

(d) The Surety (Sureties) or its successors and assigns shall not be liable for any compensation recoverable by an employee or laborer under the Workmen's Compensation Law.

(e) In no event shall the Surety (Sureties), or its successors or assigns, be liable for a greater sum than the penalty of this bond or be subject to any suit, action or proceeding hereon that is instituted by any person, firm, or corporation hereunder later than two years after the complete performance of said Contract and final settlement thereof.

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

And the Surety (Sureties), for value received, for itself and its successors and assigns, hereby stipulates and agrees that the obligation of said Surety (Sureties), and its bonds shall be in no way impaired or affected by any extension of time, modification, omission, addition, or change in or of the said Contract or the work to be performed thereunder, or by any payment thereunder before the time required therein, or by any waiver of any provisions thereof, or by any assignment, subletting or other transfer thereof or of any part thereof, or of any Work to be performed, or any moneys due to become due thereunder and said Surety (Sureties) does hereby waive notice of any and all of such extensions, modifications, omissions, additions, changes, payments, waivers, assignments, subcontracts and transfers, and hereby expressly stipulates and agrees that any and all things done and omitted to be done by and in relation to assignees, Subcontractors, and other transferees shall have the same effect as to said Surety (Sureties) as though done or omitted to be done or in relation to said Principal.



Payment Bond (Pages 100 to 103): Use for any contract for which a Payment Bond is required.

PAYMENT BOND (Page 3)

IN WITNESS WHEREOF, the Principal and the Surety (Sureties) have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereunto affixed and these presents to be signed by their proper officers, this 11th day of June, 2014.

(Seal)

Maspeth Supply Co., LLC (L.S.)

Principal

By: Henry Blatt

(Seal)

Liberty Mutual Insurance Company

Surety

By: Raymond C. Carman

Raymond C. Carman, Attorney-in-Fact

(Seal)

Surety

By: _____

(Seal)

Surety

By: _____

(Seal)

Surety

By: _____

If the Contractor (Principal) is a partnership, the bond should be signed by each of the individuals who are partners.

If the Contractor (Principal) is a corporation, the bond should be signed in its correct corporate name by a duly authorized officer, agent, or attorney-in-fact.

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

1944

Payment Bond (Pages 100 to 103): Use for any contract for which a Payment Bond is required.

PAYMENT BOND (Page 4)

ACKNOWLEDGMENT OF PRINCIPAL, IF A CORPORATION

State of _____ County of _____ ss:

On this ____ day of _____, _____, before me personally came _____ to me known, who, being by me duly sworn did depose and say that he resides at _____ that he is the _____ of the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation, and that he signed his name thereto by like order.

Notary Public or Commissioner of Deeds

ACKNOWLEDGMENT OF PRINCIPAL, IF A PARTNERSHIP

State of New York County of Spartanburg ss:

On this 12 day of July, 2013 before me personally appeared Harvey Burt to me known, and known to me to be one of the members of the firm of Hausman Supply Co LLC described in and who executed the foregoing instrument; and he acknowledged to me that he executed the same as and for the act and deed of said firm.

Keith Solomon
Notary Public
State of New York
Reg # 01306216332

My Commission Expires 12-28-2017 Notary Public or Commissioner of Deeds

ACKNOWLEDGMENT OF PRINCIPAL, IF AN INDIVIDUAL

State of _____ County of _____ ss:

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

Notary Public or Commissioner of Deeds

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

Affix Acknowledgments and Justification of Sureties.

[Faint, illegible text]

[Faint, illegible text]

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[Faint, illegible text]

Notary Public
State of New York
No. 12081833
Expiration Expires 12-31-20

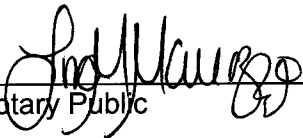
Surety Acknowledgment

State of New York

County of Nassau

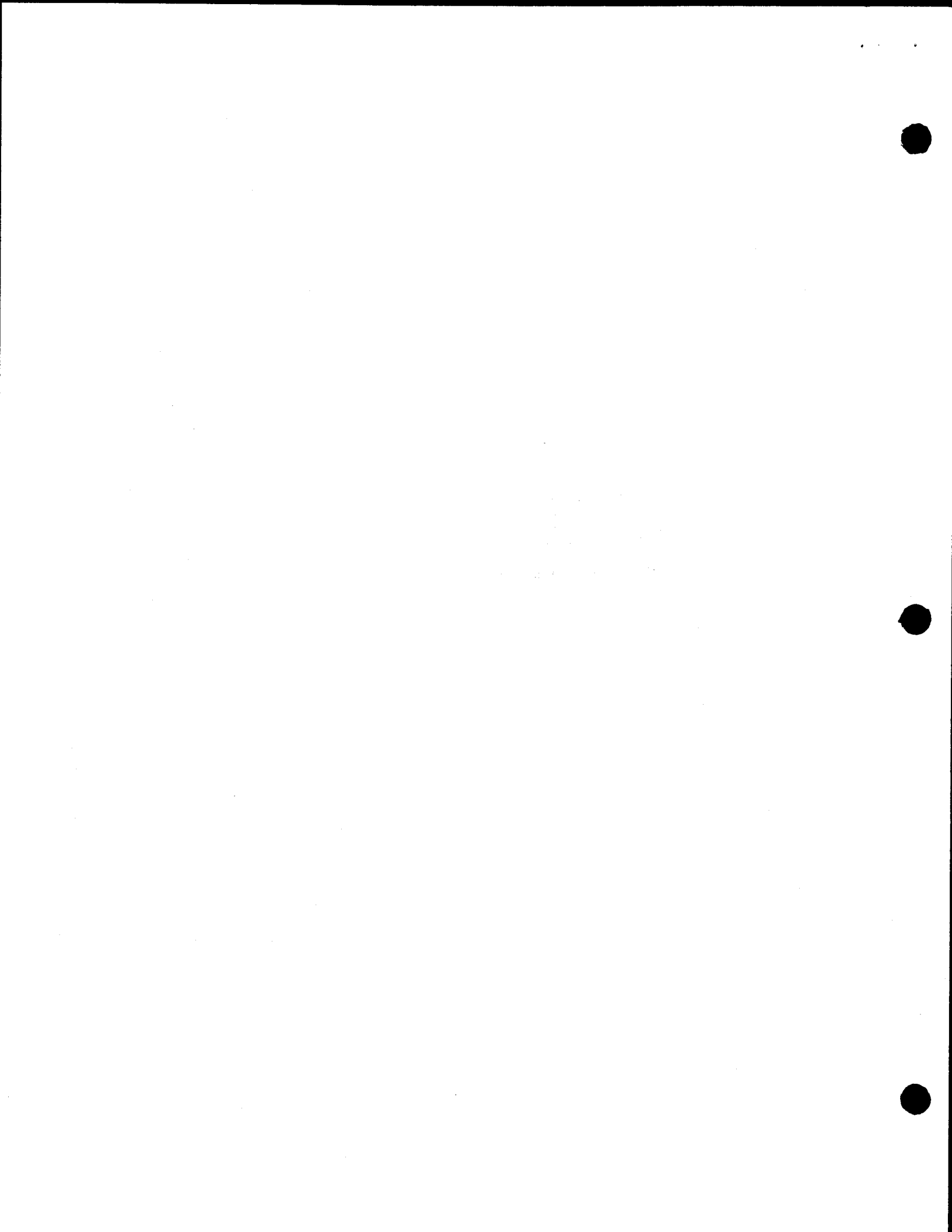
On the 11th day of June, 2014 personally came Raymond C Carman to me known , who being by me duly sworn did depose and say that he/she is an Attorney-in-Fact of Liberty Mutual Insurance Company, the corporation described in and in and which executed the above Instrument; that (s)he knows the corporate seal of said corporation; that the seal affixed to the within instrument is such corporate seal, and that he/she/they signed the said instrument and affixed the said seal as Attorney-in-fact by authority of the Board of Directors of said corporation and by authority of this office under the standing resolution thereof.

My commission expires _____



Notary Public

Lisa M. Marrazzo
Notary Public, State of New York
No. 01MA6065631
Qualified in Suffolk County
Certified in Nassau County
Commission Expires October, 22, 2017



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

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

5526031

Certificate No. _____

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

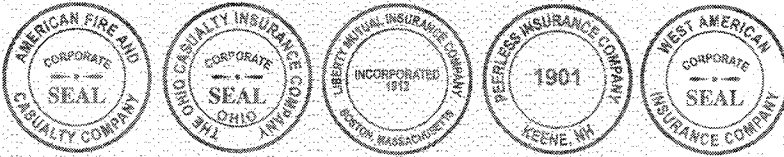
Liberty Mutual Insurance Company
Peerless Insurance Company

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That American Fire & Casualty Company and The Ohio Casualty Insurance Company are corporations duly organized under the laws of the State of Ohio, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, that Peerless Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, 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, **D. J. SCOTTO; DOROTHY SCOTTO; LISA MARRAZZO; RAYMOND C. CARMAN; THERESA A. LANFRANCO**.....

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

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 20th day of August, 2012.



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

By: *Gregory W. Davenport*
Gregory W. Davenport, Assistant Secretary

STATE OF WASHINGTON ss
COUNTY OF KING

On this 20th day of August, 2012, before me personally appeared Gregory W. Davenport, who acknowledged himself to be the Assistant Secretary of American Fire and Casualty Company, Liberty Mutual Insurance Company, The Ohio Casualty Company, Peerless Insurance Company and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Seattle, Washington, on the day and year first above written.



By: *KD Riley*
KD Riley, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, West American Insurance Company and Peerless 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 Gregory W. Davenport, Assistant Secretary to appoint such attorney-in-fact 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, David M. Carey, the undersigned, Assistant Secretary, of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, West American Insurance Company and Peerless 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 11th day of June, 2014.



By: *David M. Carey*
David M. Carey, Assistant Secretary

Not valid for mortgage, note, letter of credit, bank deposit, currency rate, interest rate or real estate value guarantees.

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.





LIBERTY MUTUAL INSURANCE COMPANY
 FINANCIAL STATEMENT — DECEMBER 31, 2013

Assets		Liabilities	
Cash and Bank Deposits	\$1,118,180,550	Unearned Premiums	\$5,940,431,054
*Bonds -- U.S Government	1,888,225,943	Reserve for Claims and Claims Expense	17,305,063,560
*Other Bonds	12,039,490,815	Funds Held Under Reinsurance Treaties	212,659,311
*Stocks	9,030,962,112	Reserve for Dividends to Policyholders	1,226,236
Real Estate	251,301,907	Additional Statutory Reserve	63,348,980
Agents' Balances or Uncollected Premiums	4,781,042,931	Reserve for Commissions, Taxes and	
Accrued Interest and Rents	149,855,386	Other Liabilities	<u>5,826,683,629</u>
Other Admitted Assets	<u>15,216,749,451</u>	Total	\$29,349,412,770
Total Admitted Assets	<u>\$44,475,809,095</u>	Special Surplus Funds	\$55,686,852
		Capital Stock	11,250,000
		Paid in Surplus	7,898,288,167
		Unassigned Surplus	7,161,171,306
		Surplus to Policyholders	<u>15,126,396,325</u>
		Total Liabilities and Surplus	<u>\$44,475,809,095</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, 2013, to the best of my knowledge and belief.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation at Seattle, Washington, this 20th day of March, 2014.

T. Mikolajewski

Assistant Secretary



SCHEDULE OF WORKMEN, MECHANICS AND LABORERS

The following is a list of classifications for workmen, mechanics and laborers which are anticipated to be employed in the performance of work under this contract, followed by a schedule of the prevailing wage rates and supplemental benefits for all classifications as established by the Comptroller of the City of New York.

Request for interpretation or correction under Subsection A of Section No. 3 in the Information for Bidders includes all requests for clarification of the classification of trades to be employed in the performance of the work under this contract.

In the event that a trade not listed in the classification of trades required to be used at the time of the award of the contract is in fact employed during the performance of this contract, the Contractor shall be required to obtain from the agency the prevailing wage rates and supplementary benefits for the trades used and to complete the performance of this contract at the price at which the contract was awarded.

<u>CODE</u>	<u>CLASSIFICATION</u>
15 42 001	Rigger
15 42 002	Sign Erector
16 11 001	Gardener
16 11 002	Tree Pruner
16 11 003	Tree Remover
16 11 011	Asphalt Raker (Highway & Paving)
16 11 012	Tamper (Highway & Paving)
16 11 013	Curbsetter (Highway & Paving)
16 11 014	Formsetter (Highway & Paving)
16 11 015	Rammerman (Highway & Paving)
16 11 016	Laborer (Highway & Paving)
16 11 017	ALL OTHER TITLES (Highway & Paving)
16 23 001	Laborer
16 23 002	Operating Engineer (Heavy Construction-Maintenance)
16 23 003	Junior Operating Engineer
16 23 004	Junior Operating Engineer
16 23 005	Junior Operating Engineer
16 23 006	Fireman (Heavy Construction)
16 23 007	Oiler (Heavy Construction)
16 23 051	Surveyor-Heavy Construction
16 23 052	Surveyor-Heavy Construction-Instrument Man
16 23 053	Surveyor-Heavy Construction-Rodman
16 23 057	Surveyor-Land Surveying-Party Chief
16 23 058	Surveyor-Land Surveying-Instrument Man
16 23 059	Surveyor-Land Surveying-Rodman

<u>CODE</u>	<u>CLASSIFICATION</u>
16 23 061	Operating Engineer-Road & Heavy Construction
16 23 062	Operating Engineer-Paving
16 23 063	Operating Engineer-Concrete
16 23 071	Teamster-Heavy Equipment Trailer Driver
16 23 072	Teamster-Dump Truck Driver
16 23 073	Teamster-Flat Bed Trailer Driver (3-Axle)
16 23 074	Teamster-Redi-Mix (Sand and Gravel)
16 29 011	Drill Runners
17 11 001	Plumbers
17 21 001	Painter (Brush & Roller)
17 31 001	Electrician
17 41 001	Bricklayer
17 41 002	Mason Tender
17 41 004	Cement Mason
17 42 002	Metallic Lather
17 51 001	Carpenter
17 51 002	Dock Builder
17 71 001	Cement & Concrete Worker
17 91 001	Structural Iron Worker
17 95 001	Barman
17 96 021	Derrickmen & Riggers
17 99 001	Ornamental Iron Worker
17 99 002	Sandblaster
17 99 005	Pointers (Waterproofer)
17 99 011	Welders

Each classification may include trainees depending upon project staffing schedules and as required by the terms of this contract.

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

LABOR LAW §220 PREVAILING WAGE SCHEDULE

Workers, Laborers and Mechanics employed on a public work project must receive not less than the prevailing rate of wage and benefits for the classification of work performed by each upon such public work. Pursuant to Labor Law §220 the Comptroller of the City of New York has promulgated this schedule solely for Workers, Laborers and Mechanics engaged by private contractors on New York City public work contracts.

Contracting agencies anticipating doing work which requires the employment of a trade or classification not included in this schedule must request the Comptroller to establish a proper classification for the work pursuant to Labor Law §220 (3-a) (a). The prevailing rate schedule as promulgated by the Comptroller, must, in compliance with law, be annexed to and form part of the contract.

Contractors are solely responsible for maintaining original payroll records which delineate, among other things, the hours each employee worked within a given classification. Contractors using rates and/or classifications not promulgated by the Comptroller do so at their own risk. Additionally, prior to bid, Agency Chief Contracting Officers must contact the Bureau of Labor Law when the need arises for a work classification not published in this schedule.

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 for work performed during the effective period, unless otherwise noted. You will be notified of any changes to this schedule by addenda published on our web site at www.comptroller.nyc.gov. The rate of wages and supplemental benefits to be paid or provided are those that prevail at the time the work is being performed. Preliminary schedules for future one-year periods are published annually in the City Record on or about June 1st of each succeeding year. Final schedules are published on or about July 1st in the City Record and on our web site at 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.

Answers to questions concerning prevailing trade practices may be obtained from the Classification Unit by calling (212) 669-7974. Please direct all other compliance issues to: Bureau of Labor Law, Attn: Wasyl Kinach, P.E., Office of the Comptroller, 1 Centre Street, Room 1122, New York, N.Y. 10007; Fax (212) 669-4002.

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.

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

Contractors are advised to review the applicable Collective Bargaining Agreements and the Comptroller's Prevailing Wage Schedule before bidding on Public Work. If there are any questions concerning prevailing wages, benefits, overtime, Holiday pay, shift differentials or any prevailing practice, please contact this office.

Public Work construction, reconstruction, demolition, excavation, rehabilitation, repair, renovation, alteration, or improvement contracts awarded pursuant to a Project Labor Agreement ("PLA") in accordance with Labor Law section 222 may have different labor standards for shift, premium and overtime work. Please refer to the PLA's pre-negotiated labor agreements for wage and benefit rates applicable to work performed outside of the regular workday. More information is available at the Mayor's Office of Contract Services (MOCS) web page at <http://www.nyc.gov/html/mocs/html/vendors/pla.shtml>.

All the provisions of Labor Law section 220 remain applicable to PLA work including, but not limited to, the enforcement of prevailing wage requirements by the Comptroller; however, we will enforce shift, premium, overtime and other non-standard rates as they appear in a project's pre-negotiated labor agreement.

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.

In order to meet their obligation to provide prevailing supplemental benefits to each covered employee, employers must either:

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

Particular attention should be given to the supplemental benefits requirement. Although in most instances the payment or provision for supplemental benefits is for each hour worked, some classifications require the payment or provision of supplemental benefits for each hour paid. Consequently, some prevailing practices require benefits to be purchased at the overtime, shift differential, Holiday, Saturday, Sunday or other premium time rate.

Benefits are paid for EACH HOUR WORKED unless otherwise noted.

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

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

220 SCHEDULE OF PREVAILING WAGES AND SUPPLEMENTAL BENEFITS ADDENDUM
EFFECTIVE PERIOD JANUARY 20, 2014 THROUGH JUNE 30, 2014

List of Amended Classifications

1. ASBESTOS HANDLER
2. BRICKLAYER
3. CARPENTER - BUILDING COMMERCIAL
4. CEMENT & CONCRETE WORKER
5. CORE DRILLER
6. ELECTRICIAN
7. FLOOR COVERER
8. HEAT AND FROST INSULATOR
9. HOUSE WRECKER
10. IRON WORKER - ORNAMENTAL
11. IRON WORKER - STRUCTURAL
12. MARBLE MECHANIC
13. MASON TENDER
14. MASON TENDER (INTERIOR DEMOLITION WORKER)
15. MOSAIC MECHANIC
16. PAINTER - STRUCTURAL STEEL
17. PLASTERER
18. PLASTERER - TENDER
19. PLUMBER
20. PLUMBER (MECHANICAL EQUIPMENT AND SERVICE)
21. PLUMBER (RESIDENTIAL RATES FOR 1, 2 AND 3 FAMILY HOME CONSTRUCTION)
22. PLUMBER: PUMP & TANK
23. ROOFER
24. STEAMFITTER
25. STEAMFITTER - REFRIGERATION AND AIR CONDITIONER
26. STONE MASON - SETTER
27. TILE FINISHER
28. TILE LAYER - SETTER

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

TABLE OF CONTENTS

<u>CLASSIFICATION</u>	<u>PAGE</u>
ASBESTOS HANDLER	6
BLASTER.....	6
BOILERMAKER.....	8
BRICKLAYER.....	9
CARPENTER - BUILDING COMMERCIAL.....	10
CARPENTER - HEAVY CONSTRUCTION WORK.....	11
CEMENT & CONCRETE WORKER.....	12
CEMENT MASON.....	13
CORE DRILLER.....	14
DERRICKPERSON AND RIGGER.....	15
DIVER.....	16
DOCKBUILDER - PILE DRIVER.....	17
DRIVER: TRUCK (TEAMSTER).....	18
ELECTRICIAN.....	20
ELECTRICIAN - ALARM TECHNICIAN.....	24
ELECTRICIAN-STREET LIGHTING WORKER.....	25
ELEVATOR CONSTRUCTOR.....	26
ELEVATOR REPAIR & MAINTENANCE.....	27
ENGINEER.....	27
ENGINEER - CITY SURVEYOR AND CONSULTANT.....	32
ENGINEER - FIELD (BUILDING CONSTRUCTION).....	33
ENGINEER - FIELD (HEAVY CONSTRUCTION).....	34
ENGINEER - FIELD (STEEL ERECTION).....	35
ENGINEER - OPERATING.....	36
FLOOR COVERER.....	44
GLAZIER.....	45
GLAZIER - REPAIR & MAINTENANCE.....	46
HEAT AND FROST INSULATOR.....	46
HOUSE WRECKER.....	47
IRON WORKER - ORNAMENTAL.....	48
IRON WORKER - STRUCTURAL.....	49
LABORER.....	50
LANDSCAPING.....	51
MARBLE MECHANIC.....	53
MASON TENDER.....	54
MASON TENDER (INTERIOR DEMOLITION WORKER).....	55
METALLIC LATHER.....	56
MILLWRIGHT.....	57
MOSAIC MECHANIC.....	58
PAINTER.....	59
PAINTER - SIGN.....	60
PAINTER - STRIPER.....	61

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

PAINTER - STRUCTURAL STEEL	62
PAPERHANGER.....	63
PAVER AND ROADBUILDER.....	63
PLASTERER.....	65
PLASTERER - TENDER.....	66
PLUMBER.....	67
PLUMBER (MECHANICAL EQUIPMENT AND SERVICE).....	68
PLUMBER (RESIDENTIAL RATES FOR 1, 2 AND 3 FAMILY HOME CONSTRUCTION).....	68
PLUMBER: PUMP & TANK.....	69
POINTER - WATERPROOFER, CAULKER MECHANIC (EXTERIOR BUILDING RENOVATION)	70
ROOFER	71
SANDBLASTER - STEAMBLASTER.....	72
SHEET METAL WORKER.....	72
SHEET METAL WORKER - SPECIALTY	73
SIGN ERECTOR	74
STEAMFITTER	75
STEAMFITTER - REFRIGERATION AND AIR CONDITIONER	77
STONE MASON - SETTER	79
TAPER	80
TELECOMMUNICATION WORKER.....	81
TILE FINISHER.....	82
TILE LAYER - SETTER	83
TIMBERPERSON.....	83
TUNNEL WORKER.....	84
WELDER.....	86

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

ASBESTOS HANDLER

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

Asbestos Handler

Effective Period: 7/1/2013 - 1/19/2014

Wage Rate per Hour: \$35.90

Supplemental Benefit Rate per Hour: \$15.05

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: \$36.00

Supplemental Benefit Rate per Hour: \$15.45

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

Blaster

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$44.40

Supplemental Benefit Rate per Hour: \$38.44

Blaster (Hydraulic)

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

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$45.17
Supplemental Benefit Rate per Hour: \$38.44

Blaster - Trac Drill Hydraulic

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$40.04
Supplemental Benefit Rate per Hour: \$38.44

Blaster - Wagon: Air Trac: Quarry Bar: Drillrunners

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$39.30
Supplemental Benefit Rate per Hour: \$38.44

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: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$38.32
Supplemental Benefit Rate per Hour: \$38.44

Blaster - Powder Carriers

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$34.66
Supplemental Benefit Rate per Hour: \$38.44

Blaster - Hydraulic Trac Drill Chuck Tender

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$33.46
Supplemental Benefit Rate per Hour: \$38.44

Blaster - Chuck Tender & Nipper

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$32.75
Supplemental Benefit Rate per Hour: \$38.44

Blaster - Magazine Keepers: (Watch Person)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$19.76
Supplemental Benefit Rate per Hour: \$38.44

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

Overtime Description

Magazine Keepers:

Time and one half for work performed in excess of forty (40) hours per week and for work performed on Saturdays, Sundays and Holidays.

All Other Employees:

Time and one-half for the first eight hours of work on Saturday and for Make-up Time. Double time for all hours over eight Monday through Friday (except make-up hours) and for all hours worked on Sunday and Holidays.

Overtime

Double time the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

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

New Year's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

Shift Rates

A single shift shall be 8 hours plus an unpaid lunch, starting at 8:00 A.M (or between 6:00 A.M. and 10:00 A.M. on weekdays). When two (2) shifts are employed, each shift shall be 8 hours plus ½ hour unpaid lunch. When three (3) shifts are employed, each shift will work seven and one-half (7 ½) hours, but will be paid for eight (8) hours, since only one-half (½) hour is allowed for mealtime. When two (2) or more shifts are employed, single time will be paid for each shift. The first 8 hours of any and all work performed Monday through Friday inclusive of any off-shift shall be at the single time rate.

(Local #29)

BOILERMAKER

Boilermaker

Effective Period: 7/1/2013 - 12/31/2013

Wage Rate per Hour: \$49.47

Supplemental Benefit Rate per Hour: \$39.78

Supplemental Note: For time and one half overtime - \$59.08; For double overtime - \$78.37.

Effective Period: 1/1/2014 - 6/30/2014

Wage Rate per Hour: \$50.45

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

Supplemental Benefit Rate per Hour: **\$41.31**

Supplemental Note: For time and one half overtime - \$61.37; For double overtime - \$81.43.

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

Bricklayer

Effective Period: 7/1/2013 - 1/19/2014

Wage Rate per Hour: **\$46.44**

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

Supplemental Benefit Rate per Hour: \$27.53

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: \$47.78

Supplemental Benefit Rate per Hour: \$28.03

Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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

Overtime Holidays

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

New Year's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

Shift Rates

Overtime rates to be paid outside the regular scheduled work day.

(Bricklayer District Council)

CARPENTER - BUILDING COMMERCIAL

Building Commercial

Effective Period: 7/1/2013 – 1/19/2014

Wage Rate per Hour: \$48.08

Supplemental Benefit Rate per Hour: \$41.10

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: \$48.88

Supplemental Benefit Rate per Hour: \$42.70

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.

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

Overtime Holidays

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

New Year's Day
Washington's Birthday
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: 7/1/2013 - 7/17/2013

Wage Rate per Hour: **\$46.74**

Supplemental Benefit Rate per Hour: **\$42.37**

Effective Period: 7/18/2013 - 6/30/2014

Wage Rate per Hour: **\$46.82**

Supplemental Benefit Rate per Hour: **\$44.97**

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

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

Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
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)

CEMENT & CONCRETE WORKER

Cement & Concrete Worker

Effective Period: 7/1/2013 - 1/19/2014

Wage Rate per Hour: **\$42.33**

Supplemental Benefit Rate per Hour: **\$26.17**

Supplemental Note: \$28.92 on Saturdays; \$31.67 on Sundays & Holidays

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$42.38**

Supplemental Benefit Rate per Hour: **\$26.17**

Supplemental Note: \$28.92 on Saturdays; \$31.67 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

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
6/11/2014

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

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


PRODUCER USI Insurance Services, LLC 333 Earle Ovington Blvd., Suite 800 Uniondale, NY 11553	CONTACT NAME: PHONE (A/C, No, Ext): 516 419-4000 FAX (A/C, No): 877 727-5171 E-MAIL ADDRESS:													
	<table border="1"> <tr> <th>INSURER(S) AFFORDING COVERAGE</th> <th>NAIC #</th> </tr> <tr> <td>INSURER A : Starr Indemnity & Liability Com</td> <td>38318</td> </tr> <tr> <td>INSURER B : Chubb Indemnity Insurance Compa</td> <td>12777</td> </tr> <tr> <td>INSURER C : American Guarantee & Liability</td> <td>26247</td> </tr> <tr> <td>INSURER D :</td> <td></td> </tr> <tr> <td>INSURER E :</td> <td></td> </tr> <tr> <td>INSURER F :</td> <td></td> </tr> </table>	INSURER(S) AFFORDING COVERAGE	NAIC #	INSURER A : Starr Indemnity & Liability Com	38318	INSURER B : Chubb Indemnity Insurance Compa	12777	INSURER C : American Guarantee & Liability	26247	INSURER D :		INSURER E :		INSURER F :
INSURER(S) AFFORDING COVERAGE	NAIC #													
INSURER A : Starr Indemnity & Liability Com	38318													
INSURER B : Chubb Indemnity Insurance Compa	12777													
INSURER C : American Guarantee & Liability	26247													
INSURER D :														
INSURER E :														
INSURER F :														
INSURED Maspeth Supply Co LLC 55-14 48th Street Maspeth, NY 11378														

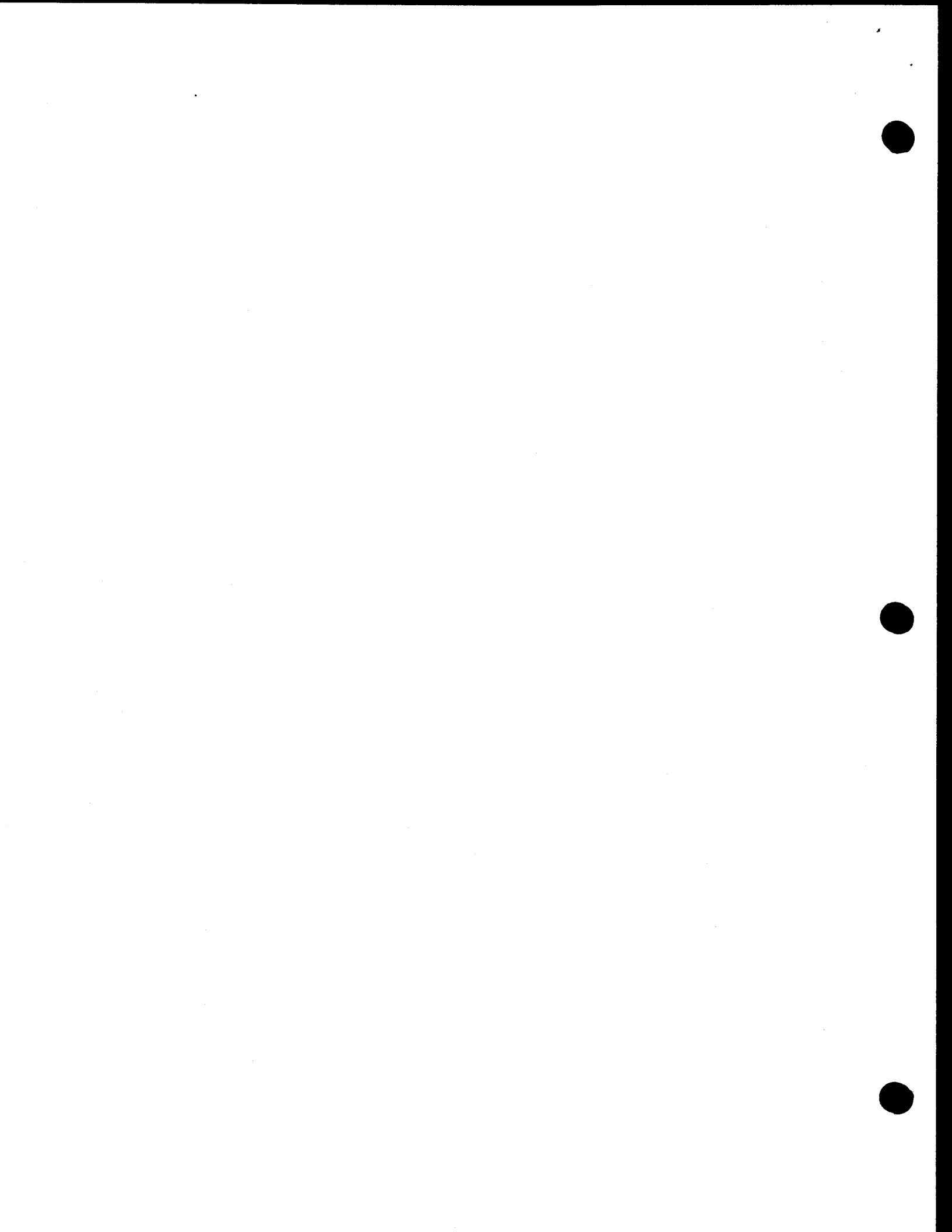
COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC		1000025198141	06/01/2014	06/01/2015	EACH OCCURRENCE \$2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$300,000 MED EXP (Any one person) \$10,000 PERSONAL & ADV INJURY \$2,000,000 GENERAL AGGREGATE \$4,000,000 PRODUCTS - COMP/OP AGG \$4,000,000 \$
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS		SISIPCA08263714	06/01/2014	06/01/2015	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	<input type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$		1000020988	06/01/2014	06/01/2015	EACH OCCURRENCE \$3,000,000 AGGREGATE \$3,000,000 \$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input type="checkbox"/> Y/N <input checked="" type="checkbox"/> N N/A (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		0044724208	04/01/2014	04/01/2015	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTH-ER E.I. EACH ACCIDENT \$1,000,000 E.I. DISEASE - EA EMPLOYEE \$1,000,000 E.I. DISEASE - POLICY LIMIT \$1,000,000
C	Excess Liability		AEC595491201	06/01/2014	06/01/2015	\$21,000,000 xs \$3,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
RE: FMS ID: HWQ411B, E-PIN: 85014B0047001, DDC PIN: 850210HW008C, Reconstruction of Albert Road Area, Borough of Queens. The following are included as Additional Insured's as respects the Named Insured's Operations where required by written contract: NYC Department of Design and Construction, The 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 (See Attached Descriptions)

CERTIFICATE HOLDER NYC Department of Design and Construction 30-30 Thomson Avenue, 4th Floor Long Island City, NY 11101	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
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CERTIFICATE OF LIABILITY INSURANCE

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

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

PRODUCER USI Insurance Services, LLC 333 Earle Ovington Blvd., Suite 800 Uniondale, NY 11553	CONTACT NAME: PHONE (A/C, No, Ext): 516 419-4000		FAX (A/C, No): 877 727-5171
	E-MAIL ADDRESS:		
INSURED Maspeth Supply Co LLC 55-14 48th Street Maspeth, NY 11378	INSURER(S) AFFORDING COVERAGE		NAIC #
	INSURER A: Starr Indemnity & Liability Com		38318
	INSURER B: Aspen Specialty Insurance Co		10717
	INSURER C:		
	INSURER D:		
	INSURER E:		

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY			1000025198141	06/01/2014	06/01/2015	EACH OCCURRENCE	\$2,000,000
	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$300,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR						MED EXP (Any one person)	\$10,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						PERSONAL & ADV INJURY	\$2,000,000
	<input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC						GENERAL AGGREGATE	\$4,000,000
	AUTOMOBILE LIABILITY						PRODUCTS - COMP/OP AGG	\$4,000,000
	<input type="checkbox"/> ANY AUTO							\$
	<input type="checkbox"/> ALL OWNED AUTOS	<input type="checkbox"/> SCHEDULED AUTOS						\$
	<input type="checkbox"/> HIRED AUTOS	<input type="checkbox"/> NON-OWNED AUTOS						\$
	<input type="checkbox"/> UMBRELLA LIAB	<input type="checkbox"/> OCCUR						\$
<input type="checkbox"/> EXCESS LIAB	<input type="checkbox"/> CLAIMS-MADE			\$				
<input type="checkbox"/> DED	<input type="checkbox"/> RETENTION \$			\$				
WORKERS COMPENSATION AND EMPLOYERS' LIABILITY							WC STATUTORY LIMITS	OTHER
ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	<input type="checkbox"/> Y <input type="checkbox"/> N		N/A				E.L. EACH ACCIDENT	\$
							E.L. DISEASE - EA EMPLOYEE	\$
							E.L. DISEASE - POLICY LIMIT	\$
B	Property			IMACTJ214	06/01/2014	06/01/2015	See Limit Below	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
RE: Contract: HWQ411B - Engineers Field Office, Contents Coverage \$40,000. The Certificate Holder is included as a Loss Payee, ATIMA as per written contract.

CERTIFICATE HOLDER NYC Department of Design and Construction 30-30 Thomson Avenue, 4th Floor Long Island City, NY 11101	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE <i>P. Sambo</i>
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STATE OF NEW YORK WORKERS' COMPENSATION BOARD

CERTIFICATE OF NYS WORKERS' COMPENSATION INSURANCE COVERAGE

<p>1a. Legal Name & Address of Insured (Use street address only)</p> <p>Maspeth Supply Co., LLC 55-14 48th Street Maspeth, NY 11378</p>	<p>1b. Business Telephone Number of Insured 718-786-7000</p> <p>1c. NYS Unemployment Insurance Employer Registration Number of Insured</p> <p>1d. Federal Employer Identification Number of Insured or Social Security Number 11-3493939</p>
<p>2. Name and Address of the Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder)</p> <p>NYC Department of Design & Construction 30-30 Thomson Avenue Long Island City, NY 11101</p>	<p>3a. Name of Insurance Carrier Chubb Indemnity & Liability Co.</p> <p>3b. Policy Number of entity listed in box "1a" 0044724208</p> <p>3c. Policy effective period 04/01/14 to 04/01/15</p> <p>3d. The Proprietor, Partners or Executive Officers are <input checked="" type="checkbox"/> included. (Only check box if all partners/officers included) <input type="checkbox"/> all excluded or certain partners/officers excluded.</p>

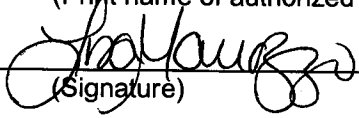
This certifies that the insurance carrier indicated above in box "3" insures the business referenced above in box "1a" for workers' compensation under the New York State Workers' Compensation Law. (To use this form, New York (NY) must be listed under Item 3A on the INFORMATION PAGE of the workers' compensation insurance policy). The Insurance Carrier or its licensed agent will send this Certificate of Insurance to the entity listed above as the certificate holder in box "2".

The Insurance Carrier will also notify the above certificate holder within 10 days IF a policy is canceled due to nonpayment of premiums or within 30 days IF there are reasons other than nonpayment of premiums that cancel the policy or eliminate the insured from the coverage indicated on this Certificate. (These notices may be sent by regular mail.) **Otherwise, this Certificate is valid for one year after this form is approved by the insurance carrier or its licensed agent, or until the policy expiration date listed in box "3c", whichever is earlier.**

Please Note: Upon the cancellation of the workers' compensation policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of Workers' Compensation Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Workers' Compensation Law.

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has the coverage as depicted on this form.

Approved by: USI Insurance Services, LLC
(Print name of authorized representative or licensed agent of insurance carrier)

Approved by:  June 11, 2014
(Signature) (Date)

Title: Lisa Marrazzo, Sr. Account Executive

Telephone Number of authorized representative or licensed agent of insurance carrier: (516) 419-4000

Please Note: Only insurance carriers and their licensed agents are authorized to issue Form C-105.2. Insurance brokers are NOT authorized to issue it.



SCHEDULE A
(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)
(GENERAL CONDITIONS RELATING TO ARTICLE 22 - INSURANCE)

PART III. BROKER'S CERTIFICATION

Pursuant to Article 22.3.3 of the Contract, every Certificate of Insurance must be accompanied by either the following certification by the broker, setting forth the following text and required information and signatures or certified copies of all policies referenced in the Certificate of Insurance.

CERTIFICATION BY BROKER

The undersigned insurance broker represents to the City of New York that the attached Certificate of Insurance is accurate in all material respects, and that the described insurance is effective as of the date of this Certification.

USI Insurance Services LLC

[Name of broker (typewritten)]

333 Earle Ovington Blvd
Uniondale, NY 11553

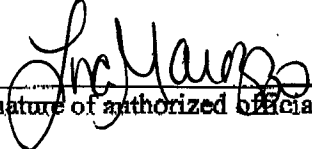
[Address of broker (typewritten)]

Lisa.Marrazzo@usi.biz

[Email address of broker (typewritten)]

(516) 419-4117 - (610) 362-8917

[Phone number/Fax number of broker (typewritten)]


[Signature of authorized official or broker]

Lisa Marrazzo, Sr. Account Executive

[Name and title of authorized official (typewritten)]

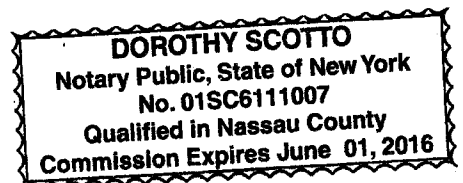
State of New York)

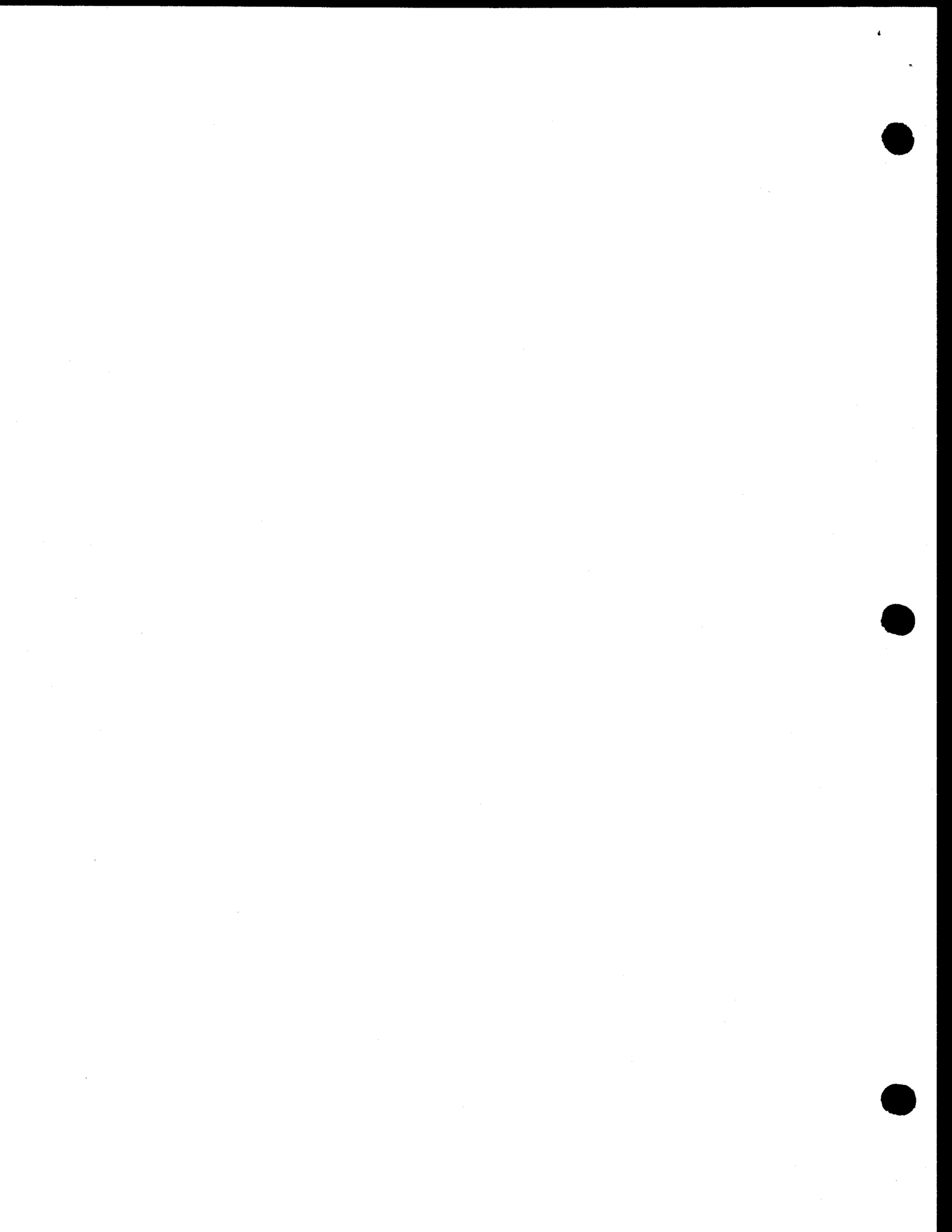
) ss.:

County of Nassau)

Sworn to before me this 11th day of June, 2014


NOTARY PUBLIC FOR THE STATE OF New York





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

Presidential Election Day
Thanksgiving Day
Christmas Day

Paid Holidays

1/2 day before Christmas Day
1/2 day before New Year's Day

Shift Rates

On shift work extending over a twenty-four hour period, all shifts are paid at straight time.

(Cement Concrete Workers District Council)

CEMENT MASON

Cement Mason

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$38.63**

Supplemental Benefit Rate per Hour: **\$39.05**

Supplemental Note: Overtime supplemental benefit rate per hour: **\$57.55**

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.

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

(Local #780)

CORE DRILLER

Core Driller

Effective Period: 7/1/2013 - 1/19/2014

Wage Rate per Hour: **\$35.44**

Supplemental Benefit Rate per Hour: **\$19.75**

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$35.71**

Supplemental Benefit Rate per Hour: **\$21.69**

Core Driller Helper

Effective Period: 7/1/2013 - 1/19/2014

Wage Rate per Hour: **\$28.60**

Supplemental Benefit Rate per Hour: **\$19.75**

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$28.60**

Supplemental Benefit Rate per Hour: **\$21.69**

Core Driller Helper(Third year in the industry)

Effective Period: 7/1/2013 - 1/19/2014

Wage Rate per Hour: **\$25.74**

Supplemental Benefit Rate per Hour: **\$19.75**

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$25.74**

Supplemental Benefit Rate per Hour: **\$21.69**

Core Driller Helper (Second year in the industry)

Effective Period: 7/1/2013 - 1/19/2014

Wage Rate per Hour: **\$22.88**

Supplemental Benefit Rate per Hour: **\$19.75**

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$22.88**

Supplemental Benefit Rate per Hour: **\$21.69**

Core Driller Helper (First year in the industry)

Effective Period: 7/1/2013 - 1/19/2014

Wage Rate per Hour: **\$20.02**

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

Supplemental Benefit Rate per Hour: \$19.75

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: \$20.02

Supplemental Benefit Rate per Hour: \$21.69

Overtime Description

Time and one half the regular rate for work on a holiday plus Holiday pay when worked.

Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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

Paid Holidays

New Year's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

Shift Rates

The shift day shall be the continuous eight and one-half (8½) hours from 6:00 A.M. to 2:30 P.M. and from 2:30 P.M. to 11:00 P.M., including one-half (½) hour of employees regular rate of pay for lunch. When two (2) or more shifts are employed, single time shall be paid for each shift, but those employees employed on a shift other than from 8:00 A.M. to 5:00 P.M. shall, in addition, receive seventy-five cents (\$0.75) per hour differential for each hour worked. When three (3) shifts are needed, each shift shall work seven and one-half (7 ½) hours paid for eight (8) hours of labor and be permitted one-half (½) hour for mealtime.

(Carpenters District Council)

DERRICKPERSON AND RIGGER

Derrick Person & Rigger

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$41.00

Supplemental Benefit Rate per Hour: \$46.07

Supplemental Note: The above supplemental rate applies for work performed in Manhattan, Bronx, Brooklyn and Queens. \$47.49 - For work performed in Staten Island.

Derrick Person & Rigger - Site Work

For site work where no rigging is involved.

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$30.00

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

Supplemental Benefit Rate per Hour: \$31.32

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: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$59.40

Supplemental Benefit Rate per Hour: \$44.97

Diver Tender (Marine)

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$42.05

Supplemental Benefit Rate per Hour: \$44.97

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

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

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

New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
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: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$46.82

Supplemental Benefit Rate per Hour: \$44.97

Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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

Overtime Holidays

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

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

Paid Holidays

None

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

Shift Rates

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 - Automobile Chauffeur (Dump Truck)

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$38.11**

Supplemental Benefit Rate per Hour: **\$40.20**

Driver - Heavy Equipment Trailer Driver

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$39.61**

Supplemental Benefit Rate per Hour: **\$40.20**

Note: For time and one half overtime Wage Rate - \$57.16; for double time overtime Wage Rate - \$76.21

Driver - Euclid & Turnapull Operator

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$38.67**

Supplemental Benefit Rate per Hour: **\$40.20**

Driver - Six Wheeler(3 Axle) Tractors & Trailers

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$39.11**

Supplemental Benefit Rate per Hour: **\$40.20**

Note: For time and one half overtime Wage Rate - \$58.01; for double time overtime Wage Rate - \$77.34

Driver - Boom Truck

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$39.36**

Supplemental Benefit Rate per Hour: **\$40.20**

Note: For time and one half overtime Wage Rate - \$58.01; for double time overtime Wage Rate - \$77.34

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

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

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

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

Driver - Redi-Mix Driver (Sand & Gravel)

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$35.71

Supplemental Benefit Rate per Hour: \$37.27

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

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

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)

Effective Period: 7/1/2013 - 5/13/2014
Wage Rate per Hour: \$52.00
Supplemental Benefit Rate per Hour: \$46.13

Effective Period: 5/14/2014 - 6/30/2014
Wage Rate per Hour: \$53.00
Supplemental Benefit Rate per Hour: \$47.54

Electrician "A" (Regular Day Overtime)

Effective Period: 7/1/2013 - 5/13/2014
Wage Rate per Hour: \$78.00
Supplemental Benefit Rate per Hour: \$49.39

Effective Period: 5/14/2014 - 6/30/2014
Wage Rate per Hour: \$79.50
Supplemental Benefit Rate per Hour: \$50.86

Electrician "A" (Day Shift)

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

Effective Period: 7/1/2013 - 5/13/2014
Wage Rate per Hour: \$52.00
Supplemental Benefit Rate per Hour: \$46.13

Effective Period: 5/14/2014 - 6/30/2014
Wage Rate per Hour: \$53.00
Supplemental Benefit Rate per Hour: \$47.54

Electrician "A" (Day Shift Overtime After 8 hours)

Effective Period: 7/1/2013 - 5/13/2014
Wage Rate per Hour: \$78.00
Supplemental Benefit Rate per Hour: \$49.39

Effective Period: 5/14/2014 - 6/30/2014
Wage Rate per Hour: \$79.50
Supplemental Benefit Rate per Hour: \$50.86

Electrician "A" (Swing Shift)

Effective Period: 7/1/2013 - 5/13/2014
Wage Rate per Hour: \$61.01
Supplemental Benefit Rate per Hour: \$52.47

Effective Period: 5/14/2014 - 6/30/2014
Wage Rate per Hour: \$62.19
Supplemental Benefit Rate per Hour: \$54.07

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

Effective Period: 7/1/2013 - 5/13/2014
Wage Rate per Hour: \$91.52
Supplemental Benefit Rate per Hour: \$56.30

Effective Period: 5/14/2014 - 6/30/2014
Wage Rate per Hour: \$93.29
Supplemental Benefit Rate per Hour: \$57.97

Electrician "A" (Graveyard Shift)

Effective Period: 7/1/2013 - 5/13/2014
Wage Rate per Hour: \$68.34
Supplemental Benefit Rate per Hour: \$57.83

Effective Period: 5/14/2014 - 6/30/2014
Wage Rate per Hour: \$69.66
Supplemental Benefit Rate per Hour: \$59.59

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

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

Effective Period: 7/1/2013 - 5/13/2014
Wage Rate per Hour: \$102.51
Supplemental Benefit Rate per Hour: \$62.11

Effective Period: 5/14/2014 - 6/30/2014
Wage Rate per Hour: \$104.49
Supplemental Benefit Rate per Hour: \$63.96

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 \$22.86 effective 1/20/2014 and \$23.63 effective 5/14/2014.

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: 7/1/2013 - 5/13/2014
Wage Rate per Hour: \$26.50
Supplemental Benefit Rate per Hour: \$19.56
First and Second Year "M" Wage Rate Per Hour - Hired on or before 5/10/07: \$25.80
First and Second Year "M" Supplemental Rate- Hired on or before 5/10/07: \$19.21
First and Second Year "M" Wage Rate Per Hour - Hired after 5/10/07: \$22.00

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

First and Second Year "M" Supplemental Rate- Hired after 5/10/07: \$17.30

Effective Period: 5/14/2014 - 6/30/2014

Wage Rate per Hour: \$27.00

Supplemental Benefit Rate per Hour: \$20.32

First and Second Year "M" Wage Rate Per Hour - Hired on or before 5/10/07: \$26.30

First and Second Year "M" Supplemental Rate- Hired on or before 5/10/07: \$19.96

First and Second Year "M" Wage Rate Per Hour - Hired after 5/10/07: \$22.50

First and Second Year "M" Supplemental Rate- Hired after 5/10/07: \$18.06

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: 7/1/2013 - 5/13/2014

Wage Rate per Hour: \$39.75

Supplemental Benefit Rate per Hour: \$21.23

First and Second Year "M" Wage Rate Per Hour - Hired on or before 5/10/07: \$38.70

First and Second Year "M" Supplemental Rate- Hired on or before 5/10/07: \$20.83

First and Second Year "M" Wage Rate Per Hour - Hired after 5/10/07: \$33.00

First and Second Year "M" Supplemental Rate- Hired after 5/10/07: \$18.68

Effective Period: 5/14/2014 - 6/30/2014

Wage Rate per Hour: \$40.50

Supplemental Benefit Rate per Hour: \$21.01

First and Second Year "M" Wage Rate Per Hour - Hired on or before 5/10/07: \$39.45

First and Second Year "M" Supplemental Rate- Hired on or before 5/10/07: \$21.61

First and Second Year "M" Wage Rate Per Hour - Hired after 5/10/07: \$33.75

First and Second Year "M" Supplemental Rate- Hired after 5/10/07: \$19.47

Overtime

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

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Overtime Holidays

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

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Paid Holidays

None

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

(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: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$30.40**

Supplemental Benefit Rate per Hour: **\$13.90**

Supplemental Note: \$12.40 only after 8 hours worked in a day

Overtime Description

Time and one half the regular rate for work on the following holidays: Columbus Day, Veterans Day, Day after Thanksgiving.

Double time the regular rate for work on the following holidays: New Year's day, Martin Luther King Jr. Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day.

Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Paid Holidays

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Shift Rates

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

Vacation

At least 1 year of employment.....ten (10) days

5 years or more of employment.....fifteen (15) days

10 years of employment.....twenty (20) days

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

Plus one Personal Day per year

Sick Days:
One day per Year

(Local #3)

ELECTRICIAN-STREET LIGHTING WORKER

Electrician - Electro Pole Electrician

Effective Period: 7/1/2013 - 5/20/2014
Wage Rate per Hour: **\$52.00**
Supplemental Benefit Rate per Hour: **\$47.90**

Effective Period: 5/21/2014 - 6/30/2014
Wage Rate per Hour: **\$53.00**
Supplemental Benefit Rate per Hour: **\$49.34**

Electrician - Electro Pole Foundation Installer

Effective Period: 7/1/2013 - 5/20/2014
Wage Rate per Hour: **\$39.42**
Supplemental Benefit Rate per Hour: **\$36.46**

Effective Period: 5/21/2014 - 6/30/2014
Wage Rate per Hour: **\$40.18**
Supplemental Benefit Rate per Hour: **\$37.73**

Electrician - Electro Pole Maintainer

Effective Period: 7/1/2013 - 5/20/2014
Wage Rate per Hour: **\$33.75**
Supplemental Benefit Rate per Hour: **\$32.83**

Effective Period: 5/21/2014 - 6/30/2014
Wage Rate per Hour: **\$34.40**
Supplemental Benefit Rate per Hour: **\$34.00**

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

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

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

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

Paid Holidays

None

(Local #3)

ELEVATOR CONSTRUCTOR

Elevator Constructor

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$57.01

Supplemental Benefit Rate per Hour: \$34.48

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

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

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: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$45.14

Supplemental Benefit Rate per Hour: \$33.02

Overtime Description

For Service Work: Double time - all work 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

For Modernization Work (4pm to 12:30am) - regularly hourly rate plus a (15%) fifteen percent differential.

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

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

Engineer - Heavy Construction Operating Engineer I

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

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$61.05

Supplemental Benefit Rate per Hour: \$31.93

Supplemental Note: \$57.46 on overtime

Shift Wage Rate: \$97.68

Engineer - Heavy Construction Operating Engineer II

Backhoes, Basin Machines, Groover, Mechanical Sweepers, Bobcat, Boom Truck, Barrier Transport (Barrier Mover) & machines of similar nature. Operation of Churn Drills and machines of a similar nature, Stetco Silent Hoist and machines of similar nature, Vac-Alls, Meyers Machines, John Beam and machines of a similar nature, Ross Carriers and Travel Lifts and machines of a similar nature, Bulldozers, Scrapers and Turn-a-Pulls: Tugger Hoists (Used exclusively for handling excavated material); Tractors with attachments, Hyster and Roustabout Cranes, Cherry pickers. Austin Western, Grove and machines of a similar nature, Scoopmobiles, Monorails, Conveyors, Trenchers: Loaders-Rubber Tired and Tractor: Barber Greene and Eimco Loaders and Eimco Backhoes; Mighty Midget and similar breakers and Tampers, Curb and Gutter Pavers and Motor Patrol, Motor Graders and all machines of a similar nature. Locomotives 10 Tons or under. Mini-Max, Break-Tech and machines of a similar nature; Milling machines, robotic and demolition machines and machines of a similar 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: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$59.24

Supplemental Benefit Rate per Hour: \$31.93

Supplemental Note: \$57.46 on overtime

Shift Wage Rate: \$94.78

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: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$56.22

Supplemental Benefit Rate per Hour: \$31.93

Supplemental Note: \$57.46 on overtime

Shift Wage Rate: \$89.95

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

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

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: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$58.97

Supplemental Benefit Rate per Hour: \$31.93

Supplemental Note: \$57.46 on overtime

Shift Wage Rate: \$94.35

Engineer - Heavy Construction Maintenance Engineer II

On Base Mounted Tower Cranes

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$77.30

Supplemental Benefit Rate per Hour: \$31.93

Supplemental Note: \$57.46 on overtime

Shift Wage Rate: \$123.68

Engineer - Heavy Construction Maintenance Engineer III

On Generators, Light Towers

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$39.10

Supplemental Benefit Rate per Hour: \$31.93

Supplemental Note: \$57.46 on overtime

Shift Wage Rate: \$62.56

Engineer - Heavy Construction Maintenance Engineer IV

On Pumps and Mixers including mud sucking

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$40.11

Supplemental Benefit Rate per Hour: \$31.93

Supplemental Note: \$57.46 on overtime

Shift Wage Rate: \$64.18

Engineer - Heavy Construction Oilers I

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

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$53.22

Supplemental Benefit Rate per Hour: \$31.93

Supplemental Note: \$57.46 on overtime

Shift Wage Rate: \$85.15

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

Engineer - Heavy Construction Oilers II

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

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$36.97

Supplemental Benefit Rate per Hour: \$31.93

Supplemental Note: \$57.46 on overtime

Shift Wage Rate: \$59.15

Engineer - Steel Erection Maintenance Engineers

Derrick, Travelers, Tower, Crawler Tower and Climbing Cranes

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$57.05

Supplemental Benefit Rate per Hour: \$31.93

Supplemental Note: \$57.46 on overtime

Shift Wage Rate: \$91.28

Engineer - Steel Erection Oiler I

On a Truck Crane

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$53.43

Supplemental Benefit Rate per Hour: \$31.93

Supplemental Note: \$57.46 on overtime

Shift Wage Rate: \$85.49

Engineer - Steel Erection Oiler II

On a Crawler Crane

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$40.84

Supplemental Benefit Rate per Hour: \$31.93

Supplemental Note: \$57.46 on overtime

Shift Wage Rate: \$65.34

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.

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

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

Paid Holidays

New Year's Day
Lincoln's Birthday
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
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: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$54.04

Supplemental Benefit Rate per Hour: \$31.93

Supplemental Note: \$57.46 on overtime

Engineer - Building Work Maintenance Engineers II

On Pumps, Generators, Mixers and Heaters

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$42.10

Supplemental Benefit Rate per Hour: \$31.93

Supplemental Note: \$57.46 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: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$51.40

Supplemental Benefit Rate per Hour: \$31.93

Supplemental Note: \$57.46 on overtime

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

Engineer - Building Work Oilers II

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

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$38.31**

Supplemental Benefit Rate per Hour: **\$31.93**

Supplemental Note: \$57.46 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: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$35.55**

Supplemental Benefit Rate per Hour: **\$17.65**

Instrument Person

Effective Period: 7/1/2013 - 6/30/2014

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

Wage Rate per Hour: \$29.41
Supplemental Benefit Rate per Hour: \$17.65

Rodperson

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$25.54
Supplemental Benefit Rate per Hour: \$17.65

Overtime Description

Overtime Benefit Rate - \$23.63 per hour (time & one half) \$29.95 per hour (double time).
Time and one half the regular rate after an 8 hour day, Time and one half the regular rate for Saturday for the first eight hours worked, Double time the regular time rate for Saturday for work performed in excess of eight hours, Double time the regular rate for Sunday and Double time the regular rate for work on a holiday.

Paid Holidays

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

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

(Operating Engineer Local #15-D)

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

Field Engineer - BC Party Chief

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$55.40
Supplemental Benefit Rate per Hour: \$30.62
Supplemental Note: Overtime Benefit Rate - \$42.73 per hour (time & one half) \$54.84 per hour (double time).

Field Engineer - BC Instrument Person

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$43.10
Supplemental Benefit Rate per Hour: \$30.62
Supplemental Note: Overtime Benefit Rate - \$42.73 per hour (time & one half) \$54.84 per hour (double time).

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

Field Engineer - BC Rodperson

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$27.96

Supplemental Benefit Rate per Hour: \$30.62

Supplemental Note: Overtime Benefit Rate - \$42.73 per hour (time & one half) \$54.84 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: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$62.61

Supplemental Benefit Rate per Hour: \$30.62

Supplemental Note: Overtime benefit rate - \$42.73 per hour (time & one half), \$54.84 per hour (double time).

Field Engineer - HC Instrument Person

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$46.00

Supplemental Benefit Rate per Hour: \$30.62

Supplemental Note: Overtime benefit rate - \$42.73 per hour (time & one half), \$54.84 per hour (double time).

Field Engineer - HC Rodperson

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

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$38.61**

Supplemental Benefit Rate per Hour: **\$30.62**

Supplemental Note: Overtime benefit rate - \$42.73 per hour (time & one half), \$54.84 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: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$58.50**

Supplemental Benefit Rate per Hour: **\$30.62**

Supplemental Note: Overtime benefit rate - \$42.73 per hour (time & one half), \$54.84 per hour (double time).

Field Engineer - Steel Erection Instrument Person

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$45.53**

Supplemental Benefit Rate per Hour: **\$30.62**

Supplemental Note: Overtime benefit rate - \$42.73 per hour (time & one half), \$54.84 per hour (double time).

Field Engineer - Steel Erection Rodperson

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$30.43**

Supplemental Benefit Rate per Hour: **\$30.62**

Supplemental Note: Overtime benefit rate - \$42.73 per hour (time & one half), \$54.84 per hour (double time).

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

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: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$67.70

Supplemental Benefit Rate per Hour: \$28.60

Supplemental Note: \$51.75 overtime hours

Shift Wage Rate: \$108.32

Operating Engineer - Road & Heavy Construction II

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

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$70.10

Supplemental Benefit Rate per Hour: \$28.60

Supplemental Note: 51.75 overtime hours

Shift Wage Rate: \$112.16

Operating Engineer - Road & Heavy Construction III

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

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

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$72.34
Supplemental Benefit Rate per Hour: \$28.60
Supplemental Note: \$51.75 overtime hours
Shift Wage Rate: \$115.74

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: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$70.63
Supplemental Benefit Rate per Hour: \$28.60
Supplemental Note: \$51.75 overtime hours
Shift Wage Rate: \$113.01

Operating Engineer - Road & Heavy Construction V

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

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$69.23
Supplemental Benefit Rate per Hour: \$28.60
Supplemental Note: \$51.75 overtime hours
Shift Wage Rate: \$110.77

Operating Engineer - Road & Heavy Construction VI

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

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$65.76
Supplemental Benefit Rate per Hour: \$28.60
Supplemental Note: \$51.75 overtime hours
Shift Wage Rate: \$105.22

Operating Engineer - Road & Heavy Construction VII

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

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$53.08
Supplemental Benefit Rate per Hour: \$28.60
Supplemental Note: \$51.75 overtime hours
Shift Wage Rate: \$84.93

Operating Engineer - Road & Heavy Construction VIII

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

Utility Compressors

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$41.18
Supplemental Benefit Rate per Hour: \$28.60
Supplemental Note: \$51.75 overtime hours
Shift Wage Rate: \$51.93

Operating Engineer - Road & Heavy Construction IX

Horizontal Boring Rig

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$62.53
Supplemental Benefit Rate per Hour: \$28.60
Supplemental Note: \$51.75 overtime hours
Shift Wage Rate: \$100.05

Operating Engineer - Road & Heavy Construction X

Elevators (manually operated as personnel hoist).

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$57.46
Supplemental Benefit Rate per Hour: \$28.60
Supplemental Note: \$51.75 overtime hours
Shift Wage Rate: \$91.94

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: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$44.63
Supplemental Benefit Rate per Hour: \$28.60
Supplemental Note: \$51.75 overtime hours
Shift Wage Rate: \$71.41

Operating Engineer - Road & Heavy Construction XII

All Drills and Machines of a similar nature.

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$66.45
Supplemental Benefit Rate per Hour: \$28.60
Supplemental Note: \$51.75 overtime hours
Shift Wage Rate: \$106.32

Operating Engineer - Road & Heavy Construction XIII

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

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

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$64.34

Supplemental Benefit Rate per Hour: \$28.60

Supplemental Note: \$51.75 overtime hours

Shift Wage Rate: \$102.94

Operating Engineer - Road & Heavy Construction XIV

Concrete Mixer

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$61.53

Supplemental Benefit Rate per Hour: \$28.60

Supplemental Note: \$51.75 overtime hours

Shift Wage Rate: \$98.45

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: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$41.44

Supplemental Benefit Rate per Hour: \$28.60

Supplemental Note: \$51.75 overtime hours

Shift Wage Rate: \$66.30

Operating Engineer - Road & Heavy Construction XVI

Concrete Breaking Machines, Hoists (Single Drum), Load Masters, Locomotives (over ten tons) and Dinkies over ten tons, Hydraulic Crane-Second Engineer.

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$58.74

Supplemental Benefit Rate per Hour: \$28.60

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$93.98

Operating Engineer - Road & Heavy Construction XVII

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

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$59.21

Supplemental Benefit Rate per Hour: \$28.60

Supplemental Note: \$51.75 overtime hours

Shift Wage Rate: \$94.74

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

Operating Engineer - Road & Heavy Construction XVIII

Tower Crane

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$85.00

Supplemental Benefit Rate per Hour: \$28.60

Supplemental Note: \$51.75 overtime hours

Shift Wage Rate: \$136.00

Operating Engineer - Paving I

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

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$65.76

Supplemental Benefit Rate per Hour: \$28.60

Supplemental Note: \$51.75 overtime hours

Shift Wage Rate: \$105.22

Operating Engineer - Paving II

Asphalt Roller

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$64.04

Supplemental Benefit Rate per Hour: \$28.60

Supplemental Note: \$51.75 overtime hours

Shift Wage Rate: \$102.46

Operating Engineer - Paving III

Asphalt Plants

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$54.17

Supplemental Benefit Rate per Hour: \$28.60

Supplemental Note: \$51.75 overtime hours

Shift Wage Rate: \$86.67

Operating Engineer - Concrete I

Cranes

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$70.32

Supplemental Benefit Rate per Hour: \$28.60

Supplemental Note: \$51.75 overtime hours

Operating Engineer - Concrete II

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

Compressors

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$41.76**

Supplemental Benefit Rate per Hour: **\$28.60**

Supplemental Note: \$51.75 overtime hours

Operating Engineer - Concrete III

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

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$56.16**

Supplemental Benefit Rate per Hour: **\$28.60**

Supplemental Note: \$51.75 overtime hours

Operating Engineer - Steel Erection I

Three Drum Derricks

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$73.37**

Supplemental Benefit Rate per Hour: **\$28.60**

Supplemental Note: \$51.75 overtime hours

Shift Wage Rate: **\$117.39**

Operating Engineer - Steel Erection II

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

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$70.50**

Supplemental Benefit Rate per Hour: **\$28.60**

Supplemental Note: \$51.75 overtime hours

Shift Wage Rate: **\$112.80**

Operating Engineer - Steel Erection III

Compressors, Welding Machines.

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$41.84**

Supplemental Benefit Rate per Hour: **\$28.60**

Supplemental Note: \$51.75 overtime hours

Shift Wage Rate: **\$66.94**

Operating Engineer - Steel Erection IV

Compressors - Not Combined with Welding Machine.

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

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$39.85
Supplemental Benefit Rate per Hour: \$28.60
Supplemental Note: \$51.75 overtime hours
Shift Wage Rate: \$63.76

Operating Engineer - Building Work I

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

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$57.82
Supplemental Benefit Rate per Hour: \$28.60
Supplemental Note: \$51.75 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: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$43.28
Supplemental Benefit Rate per Hour: \$28.60
Supplemental Note: \$51.75 overtime hours

Operating Engineer - Building Work III

Double Drum

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$65.83
Supplemental Benefit Rate per Hour: \$28.60
Supplemental Note: \$51.75 overtime hours

Operating Engineer - Building Work IV

Stone Derrick, Cranes, Hydraulic Cranes Boom Trucks.

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$69.74
Supplemental Benefit Rate per Hour: \$28.60
Supplemental Note: \$51.75 overtime hours

Operating Engineer - Building Work V

Dismantling and Erection of Cranes, Relief Engineer.

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$64.26

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

Supplemental Benefit Rate per Hour: \$28.60
Supplemental Note: \$51.75 overtime hours

Operating Engineer - Building Work VI

4 Pole Hoist, Single Drum Hoists.

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$63.58
Supplemental Benefit Rate per Hour: \$28.60
Supplemental Note: \$51.75 overtime hours

Operating Engineer - Building Work VII

Rack & Pinion and House Cars

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$50.53
Supplemental Benefit Rate per Hour: \$28.60
Supplemental Note: \$51.75 overtime hours
For New House Car projects started after 7/1/11 only: Wage Rate per Hour \$40.31

Overtime Description

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

For House Cars and Rack & Pinion only: Overtime paid at time and one-half for all hours in excess of eight hours in a day, Saturday, Sunday and Holidays worked.

Overtime

Double time the regular rate after an 8 hour day.
Double time the regular time rate for Saturday.
Double time the regular rate for Sunday.
Double time the regular rate for work on the following holiday(s).

Paid Holidays

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

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

(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: 7/1/2013 – 1/19/2014

Wage Rate per Hour: **\$46.15**

Supplemental Benefit Rate per Hour: **\$38.50**

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$48.88**

Supplemental Benefit Rate per Hour: **\$42.70**

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)

Glazier

Effective Period: 7/1/2013 - 10/31/2013

Wage Rate per Hour: **\$42.00**

Supplemental Benefit Rate per Hour: **\$33.24**

Supplemental Note: Supplemental Benefit Overtime Rate: **\$41.24**

Effective Period: 11/1/2013 - 6/30/2014

Wage Rate per Hour: **\$42.00**

Supplemental Benefit Rate per Hour: **\$34.09**

Supplemental Note: Supplemental Benefit Overtime Rate: **\$42.59**

Overtime Description

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

Overtime

Double time the regular rate after a 7 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

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

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Paid Holidays

None

Shift Rates

Shifts shall be any 7 hours beyond 4:00 P.M. for which the glazier shall receive 8 hours pay for 7 hours worked.

(Local #1281)

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

GLAZIER - REPAIR & MAINTENANCE

(For the Installation of Glass - All repair and maintenance work on a particular building, whenever performed, where the total cumulative contract value is under \$105,000. Except where enumerated (i.e. plate glass windows) does not apply to non-residential buildings.)

Craft Jurisdiction for repair, maintenance and fabrication

Plate glass replacement, Residential glass replacement, Residential mirrors and shower doors, Storm windows and storm doors, Residential replacement windows, Herculite door repairs, Door closer repairs, Retrofit apartment house (non commercial buildings), Glass tinting.

Effective Period: 7/1/2013 - 4/30/2014

Wage Rate per Hour: **\$23.50**

Supplemental Benefit Rate per Hour: **\$18.54**

Effective Period: 5/1/2014 - 6/30/2014

Wage Rate per Hour: **\$23.60**

Supplemental Benefit Rate per Hour: **\$19.04**

Overtime

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

Double time the regular rate for Sunday.

Time and one half the regular hourly rate after 40 hours in any work week.

Paid Holidays

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

(Local #1281)

HEAT AND FROST INSULATOR

Heat & Frost Insulator

Effective Period: 7/1/2013 - 1/19/2014

Wage Rate per Hour: **\$56.48**

Supplemental Benefit Rate per Hour: **\$33.31**

Effective Period: 1/20/2014 - 6/30/2014

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

Wage Rate per Hour: \$56.98

Supplemental Benefit Rate per Hour: \$34.81

Overtime Description

Double time shall be paid for supplemental benefits during overtime work.

8th hour paid at time and one half.

Overtime

Double time the regular rate after an 8 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

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

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

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

Labor Day

Paid Holidays

None

Shift Rates

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

Off hour work in occupied or retail buildings may be worked on weekdays with an increment of \$1.00 per hour and eight hours pay for seven (7) hours worked. Double time will apply for over seven (7) hours worked on weekdays, weekends or holidays.

(Local #12)

HOUSE WRECKER (TOTAL DEMOLITION)

House Wrecker - Tier A

On all work sites the first, second, eleventh and every third House Wrecker thereafter shall be Tier A House Wreckers (i.e. 1st, 2nd, 11th, 14th etc). The 10th and 20th House Wrecker shall be apprentices. Other House Wreckers shall be Tier B House Wreckers.

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

Effective Period: 7/1/2013 – 1/19/2014
Wage Rate per Hour: **\$34.01**
Supplemental Benefit Rate per Hour: **\$25.14**

Effective Period: 1/20/2014 - 6/30/2014
Wage Rate per Hour: **\$34.51**
Supplemental Benefit Rate per Hour: **\$25.59**

House Wrecker - Tier B

On all work sites the first, second, eleventh and every third House Wrecker thereafter shall be Tier A House Wreckers (i.e. 1st, 2nd, 11th, 14th etc). The 10th and 20th House Wrecker shall be apprentices. Other House Wreckers shall be Tier B House Wreckers.

Effective Period: 7/1/2013 – 1/19/2014
Wage Rate per Hour: **\$23.75**
Supplemental Benefit Rate per Hour: **\$18.62**

Effective Period: 1/20/2014 - 6/30/2014
Wage Rate per Hour: **\$24.02**
Supplemental Benefit Rate per Hour: **\$19.12**

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: 7/1/2013 – 1/19/2014

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

Wage Rate per Hour: \$42.30

Supplemental Benefit Rate per Hour: \$43.54

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

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: \$42.70

Supplemental Benefit Rate per Hour: \$44.57

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

Iron Worker - Structural

Effective Period: 7/1/2013 - 1/19/2014

Wage Rate per Hour: \$46.75

Supplemental Benefit Rate per Hour: \$62.48

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

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

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: \$47.25

Supplemental Benefit Rate per Hour: \$64.43

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

Overtime Description

Monday through Friday- the first eight hours are paid at straight time, the 9th and 10th hours are paid at time and one-half the regular rate, all additional weekday overtime is paid at double the regular rate. Saturdays- the first eight hours are paid at time and one-half the regular rate, double time thereafter. Sunday-all shifts are paid at double time.

Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

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

New Year's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

Paid Holidays

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

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

Shift Rates

Monday through Friday - First Shift: First eight hours are paid at straight time, the 9th & 10th hours are paid at time and a half, double time paid thereafter. Second and third Shifts: First eight hours are paid at time and 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

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

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: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$39.25**

Supplemental Benefit Rate per Hour: **\$33.25**

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).

New Year's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

Paid Holidays

Labor Day

Thanksgiving Day

Shift Rates

When two shifts are employed, single time rate shall be paid for each shift. When three shifts are found necessary, each shift shall work seven and one half hours (7 ½), but shall be paid for eight (8) hours of labor, and be permitted one half hour for lunch.

(Local #731)

LANDSCAPING

(Landscaping tasks, 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: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$24.25**

Supplemental Benefit Rate per Hour: **\$12.30**

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

Landscaper (3 - 6 years experience)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$23.25
Supplemental Benefit Rate per Hour: \$12.30

Landscaper (up to 3 years experience)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$20.75
Supplemental Benefit Rate per Hour: \$12.30

Groundperson

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$20.75
Supplemental Benefit Rate per Hour: \$12.30

Tree Remover / Pruner

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$29.25
Supplemental Benefit Rate per Hour: \$12.30

Landscaper Sprayer (Pesticide Applicator)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$19.25
Supplemental Benefit Rate per Hour: \$12.30

Watering - Plant Maintainer

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$14.25
Supplemental Benefit Rate per Hour: \$12.30

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

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

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: 7/1/2013 – 1/19/2014

Wage Rate per Hour: **\$49.19**

Supplemental Benefit Rate per Hour: **\$32.24**

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$50.57**

Supplemental Benefit Rate per Hour: **\$33.82**

Marble Finisher

Effective Period: 7/1/2013 – 1/19/2014

Wage Rate per Hour: **\$39.05**

Supplemental Benefit Rate per Hour: **\$31.43**

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$39.71**

Supplemental Benefit Rate per Hour: **\$33.10**

Marble Polisher

Effective Period: 7/1/2013 – 1/19/2014

Wage Rate per Hour: **\$34.73**

Supplemental Benefit Rate per Hour: **\$24.60**

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$35.64**

Supplemental Benefit Rate per Hour: **\$25.64**

Overtime Description

Supplemental Benefit contributions are to be made at the applicable overtime rates. Time and one half the regular rate after a 7 hour day or time and one half the regular rate after an 8 hour day - chosen by Employer at the start of the project and then would last for the full duration of the project.

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

Overtime

Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays

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

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

Paid Holidays

None

(Local #7)

MASON TENDER

Mason Tender

Effective Period: 7/1/2013 – 1/19/2014

Wage Rate per Hour: **\$35.00**

Supplemental Benefit Rate per Hour: **\$25.74**

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$35.53**

Supplemental Benefit Rate per Hour: **\$26.31**

Overtime

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays

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

New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day

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

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)

(The erection, building, moving, servicing and dismantling of enclosures, scaffolding, barricades, protection and site safety structures etc., on Interior Demolition jobs.)

Mason Tender Tier A

Effective Period: 7/1/2013 – 1/19/2014

Wage Rate per Hour: **\$34.07**

Supplemental Benefit Rate per Hour: **\$19.77**

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$34.59**

Supplemental Benefit Rate per Hour: **\$20.75**

Mason Tender Tier B

On Interior Demolition job sites 33 1/3 % of the employees shall be classified as Tier A Interior Demolition Workers and 66 2/3 % shall be classified as Tier B Interior Demolition Workers; provided that the employer may employ more than 33 1/3 % Tier A Interior Demolition Workers on the job site. Where the number of employees on a job site is not divisible by 3, the first additional employee (above the number of employees divisible by three) shall be a Tier B Interior Demolition Worker, and the second additional employee shall be a Tier A Interior Demolition Worker.

Effective Period: 7/1/2013 – 1/19/2014

Wage Rate per Hour: **\$23.27**

Supplemental Benefit Rate per Hour: **\$14.08**

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$23.78**

Supplemental Benefit Rate per Hour: **\$15.07**

Overtime

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

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

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: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$41.43

Supplemental Benefit Rate per Hour: \$40.15

Supplemental Note: Supplemental benefits for overtime are paid at the appropriate overtime rate.

Overtime Description

Overtime would be time and one half the regular rate after a seven (7) or eight (8) hours workday, which would be set at the start of the job.

Overtime

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

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

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

Paid Holidays

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

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

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

Shift Rates

There shall be either two (2) or three (3) shifts, each shift shall be eight (8) hours with nine (9) hours pay, including one half (1/2) hour for lunch. Off-Hour Start shall commence after 3:30 P.M. and shall conclude by 6:00 A.M. The first consecutive seven (7) hours shall be at straight time with a differential of twelve dollars (\$12.00) per hour. Fringes shall be paid at the straight time rate.

(Local #46)

MILLWRIGHT

Millwright

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$47.69

Supplemental Benefit Rate per Hour: \$48.87

Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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

Overtime Holidays

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

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

Paid Holidays

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

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

Shift Rates

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

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

(Local #740)

MOSAIC MECHANIC

Mosaic Mechanic - Mosaic & Terrazzo Mechanic

Effective Period: 7/1/2013 - 1/19/2014

Wage Rate per Hour: **\$44.39**

Supplemental Benefit Rate per Hour: **\$35.11**

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$46.08 per hour.

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$44.64**

Supplemental Benefit Rate per Hour: **\$35.83**

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$46.80 per hour.

Mosaic Mechanic - Mosaic & Terrazzo Finisher

Effective Period: 7/1/2013 - 1/19/2014

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

Supplemental Benefit Rate per Hour: **\$35.11**

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$46.08 per hour.

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$43.03**

Supplemental Benefit Rate per Hour: **\$35.82**

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$46.79 per hour.

Mosaic Mechanic - Machine Operator Grinder

Effective Period: 7/1/2013 - 1/19/2014

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

Supplemental Benefit Rate per Hour: **\$35.11**

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$46.08 per hour.

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$43.03**

Supplemental Benefit Rate per Hour: **\$35.82**

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$46.79 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

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

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: 7/1/2013 - 4/30/2014
Wage Rate per Hour: \$37.50
Supplemental Benefit Rate per Hour: \$25.62
Supplemental Note: \$30.25 on overtime

Effective Period: 5/1/2014 - 6/30/2014
Wage Rate per Hour: \$39.50
Supplemental Benefit Rate per Hour: \$26.12
Supplemental Note: \$30.75 on overtime

Spray & Scaffold / Decorative / Sandblast

Effective Period: 7/1/2013 - 4/30/2014
Wage Rate per Hour: \$40.50
Supplemental Benefit Rate per Hour: \$25.62
Supplemental Note: \$30.25 on overtime

Effective Period: 5/1/2014 - 6/30/2014
Wage Rate per Hour: \$42.50
Supplemental Benefit Rate per Hour: \$26.12
Supplemental Note: \$30.75 on overtime

Overtime

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

Overtime Holidays

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

New Year's Day
President's Day

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

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

Paid Holidays

None

(District Council of Painters #9)

PAINTER - SIGN

Designer

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: **\$36.15**
Supplemental Benefit Rate per Hour: **\$9.66**

Journey person

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: **\$33.62**
Supplemental Benefit Rate per Hour: **\$9.66**

Overtime

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Time and one half the regular rate for Sunday.
Double time the regular rate for work on the following holiday(s).

Paid Holidays

New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Election Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Shift Rates

All work performed outside the regular 8 hour work day (either 7:00 A.M to 3:30 P.M or 8:00 A.M. to 4:30 P.M) shall be paid at time and one half the regular hourly rate.

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

(Local #8A-28A)

PAINTER - STRIPER

Striper (paint)

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$33.50

Supplemental Benefit Rate per Hour: \$11.62

Supplemental Note: Overtime Supplemental Benefit rate - \$7.42; New Hire Rate (0-3 months) - \$0.00

Lineperson (thermoplastic)

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$37.50

Supplemental Benefit Rate per Hour: \$11.62

Supplemental Note: Overtime Supplemental Benefit rate - \$7.42; New Hire Rate (0-3 months) - \$0.00

Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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

Paid Holidays

New Year's Day

Good Friday

Memorial Day

Independence Day

Labor Day

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)

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

PAINTER - STRUCTURAL STEEL

Painters on Structural Steel

Effective Period: 7/1/2013 – 1/19/2014

Wage Rate per Hour: **\$47.00**

Supplemental Benefit Rate per Hour: **\$32.08**

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$47.00**

Supplemental Benefit Rate per Hour: **\$33.58**

Painter - Power Tool

Effective Period: 7/1/2013 – 1/19/2014

Wage Rate per Hour: **\$53.00**

Supplemental Benefit Rate per Hour: **\$32.08**

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$53.00**

Supplemental Benefit Rate per Hour: **\$33.58**

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)

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

PAPERHANGER

Paperhanger

Effective Period: 7/1/2013 - 4/30/2014

Wage Rate per Hour: \$39.00

Supplemental Benefit Rate per Hour: \$29.23

Supplemental Note: Supplemental benefits are to be paid at the appropriate straight time and overtime rate.

Effective Period: 5/1/2014 - 6/30/2014

Wage Rate per Hour: \$41.08

Supplemental Benefit Rate per Hour: \$29.23

Supplemental Note: Supplemental benefits are to be paid at the appropriate straight time and overtime rate.

Overtime

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

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Overtime Holidays

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

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Paid Holidays

None

Shift Rates

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

(District Council of Painters #9)

PAVER AND ROADBUILDER

Paver & Roadbuilder - Formsetter

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$43.54

Supplemental Benefit Rate per Hour: \$33.55

Paver & Roadbuilder - Laborer

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

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: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$39.67

Supplemental Benefit Rate per Hour: \$33.55

Production Paver & Roadbuilder - Screed Person

(Production paving is asphalt paving when using a paving machine or on a project where a paving machine is traditionally used)

Adjustment of paving machinery on production paving jobs.

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$45.12

Supplemental Benefit Rate per Hour: \$33.55

Production Paver & Roadbuilder - Raker

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$44.61

Supplemental Benefit Rate per Hour: \$33.55

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: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$41.32

Supplemental Benefit Rate per Hour: \$33.55

Overtime Description

Veteran's Day is a Paid Holiday for employees working on production paving.

If an employee works New Year's Day or Christmas Day, they receive the single time rate plus 25%.

Employees who work on a holiday listed below receive the straight time rate plus one day's pay for the holiday.

Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Paid Holidays

Memorial Day

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

Independence Day
Labor Day
Presidential Election Day
Thanksgiving Day

Shift Rates

When two shifts are employed, the work period for each shift shall be a continuous eight (8) hours. When three shifts are employed, each shift will work seven and one half (7 ½) hours but will be paid for eight (8) hours since only one half (1/2) hour is allowed for meal time.

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

Night Work - On night work, the first eight (8) hours of work will be paid for at the single time rate, except that production paving work shall be paid at 20% over the single time rate for the screed person, rakers and shovelers directly involved only. All other workers will be exempt. Hours worked over eight (8) hours during said shift shall be paid for at the time and one-half rate.

(Local #1010)

PLASTERER

Plasterer

Effective Period: 7/1/2013 - 1/19/2014

Wage Rate per Hour: \$41.13

Supplemental Benefit Rate per Hour: \$24.95

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: \$41.78

Supplemental Benefit Rate per Hour: \$27.95

Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a 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
Martin Luther King Jr. Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
Christmas Day

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

Paid Holidays

None

Shift Rates

When it is not possible to conduct alteration work during regular work hours, in a building occupied by tenants, said work shall proceed on a shift basis: however work over seven (7) hours in any twenty four (24) hour period, the time after seven (7) hours shall be considered overtime.

The second shift shall start at a time between 3:30 p.m. and 7:00 p.m. and shall consist of seven (7) working hours and shall receive eight (8) hours of wages and benefits at the straight time rate. The workers on the second shift shall be allowed one-half (½) hour to eat with this time being included in the seven (7) hours of work.

(Local #530)

PLASTERER - TENDER

Plasterer - Tender

Effective Period: 7/1/2013 - 1/19/2014

Wage Rate per Hour: **\$35.00**

Supplemental Benefit Rate per Hour: **\$25.74**

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$35.53**

Supplemental Benefit Rate per Hour: **\$26.31**

Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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

Overtime Holidays

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

New Year's Day

Washington's Birthday

Memorial Day

Independence Day

Labor Day

Presidential Election Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

Shift Rates

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

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

(Mason Tenders District Council)

PLUMBER

Plumber

Effective Period: 7/1/2013 – 1/19/2014

Wage Rate per Hour: **\$52.36**

Supplemental Benefit Rate per Hour: **\$37.34**

Supplemental Note: Overtime supplemental benefit rate per hour: **\$74.40**

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$64.87**

Supplemental Benefit Rate per Hour: **\$25.18**

Supplemental Note: Overtime supplemental benefit rate per hour: **\$50.08**

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.

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

(Plumbers Local #1)

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

Effective Period: 7/1/2013 - 1/19/2014

Wage Rate per Hour: **\$33.46**

Supplemental Benefit Rate per Hour: **\$16.93**

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$38.27**

Supplemental Benefit Rate per Hour: **\$12.84**

Overtime

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

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Overtime Holidays

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

New Year's Day

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: 7/1/2013 – 1/19/2014

Wage Rate per Hour: **\$37.11**

Supplemental Benefit Rate per Hour: **\$25.56**

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$44.91**

Supplemental Benefit Rate per Hour: **\$18.37**

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

Overtime

Double time the regular rate after an 8 hour day.
Double time the regular time rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays

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

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

Paid Holidays

None

Shift Rates

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
(Installation and Maintenance)**

Plumber - Pump & Tank

Effective Period: 7/1/2013 – 1/19/2014
Wage Rate per Hour: \$53.01
Supplemental Benefit Rate per Hour: \$31.86

Effective Period: 1/20/2014 - 6/30/2014
Wage Rate per Hour: \$62.83
Supplemental Benefit Rate per Hour: \$21.37

Overtime

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

Overtime Holidays

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

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

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

Paid Holidays

None

Shift Rates

All work outside the regular workday (8:00 A.M. to 3:30 P.M.) is to be paid at time and one half the regular hourly rate

(Plumbers Local #1)

POINTER - WATERPROOFER, CAULKER MECHANIC (EXTERIOR BUILDING RENOVATION)

Pointer - Waterproofer, Caulker Mechanic

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$45.41**

Supplemental Benefit Rate per Hour: **\$23.29**

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

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

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: 7/1/2013 – 1/19/2014

Wage Rate per Hour: **\$39.00**

Supplemental Benefit Rate per Hour: **\$27.37**

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$40.00**

Supplemental Benefit Rate per Hour: **\$27.87**

Overtime

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

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Overtime Holidays

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

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Presidential Election Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

Shift Rates

Second shift - Regular hourly rate plus a 10% differential. Third shift - Regular hourly rate plus a 15% differential.

(Local #8)

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

SANDBLASTER - STEAMBLASTER
(Exterior Building Renovation)

Sandblaster / Steamblaster

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$45.41**

Supplemental Benefit Rate per Hour: **\$23.29**

Overtime

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

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

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

Overtime Holidays

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

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

Shift Rates

All work outside the regular work day (an eight hour workday between the hours of 6:00 A.M. and 4:30 P.M.) is to be paid at time and one half the regular rate.

(Bricklayer District Council)

SHEET METAL WORKER

Sheet Metal Worker

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$45.96**

Supplemental Benefit Rate per Hour: **\$43.19**

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

Sheet Metal Worker - Duct Cleaner

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

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$12.90

Supplemental Benefit Rate per Hour: \$8.07

Sheet Metal Worker - Fan Maintenance

(The temporary operation of fans or blowers in new or existing buildings for heating and/or ventilation, and/or air conditioning prior to the completion of the project.)

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$36.77

Supplemental Benefit Rate per Hour: \$43.19

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

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Paid Holidays

None

Shift Rates

Work that can only be performed outside regular working hours (seven hours of work between 7:30 A.M. and 3:30 P.M.) - First shift (work between 3:30 P.M. and 11:30 P.M.) - 10% differential above the established hourly rate.

Second shift (work between 11:30 P.M. and 7:30 A.M.) - 15% differential above the established hourly rate.

For Fan Maintenance: On all full shifts of fan maintenance work the straight time hourly rate of pay will be paid for each shift, including nights, Saturdays, Sundays, and holidays. No journey person engaged in fan maintenance shall work in excess of forty (40) hours in any work week.

(Local #28)

SHEET METAL WORKER - SPECIALTY (Decking & Siding)

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

Sheet Metal Specialty Worker

The first worker to perform this work must be paid at the rate of the Sheet Metal Worker. The second and third workers shall be paid the Specialty Worker Rate. The ratio of One Sheet Metal Worker, then Two Specialty Workers shall be utilized thereafter.

Effective Period: 7/1/2013 - 7/31/2013

Wage Rate per Hour: **\$41.28**

Supplemental Benefit Rate per Hour: **\$22.88**

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

Effective Period: 8/1/2013 - 6/30/2014

Wage Rate per Hour: **\$40.78**

Supplemental Benefit Rate per Hour: **\$23.38**

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)

SIGN ERECTOR
(Sheet Metal, Plastic, Electric, and Neon)

Sign Erector

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$42.80**

Supplemental Benefit Rate per Hour: **\$42.17**

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

Overtime

Time and one half the regular rate after a 7 hour day.
Time and one half the regular rate for Saturday.
Time and one half the regular rate for Sunday.
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: 7/1/2013 – 1/19/2014
Wage Rate per Hour: **\$52.50**
Supplemental Benefit Rate per Hour: **\$50.54**
Supplemental Note: Overtime supplemental benefit rate: \$100.34

Effective Period: 1/20/2014 - 6/30/2014
Wage Rate per Hour: **\$53.25**
Supplemental Benefit Rate per Hour: **\$51.04**
Supplemental Note: Overtime supplemental benefit rate: \$101.34

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

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

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

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: 7/1/2013 – 1/19/2014

Wage Rate per Hour: **\$52.50**

Supplemental Benefit Rate per Hour: **\$50.54**

Supplemental Note: Overtime supplemental benefit rate: **\$100.34**

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$53.25**

Supplemental Benefit Rate per Hour: **\$51.04**

Supplemental Note: Overtime supplemental benefit rate: **\$101.34**

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

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

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

Effective Period: 7/1/2013 - 1/19/2014
Wage Rate per Hour: \$38.05
Supplemental Benefit Rate per Hour: \$12.26

Effective Period: 1/20/2014 – 6/30/2014
Wage Rate per Hour: \$38.30
Supplemental Benefit Rate per Hour: \$12.76

Refrigeration and Air Conditioner Service Person V

Effective Period: 7/1/2013 - 1/19/2014
Wage Rate per Hour: \$31.26
Supplemental Benefit Rate per Hour: \$11.13

Effective Period: 1/20/2014 – 6/30/2014
Wage Rate per Hour: \$31.47
Supplemental Benefit Rate per Hour: \$11.55

Refrigeration and Air Conditioner Service Person IV

Effective Period: 7/1/2013 - 1/19/2014
Wage Rate per Hour: \$25.90
Supplemental Benefit Rate per Hour: \$10.16

Effective Period: 1/20/2014 – 6/30/2014
Wage Rate per Hour: \$26.07
Supplemental Benefit Rate per Hour: \$10.52

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

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: 7/1/2013 - 1/19/2014

Wage Rate per Hour: **\$22.23**

Supplemental Benefit Rate per Hour: **\$9.44**

Effective Period: 1/20/2014 – 6/30/2014

Wage Rate per Hour: **\$22.38**

Supplemental Benefit Rate per Hour: **\$9.76**

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: 7/1/2013 - 1/19/2014

Wage Rate per Hour: **\$18.44**

Supplemental Benefit Rate per Hour: **\$8.78**

Effective Period: 1/20/2014 – 6/30/2014

Wage Rate per Hour: **\$18.56**

Supplemental Benefit Rate per Hour: **\$9.06**

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: 7/1/2013 - 1/19/2014

Wage Rate per Hour: **\$13.48**

Supplemental Benefit Rate per Hour: **\$8.10**

Effective Period: 1/20/2014 – 6/30/2014

Wage Rate per Hour: **\$13.57**

Supplemental Benefit Rate per Hour: **\$8.30**

Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

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

New Year's Day

Independence Day

Labor Day

Veteran's Day

Thanksgiving Day

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

Christmas Day

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

Martin Luther King Jr. Day
President's Day
Memorial Day
Columbus Day

Paid Holidays

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

(Local #638B)

STONE MASON - SETTER

Stone Mason - Setters

Effective Period: 7/1/2013 – 1/19/2014

Wage Rate per Hour: \$47.72

Supplemental Benefit Rate per Hour: \$35.28

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: \$46.56

Supplemental Benefit Rate per Hour: \$36.40

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

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

Paid Holidays

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

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: 7/1/2013 - 12/31/2013

Wage Rate per Hour: **\$44.32**

Supplemental Benefit Rate per Hour: **\$21.66**

Effective Period: 1/1/2014 - 6/24/2014

Wage Rate per Hour: **\$44.82**

Supplemental Benefit Rate per Hour: **\$21.66**

Effective Period: 6/25/2014 - 6/30/2014

Wage Rate per Hour: **\$45.32**

Supplemental Benefit Rate per Hour: **\$21.66**

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.

Shift Rates

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

Time and one half the regular rate outside the regular work hours (8:00 A.M. through 3:30 P.M.)

(Local #1974)

**TELECOMMUNICATION WORKER
(Voice Installation Only)**

Telecommunication Worker

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$35.94**

Supplemental Benefit Rate per Hour: **\$13.19**

Supplemental Note: The above rate applies for Manhattan, Bronx, Brooklyn, Queens. \$12.64 for Staten Island only.

Overtime

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

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Overtime Holidays

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

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

Paid Holidays

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

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

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

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: 7/1/2013 – 1/19/2014
Wage Rate per Hour: **\$38.49**
Supplemental Benefit Rate per Hour: **\$27.40**

Effective Period: 1/20/2014 - 6/30/2014
Wage Rate per Hour: **\$38.80**
Supplemental Benefit Rate per Hour: **\$28.03**

Overtime

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

Overtime Holidays

Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays

None

Shift Rates

Off shift work day (work performed outside the regular 8:00 A.M. to 3:30 P.M. workday): shift differential of one and one quarter (1¼) times the regular straight time rate of pay for the seven hours of actual off-shift work.

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

(Local #7)

TILE LAYER - SETTER

Tile Layer - Setter

Effective Period: 7/1/2013 – 1/19/2014

Wage Rate per Hour: **\$48.35**

Supplemental Benefit Rate per Hour: **\$31.44**

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$49.25**

Supplemental Benefit Rate per Hour: **\$31.82**

Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

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

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Shift Rates

Off shift work day (work performed outside the regular 8:00 A.M. to 3:30 P.M. workday): shift differential of one and one quarter (1¼) times the regular straight time rate of pay for the seven hours of actual off-shift work.

(Local #7)

TIMBERPERSON

Timberperson

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$42.63**

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

Supplemental Benefit Rate per Hour: **\$44.54**

Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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

Time and one half the regular hourly rate after 40 hours in any work week.

Overtime Holidays

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

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

Shift Rates

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

(Local #1536)

TUNNEL WORKER

Blasters, Mucking Machine Operators (Compressed Air Rates)

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$54.20**

Supplemental Benefit Rate per Hour: **\$48.20**

Tunnel Workers (Compressed Air Rates)

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$52.31**

Supplemental Benefit Rate per Hour: **\$46.59**

Top Nipper (Compressed Air Rates)

Effective Period: 7/1/2013 - 6/30/2014

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

Wage Rate per Hour: \$51.35
Supplemental Benefit Rate per Hour: \$45.78

Outside Lock Tender, Outside Gauge Tender, Muck Lock Tender (Compressed Air Rates)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$50.42
Supplemental Benefit Rate per Hour: \$44.91

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

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$50.42
Supplemental Benefit Rate per Hour: \$44.92

Changehouse Attendant: Powder Watchperson (Compressed Air Rates)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$43.94
Supplemental Benefit Rate per Hour: \$42.55

Blasters (Free Air Rates)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$51.72
Supplemental Benefit Rate per Hour: \$46.03

Tunnel Workers (Free Air Rates)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$49.48
Supplemental Benefit Rate per Hour: \$44.06

All Others (Free Air Rates)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$45.73
Supplemental Benefit Rate per Hour: \$40.75

Microtunneling (Free Air Rates)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$39.58
Supplemental Benefit Rate per Hour: \$35.25

Overtime Description

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

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

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.

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

APPRENTICESHIP SCHEDULE OF PREVAILING WAGES AND SUPPLEMENTAL BENEFITS
ADDENDUM
EFFECTIVE PERIOD JANUARY 20, 2014 THROUGH JUNE 30, 2014

List of Amended Classifications

1. ASBESTOS HANDLER
2. BRICKLAYER
3. FLOOR COVERER
4. HOUSE WRECKER
5. IRONWORKER – ORNAMENTAL
6. IRON WORKER - STRUCTURAL
7. MASON TENDER
8. PLASTERER
9. PLUMBER

TABLE OF CONTENTS

<u>CLASSIFICATION</u>	<u>PAGE</u>
ASBESTOS HANDLER.....	4
BOILERMAKER.....	4
BRICKLAYER.....	6
CARPENTER.....	7
CEMENT MASON.....	8
CEMENT AND CONCRETE WORKER.....	8
DERRICKPERSON & RIGGER (STONE).....	9
DOCKBUILDER/PILE DRIVER.....	9
ELECTRICIAN.....	10
ELEVATOR CONSTRUCTOR.....	13
ELEVATOR REPAIR & MAINTENANCE.....	14
ENGINEER.....	15
ENGINEER - OPERATING.....	15
FLOOR COVERER.....	16
GLAZIER.....	17
HEAT & FROST INSULATOR.....	17
HOUSE WRECKER.....	18
IRON WORKER - ORNAMENTAL.....	19
IRON WORKER - STRUCTURAL.....	21
LABORER (FOUNDATION, CONCRETE, EXCAVATING, STREET PIPE LAYER & COMMON).....	22
MARBLE MECHANICS.....	22
MASON TENDER.....	24
METALLIC LATHER.....	25
MILLWRIGHT.....	26
PAVER AND ROADBUILDER.....	26
PAINTER.....	27
PAINTER - STRUCTURAL STEEL.....	28
PLASTERER.....	28
PLUMBER.....	29
POINTER - WATERPROOFER, CAULKER MECHANIC (EXTERIOR BUILDING RENOVATION).....	31
ROOFER.....	31
SHEET METAL WORKER.....	32
SIGN ERECTOR.....	33
STEAMFITTER.....	35
STONE MASON - SETTER.....	35
TAPER.....	36
TILE LAYER - SETTER.....	37
TIMBERPERSON.....	37

ASBESTOS HANDLER

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

Asbestos Handler (First 1000 Hours)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 78% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$15.05
Effective 1/20/2014 – Supplemental Benefits Per Hour: 15.45

Asbestos Handler (Second 1000 Hours)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 80% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$15.05
Effective 1/20/2014 – Supplemental Benefits Per Hour: 15.45

Asbestos Handler (Third 1000 Hours)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 83% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$15.05
Effective 1/20/2014 – Supplemental Benefits Per Hour: 15.45

Asbestos Handler (Fourth 1000 Hours)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 89% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$15.05
Effective 1/20/2014 – Supplemental Benefits Per Hour: 15.45

(Local #78)

BOILERMAKER

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

Boilermaker (First Year)

Effective Period: 7/1/2013 - 12/31/2013
Wage Rate Per Hour: 65% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$28.75

Effective Period: 1/1/2014 - 6/30/2014
Wage Rate Per Hour: 65% of Journeyman's rate

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

Supplemental Benefit Rate Per Hour: \$29.74

Boilermaker (Second Year: 1st Six Months)

Effective Period: 7/1/2013 - 12/31/2013
Wage Rate Per Hour: 70% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$30.33

Effective Period: 1/1/2014 - 6/30/2014
Wage Rate Per Hour: 75% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$31.40

Boilermaker (Second Year: 2nd Six Months)

Effective Period: 7/1/2013 - 12/31/2013
Wage Rate Per Hour: 75% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$31.91

Effective Period: 1/1/2014 - 6/30/2014
Wage Rate Per Hour: 75% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$33.05

Boilermaker (Third Year: 1st Six Months)

Effective Period: 7/1/2013 - 12/31/2013
Wage Rate Per Hour: 80% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$33.49

Effective Period: 1/1/2014 - 6/30/2014
Wage Rate Per Hour: 80% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$34.69

Boilermaker (Third Year: 2nd Six Months)

Effective Period: 7/1/2013 - 12/31/2013
Wage Rate Per Hour: 85% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$35.05

Effective Period: 1/1/2014 - 6/30/2014
Wage Rate Per Hour: 85% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$36.34

Boilermaker (Fourth Year: 1st Six Months)

Effective Period: 7/1/2013 - 12/31/2013
Wage Rate Per Hour: 90% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$36.63

Effective Period: 1/1/2014 - 6/30/2014
Wage Rate Per Hour: 90% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$38.00

Boilermaker (Fourth Year: 2nd Six Months)

Effective Period: 7/1/2013 - 12/31/2013
Wage Rate Per Hour: 95% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$38.19

Effective Period: 1/1/2014 - 6/30/2014
Wage Rate Per Hour: 95% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$39.65

(Local #5)

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

Bricklayer (First 750 Hours)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$16.60
Effective 1/20/2014 – Supplemental Benefits Per Hour: 17.10

Bricklayer (Second 750 Hours)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 60% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$16.60
Effective 1/20/2014 – Supplemental Benefits Per Hour: 17.10

Bricklayer (Third 750 Hours)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$16.60
Effective 1/20/2014 – Supplemental Benefits Per Hour: 17.10

Bricklayer (Fourth 750 Hours)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 80% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$16.60
Effective 1/20/2014 – Supplemental Benefits Per Hour: 17.10

Bricklayer (Fifth 750 Hours)

Effective Period: 7/1/2013 - 6/30/2014

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

Wage Rate Per Hour: 90% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$16.60
Effective 1/20/2014 – Supplemental Benefits Per Hour: 17.10

Bricklayer (Sixth 750 Hours)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 95% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$16.60
Effective 1/20/2014 – Supplemental Benefits Per Hour: 17.10

(Bricklayer District Council)

CARPENTER

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

Carpenter (First Year)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 40% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$30.29

Carpenter (Second Year)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 50% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$30.29

Carpenter (Third Year)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 65% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$30.29

Carpenter (Fourth Year)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 80% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$30.29

(Carpenters District Council)

CEMENT MASON

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

Cement Mason (First Year)

Effective Period: 7/1/2013 - 6/30/2014

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

Cement Mason (Second Year)

Effective Period: 7/1/2013 - 6/30/2014

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

Cement Mason (Third Year)

Effective Period: 7/1/2013 - 6/30/2014

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

(Local #780)

CEMENT AND CONCRETE WORKER

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

Cement & Concrete Worker (0 - 500 hours)

Effective Period: 7/1/2013 - 6/30/2014

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

Supplemental Benefit Rate Per Hour: \$18.04

Cement & Concrete Worker (501 - 1000 hours)

Effective Period: 7/1/2013 - 6/30/2014

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

Supplemental Benefit Rate Per Hour: \$18.87

Cement & Concrete Worker (1001 - 2000 hours)

Effective Period: 7/1/2013 - 6/30/2014

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

Supplemental Benefit Rate Per Hour: \$24.25

Cement & Concrete Worker (2001 - 4000 hours)

Effective Period: 7/1/2013 - 6/30/2014

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

Wage Rate Per Hour: 80% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$25.07

(Cement Concrete Workers District Council)

DERRICKPERSON & RIGGER (STONE)
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 6)

Derrickperson & Rigger (stone) - First Year

Effective Period: 7/1/2013 - 6/30/2014
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: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: 75% of Journeyperson's rate

Derrickperson & Rigger (stone) - Second Year: 2nd Six Months

Effective Period: 7/1/2013 - 6/30/2014
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: 7/1/2013 - 6/30/2014
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: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 40% of Journeyperson's rate

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

Supplemental Benefit Rate Per Hour: \$30.29

Dockbuilder/Pile Driver (Second Year)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 50% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$30.29

Dockbuilder/Pile Driver (Third Year)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 65% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$30.29

Dockbuilder/Pile Driver (Fourth Year)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 80% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$30.29

(Carpenters District Council)

ELECTRICIAN

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

Electrician (First Term: 0-6 Months)

Effective period: 7/1/2013 - 5/13/2014
Wage Rate per Hour: \$12.50
Supplemental Benefit Rate per Hour: \$10.86
Overtime Supplemental Rate per Hour: \$11.68

Effective period: 5/14/2014 - 6/30/2014
Wage Rate per Hour: \$12.50
Supplemental Benefit Rate per Hour: \$11.10
Overtime Supplemental Rate per Hour: \$11.93

Electrician (First Term: 7-12 Months)

Effective period: 7/1/2013 - 5/13/2014
Wage Rate per Hour: \$13.50
Supplemental Benefit Rate per Hour: \$11.37
Overtime Supplemental Rate per Hour: \$12.26

Effective period: 5/14/2014 - 6/30/2014

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

Wage Rate per Hour: \$13.50
Supplemental Benefit Rate per Hour: \$11.62
Overtime Supplemental Rate per Hour: \$12.51

Electrician (Second Term: 0-6 Months)

Effective period: 7/1/2013 - 5/13/2014
Wage Rate per Hour: \$14.50
Supplemental Benefit Rate per Hour: \$11.88
Overtime Supplemental Rate per Hour: \$12.83

Effective period: 5/14/2014 - 6/30/2014
Wage Rate per Hour: \$14.50
Supplemental Benefit Rate per Hour: \$12.13
Overtime Supplemental Rate per Hour: \$13.08

Electrician (Second Term: 7-12 Months)

Effective period: 7/1/2013 - 5/13/2014
Wage Rate per Hour: \$15.50
Supplemental Benefit Rate per Hour: \$12.39
Overtime Supplemental Rate per Hour: \$13.41

Effective period: 5/14/2014 - 6/30/2014
Wage Rate per Hour: \$15.50
Supplemental Benefit Rate per Hour: \$12.64
Overtime Supplemental Rate per Hour: \$13.66

Electrician (Third Term: 0-6 Months)

Effective period: 7/1/2013 - 5/13/2014
Wage Rate per Hour: \$16.50
Supplemental Benefit Rate per Hour: \$12.90
Overtime Supplemental Rate per Hour: \$13.98

Effective period: 5/14/2014 - 6/30/2014
Wage Rate per Hour: \$16.50
Supplemental Benefit Rate per Hour: \$13.15
Overtime Supplemental Rate per Hour: \$14.23

Electrician (Third Term: 7-12 Months)

Effective period: 7/1/2013 - 5/13/2014
Wage Rate per Hour: \$17.50
Supplemental Benefit Rate per Hour: \$13.40
Overtime Supplemental Rate per Hour: \$14.56

Effective period: 5/14/2014 - 6/30/2014
Wage Rate per Hour: \$17.50
Supplemental Benefit Rate per Hour: \$13.65

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

Overtime Supplemental Rate per Hour: \$14.81

Electrician (Fourth Term: 0-6 Months - Hired on or after 5/10/07)

Effective period: 7/1/2013 - 5/13/2014

Wage Rate per Hour: \$18.50

Supplemental Benefit Rate per Hour: \$13.91

Overtime Supplemental Rate per Hour: \$15.13

Effective period: 5/14/2014 - 6/30/2014

Wage Rate per Hour: \$18.50

Supplemental Benefit Rate per Hour: \$14.16

Overtime Supplemental Rate per Hour: \$15.38

Electrician (Fourth Term: 7-12 Months - Hired on or after 5/10/07)

Effective period: 7/1/2013 - 5/13/2014

Wage Rate per Hour: \$20.25

Supplemental Benefit Rate per Hour: \$14.80

Overtime Supplemental Rate per Hour: \$16.14

Effective period: 5/14/2014 - 6/30/2014

Wage Rate per Hour: \$20.50

Supplemental Benefit Rate per Hour: \$15.18

Overtime Supplemental Rate per Hour: \$16.53

Electrician (Fifth Term: 0-12 Months - Hired on or after 5/10/07)

Effective period: 7/1/2013 - 5/13/2014

Wage Rate per Hour: \$22.00

Supplemental Benefit Rate per Hour: \$17.30

Overtime Supplemental Rate per Hour: \$18.68

Effective period: 5/14/2014 - 6/30/2014

Wage Rate per Hour: \$22.50

Supplemental Benefit Rate per Hour: \$18.06

Overtime Supplemental Rate per Hour: \$19.47

Electrician (Fifth Term: 13-18 Months - Hired on or after 5/10/07)

Effective period: 7/1/2013 - 5/13/2014

Wage Rate per Hour: \$26.50

Supplemental Benefit Rate per Hour: \$19.56

Overtime Supplemental Rate per Hour: \$21.23

Effective period: 5/14/2014 - 6/30/2014

Wage Rate per Hour: \$27.00

Supplemental Benefit Rate per Hour: \$20.32

Overtime Supplemental Rate per Hour: \$22.01

Electrician (Fourth Term: 0-6 Months - Hired before 5/10/07)

Effective period: 7/1/2013 - 5/13/2014
Wage Rate per Hour: \$22.10
Supplemental Benefit Rate per Hour: \$15.74
Overtime Supplemental Rate per Hour: \$17.20

Effective period: 5/14/2014 - 6/30/2014
Wage Rate per Hour: \$22.10
Supplemental Benefit Rate per Hour: \$15.99
Overtime Supplemental Rate per Hour: \$17.45

Electrician (Fourth Term: 7-12 Months - Hired before 5/10/07)

Effective period: 7/1/2013 - 5/13/2014
Wage Rate per Hour: \$23.95
Supplemental Benefit Rate per Hour: \$16.69
Overtime Supplemental Rate per Hour: \$18.26

Effective period: 5/14/2014 - 6/30/2014
Wage Rate per Hour: \$24.20
Supplemental Benefit Rate per Hour: \$17.06
Overtime Supplemental Rate per Hour: \$18.66

Electrician (Fifth Term: 0-18 Months - Hired before 5/10/07)

Effective period: 7/1/2013 - 5/13/2014
Wage Rate per Hour: \$25.80
Supplemental Benefit Rate per Hour: \$19.21
Overtime Supplemental Rate per Hour: \$20.83

Effective period: 5/14/2014 - 6/30/2014
Wage Rate per Hour: \$26.30
Supplemental Benefit Rate per Hour: \$19.96
Overtime Supplemental Rate per Hour: \$21.61

Overtime Description

Overtime Wage paid at time and one half the regular rate
For "A" rated Apprentices (work in excess of 7 hours per day)
For "M" rated Apprentices (work in excess of 8 hours per day)

(Local #3)

ELEVATOR CONSTRUCTOR

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

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

Elevator (Constructor) - First Year

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 50% of Journeyman's rate
Supplemental Rate Per Hour: \$26.87

Elevator (Constructor) - Second Year

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 55% of Journeyman's rate
Supplemental Rate Per Hour: \$27.92

Elevator (Constructor) - Third Year

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 65% of Journeyman's rate
Supplemental Rate Per Hour: \$29.38

Elevator (Constructor) - Fourth Year

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 75% of Journeyman's rate
Supplemental Rate Per Hour: \$30.84

(Local #1)

ELEVATOR REPAIR & MAINTENANCE
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 2)

Elevator Service/Modernization Mechanic (First Year)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 50% of Journeyman's rate
Supplemental Benefit Per Hour: \$26.79

Elevator Service/Modernization Mechanic (Second Year)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 55% of Journeyman's rate
Supplemental Benefit Per Hour: \$27.12

Elevator Service/Modernization Mechanic (Third Year)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 65% of Journeyman's rate

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

Supplemental Benefit Per Hour: \$28.43

Elevator Service/Modernization Mechanic (Fourth Year)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Benefit Per Hour: \$29.74

(Local #1)

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

Engineer - First Year

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$22.49
Supplemental Benefit Rate per Hour: \$20.68

Engineer - Second Year

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$28.11
Supplemental Benefit Rate per Hour: \$20.68

Engineer - Third Year

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$20.92
Supplemental Benefit Rate per Hour: \$20.68

Engineer - Fourth Year

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$33.73
Supplemental Benefit Rate per Hour: \$20.68

(Local #15)

ENGINEER - OPERATING
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 5)

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

Operating Engineer - First Year

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour 40% of Journeyperson's Rate
Supplemental Benefit Per Hour: \$18.60

Operating Engineer - Second Year

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 50% of Journeyperson's Rate
Supplemental Benefit Per Hour: \$18.60

Operating Engineer - Third Year

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 60% of Journeyperson's Rate
Supplemental Benefit Per Hour: \$18.60

(Local #14)

FLOOR COVERER

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

Floor Coverer (First Year)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 40% of Journeyperson's rate
Supplemental Rate Per Hour: \$25.75
Effective 1/20/2014 – Supplemental Benefits Per Hour: 29.55

Floor Coverer (Second Year)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Rate Per Hour: \$25.75
Effective 1/20/2014 – Supplemental Benefits Per Hour: 29.55

Floor Coverer (Third Year)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 65% of Journeyperson's rate
Supplemental Rate Per Hour: \$25.75
Effective 1/20/2014 – Supplemental Benefits Per Hour: 29.55

Floor Coverer (Fourth Year)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 80% of Journeyman's rate
Supplemental Rate Per Hour: \$25.75
Effective 1/20/2014 – Supplemental Benefits Per Hour: 29.55

(Carpenters District Council)

GLAZIER
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

Glazier (First Year)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 40% of Journeyman's rate
Supplemental Rate Per Hour: \$11.97

Glazier (Second Year)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 50% of Journeyman's rate
Supplemental Rate Per Hour: \$21.13

Glazier (Third Year)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 60% of Journeyman's rate
Supplemental Rate Per Hour: \$23.54

Glazier (Fourth Year)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 80% of Journeyman's rate
Supplemental Rate Per Hour: \$28.34

(Local #1281)

HEAT & FROST INSULATOR
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

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

Heat & Frost Insulator (First Year)

Effective Period: 7/1/2013 - 6/30/2014
Wage and Supplemental Rate Per Hour: 40% of Journeyperson's rate

Heat & Frost Insulator (Second Year)

Effective Period: 7/1/2013 - 6/30/2014
Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

Heat & Frost Insulator (Third Year)

Effective Period: 7/1/2013 - 6/30/2014
Wage and Supplemental Rate Per Hour: 70% of Journeyperson's rate

Heat & Frost Insulator (Fourth Year)

Effective Period: 7/1/2013 - 6/30/2014
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: 7/1/2013 - 1/19/2014
Wage Rate per Hour: \$20.36
Supplemental Benefit Rate per Hour: \$16.35

Effective Period: 1/20/2014 - 6/30/2014
Wage Rate per Hour: \$20.52
Supplemental Benefit Rate per Hour: \$16.60

House Wrecker - Second Year

Effective Period: 7/1/2013 - 1/19/2014
Wage Rate per Hour: \$21.46
Supplemental Benefit Rate per Hour: \$16.35

Effective Period: 1/20/2014 - 6/30/2014
Wage Rate per Hour: \$21.67

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

Supplemental Benefit Rate per Hour: \$16.60

House Wrecker - Third Year

Effective Period: 7/1/2013 - 1/19/2014

Wage Rate per Hour: \$23.01

Supplemental Benefit Rate per Hour: \$16.35

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: \$23.27

Supplemental Benefit Rate per Hour: \$16.60

House Wrecker - Fourth Year

Effective Period: 7/1/2013 - 1/19/2014

Wage Rate per Hour: \$25.36

Supplemental Benefit Rate per Hour: \$16.35

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: \$25.83

Supplemental Benefit Rate per Hour: \$16.60

(Local #79)

IRON WORKER - ORNAMENTAL

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

Iron Worker (Ornamental) - 1st Four Months - Hired on or Before 8/1/08

Effective Period: 7/1/2013 - 6/30/2014

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

Supplemental Rate Per Hour: \$35.78

Iron Worker (Ornamental) 5 - 10 Months - Hired on or Before 8/1/08

Effective Period: 7/1/2013 - 6/30/2014

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

Supplemental Rate Per Hour: \$36.75

Iron Worker (Ornamental) 11 - 16 Months - Hired on or Before 8/1/08

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate Per Hour: 70% of Journeyman's rate

Supplemental Rate Per Hour: \$37.72

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

Iron Worker (Ornamental) 17 - 22 Months - Hired on or Before 8/1/08

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 80% of Journeyman's rate
Supplemental Rate Per Hour: \$39.66

Iron Worker (Ornamental) 23 - 28 Months - Hired on or Before 8/1/08

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 85% of Journeyman's rate
Supplemental Rate Per Hour: \$40.63

Iron Worker (Ornamental) 29 - 36 Months - Hired on or Before 8/1/08

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 95% of Journeyman's rate
Supplemental Rate Per Hour: \$42.57

Iron Worker (Ornamental) - 1st Ten Months - Hired After 8/1/08

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 50% of Journeyman's rate
Supplemental Rate Per Hour: \$33.84
Effective 1/20/2014 – Supplemental Benefits Per Hour: 34.55

Iron Worker (Ornamental) - 11 - 16 Months - Hired After 8/1/08

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 55% of Journeyman's rate
Supplemental Rate Per Hour: \$34.81
Effective 1/20/2014 – Supplemental Benefits Per Hour: 35.55

Iron Worker (Ornamental) - 17 - 22 Months - Hired After 8/1/08

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 60% of Journeyman's rate
Supplemental Rate Per Hour: \$35.78
Effective 1/20/2014 – Supplemental Benefits Per Hour: 36.55

Iron Worker (Ornamental) - 23 - 28 Months - Hired After 8/1/08

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 70% of Journeyman's rate
Supplemental Rate Per Hour: \$37.72
Effective 1/20/2014 – Supplemental Benefits Per Hour: 38.56

Iron Worker (Ornamental) - 29 - 36 Months - Hired After 8/1/08

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 80% of Journeyman's rate
Supplemental Rate Per Hour: \$39.66

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

Effective 1/20/2014 – Supplemental Benefits Per Hour: 40.56

(Local #580)

IRON WORKER - STRUCTURAL
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 6)

Iron Worker (Structural) - 1st Six Months

Effective Period: 7/1/2013 – 1/19/2014
Wage Rate per Hour: **\$24.48**
Supplemental Benefit Rate per Hour: **\$43.87**

Effective Period: 1/20/2014 - 6/30/2014
Wage Rate per Hour: **\$24.73**
Supplemental Benefit Rate per Hour: **\$45.07**

Iron Worker (Structural) - 7- 18 Months

Effective Period: 7/1/2013 – 1/19/2014
Wage Rate per Hour: **\$25.08**
Supplemental Benefit Rate per Hour: **\$43.87**

Effective Period: 1/20/2014 - 6/30/2014
Wage Rate per Hour: **\$25.33**
Supplemental Benefit Rate per Hour: **\$45.07**

Iron Worker (Structural) - 19 - 36 months

Effective Period: 7/1/2013 – 1/19/2014
Wage Rate per Hour: **\$25.68**
Supplemental Benefit Rate per Hour: **\$43.87**

Effective Period: 1/20/2014 - 6/30/2014
Wage Rate per Hour: **\$25.93**
Supplemental Benefit Rate per Hour: **\$45.07**

(Local #40 and #361)

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

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

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

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 50% of Journeyman's rate
Supplemental Rate Per Hour: \$33.25

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

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 60% of Journeyman's rate
Supplemental Rate Per Hour: \$33.25

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

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 75% of Journeyman's rate
Supplemental Rate Per Hour: \$33.25

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

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 90% of Journeyman's rate
Supplemental Rate Per Hour: \$33.25

(Local #731)

MARBLE MECHANICS

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

Cutters & Setters - First 750 Hours

Effective Period: 7/1/2013 - 6/30/2014
Wage and Supplemental Rate Per Hour: 50% of Journeyman's rate

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

Cutters & Setters - Second 750 Hours

Effective Period: 7/1/2013 - 6/30/2014

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

Cutters & Setters - Third 750 Hours

Effective Period: 7/1/2013 - 6/30/2014

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

Cutters & Setters - Fourth 750 Hours

Effective Period: 7/1/2013 - 6/30/2014

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

Cutters & Setters - Fifth 750 Hours

Effective Period: 7/1/2013 - 6/30/2014

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

Cutters & Setters - Sixth 750 Hours

Effective Period: 7/1/2013 - 6/30/2014

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

Polishers & Finishers - First 750 Hours

Effective Period: 7/1/2013 - 6/30/2014

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: 7/1/2013 - 6/30/2014

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

Polishers & Finishers - Third 750 Hours

Effective Period: 7/1/2013 - 6/30/2014

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

Polishers & Finishers - Fourth 750 Hours

Effective Period: 7/1/2013 - 6/30/2014

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

(Local #7)

MASON TENDER

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

Mason Tender - First Year

Effective Period: 7/1/2013 - 1/19/2014

Wage Rate per Hour: **\$20.63**

Supplemental Benefit Rate per Hour: **\$17.06**

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$20.79**

Supplemental Benefit Rate per Hour: **\$17.58**

Mason Tender - Second Year

Effective Period: 7/1/2013 - 1/19/2014

Wage Rate per Hour: **\$21.73**

Supplemental Benefit Rate per Hour: **\$17.06**

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$21.94**

Supplemental Benefit Rate per Hour: **\$17.58**

Mason Tender - Third Year

Effective Period: 7/1/2013 - 1/19/2014

Wage Rate per Hour: **\$23.33**

Supplemental Benefit Rate per Hour: **\$17.06**

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$23.59**

Supplemental Benefit Rate per Hour: **\$17.58**

Mason Tender - Fourth Year

Effective Period: 7/1/2013 - 1/19/2014

Wage Rate per Hour: **\$25.93**

Supplemental Benefit Rate per Hour: **\$17.06**

Effective Period: 1/20/2014 - 6/30/2014

Wage Rate per Hour: **\$26.25**

Supplemental Benefit Rate per Hour: **\$17.58**

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

(Local #79)

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

Metallic Lather (First Year -Called Prior to 6/29/11)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$28.11
Supplemental Benefit Rate per Hour: \$22.79

Metallic Lather (Second Year - Called Prior to 6/29/11)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$32.71
Supplemental Benefit Rate per Hour: \$24.44

Metallic Lather (Third Year - Called Prior to 6/29/11)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$37.77
Supplemental Benefit Rate per Hour: \$25.59

Metallic Lather (First Year -Called On Or After 6/29/11)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$17.71
Supplemental Benefit Rate per Hour: \$19.85

Metallic Lather (Second Year - Called On Or After 6/29/11)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$22.81
Supplemental Benefit Rate per Hour: \$19.85

Metallic Lather (Third Year - Called On Or After 6/29/11)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$27.91
Supplemental Benefit Rate per Hour: \$19.85

(Local #46)

MILLWRIGHT

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

Millwright (First Year)

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$26.23

Supplemental Benefit Rate per Hour: \$31.51

Millwright (Second Year)

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$31.00

Supplemental Benefit Rate per Hour: \$34.77

Millwright (Third Year)

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$35.77

Supplemental Benefit Rate per Hour: \$39.19

Millwright (Fourth Year)

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$45.30

Supplemental Benefit Rate per Hour: \$44.63

(Local #740)

PAVER AND ROADBUILDER

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

Paver and Roadbuilder - First Year (Minimum 1000 hours)

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$26.19

Supplemental Benefit Rate per Hour: \$16.20

Paver and Roadbuilder - Second Year (Minimum 1000 hours)

Effective Period: 7/1/2013 - 6/30/2014

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

Wage Rate per Hour: \$27.77
Supplemental Benefit Rate per Hour: \$16.20

(Local #1010)

PAINTER
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

Painter - Brush & Roller - First Year

Effective Period: 7/1/2013 - 4/30/2014
Wage Rate per Hour: \$15.00
Supplemental Benefit Rate per Hour: \$11.38

Effective Period: 5/1/2014 - 6/30/2014
Wage Rate per Hour: \$15.80
Supplemental Benefit Rate per Hour: \$11.88

Painter - Brush & Roller - Second Year

Effective Period: 7/1/2013 - 4/30/2014
Wage Rate per Hour: \$18.75
Supplemental Benefit Rate per Hour: \$15.23

Effective Period: 5/1/2014 - 6/30/2014
Wage Rate per Hour: \$19.75
Supplemental Benefit Rate per Hour: \$15.73

Painter - Brush & Roller - Third Year

Effective Period: 7/1/2013 - 4/30/2014
Wage Rate per Hour: \$22.50
Supplemental Benefit Rate per Hour: \$18.14

Effective Period: 5/1/2014 - 6/30/2014
Wage Rate per Hour: \$23.70
Supplemental Benefit Rate per Hour: \$18.64

Painter - Brush & Roller - Fourth Year

Effective Period: 7/1/2013 - 4/30/2014
Wage Rate per Hour: \$30.00
Supplemental Benefit Rate per Hour: \$23.52

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

Effective Period: 5/1/2014 - 6/30/2014
Wage Rate per Hour: \$31.60
Supplemental Benefit Rate per Hour: \$24.02

(District Council of Painters)

PAINTER - STRUCTURAL STEEL
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

Painters - Structural Steel (First Year)

Effective Period: 7/1/2013 - 6/30/2014
Wage and Supplemental Rate Per Hour: 40% of Journeyman's rate

Painters - Structural Steel (Second Year)

Effective Period: 7/1/2013 - 6/30/2014
Wage and Supplemental Rate Per Hour: 60% of Journeyman's rate

Painters - Structural Steel (Third Year)

Effective Period: 7/1/2013 - 6/30/2014
Wage and Supplemental Rate Per Hour: 80% of Journeyman's rate

(Local #806)

PLASTERER
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

Plasterer - First Year: 1st Six Months

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 40% of Journeyman's rate
Supplemental Rate Per Hour: \$12.76
Effective 1/20/2014 – Supplemental Benefits Per Hour: 15.76

Plasterer - First Year: 2nd Six Months

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 45% of Journeyman's rate
Supplemental Rate Per Hour: \$13.24

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

Effective 1/20/2014 – Supplemental Benefits Per Hour: 16.24

Plasterer - Second Year: 1st Six Months

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 55% of Journeyman's rate
Supplemental Rate Per Hour: \$15.21
Effective 1/20/2014 – Supplemental Benefits Per Hour: 18.21

Plasterer - Second Year: 2nd Six Months

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 60% of Journeyman's rate
Supplemental Rate Per Hour: \$16.29
Effective 1/20/2014 – Supplemental Benefits Per Hour: 19.29

Plasterer - Third Year: 1st Six Months

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 70% of Journeyman's rate
Supplemental Rate Per Hour: \$18.46
Effective 1/20/2014 – Supplemental Benefits Per Hour: 21.46

Plasterer - Third Year: 2nd Six Months

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 75% of Journeyman's rate
Supplemental Rate Per Hour: \$19.54
Effective 1/20/2014 – Supplemental Benefits Per Hour: 22.54

(Local #530)

PLUMBER

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

Plumber - First Year: 1st Six Months

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$14.00
Supplemental Benefit Rate per Hour: \$0.71

Plumber - First Year: 2nd Six Months

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$14.00
Supplemental Benefit Rate per Hour: \$2.96

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Plumber - Second Year

Effective Period: 7/1/2013 - 1/19/2014
Wage Rate per Hour: **\$18.26**
Supplemental Benefit Rate per Hour: **\$16.32**

Effective Period: 1/20/2014 - 6/30/2014
Wage Rate per Hour: **\$23.67**
Supplemental Benefit Rate per Hour: **\$11.16**

Plumber - Third Year

Effective Period: 7/1/2013 - 1/19/2014
Wage Rate per Hour: **\$20.36**
Supplemental Benefit Rate per Hour: **\$16.32**

Effective Period: 1/20/2014 - 6/30/2014
Wage Rate per Hour: **\$25.77**
Supplemental Benefit Rate per Hour: **\$11.16**

Plumber - Fourth Year

Effective Period: 7/1/2013 - 1/19/2014
Wage Rate per Hour: **\$23.21**
Supplemental Benefit Rate per Hour: **\$16.32**

Effective Period: 1/20/2014 - 6/30/2014
Wage Rate per Hour: **\$28.62**
Supplemental Benefit Rate per Hour: **\$11.16**

Plumber - Fifth Year: 1st Six Months

Effective Period: 7/1/2013 - 1/19/2014
Wage Rate per Hour: **\$24.61**
Supplemental Benefit Rate per Hour: **\$16.32**

Effective Period: 1/20/2014 - 6/30/2014
Wage Rate per Hour: **\$30.02**
Supplemental Benefit Rate per Hour: **\$11.16**

Plumber - Fifth Year: 2nd Six Months

Effective Period: 7/1/2013 - 1/19/2014
Wage Rate per Hour: **\$36.68**
Supplemental Benefit Rate per Hour: **\$16.32**

Effective Period: 1/20/2014 - 6/30/2014

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Wage Rate per Hour: \$42.09
Supplemental Benefit Rate per Hour: \$11.16

(Plumbers Local #1)

POINTER - WATERPROOFER, CAULKER MECHANIC (EXTERIOR BUILDING RENOVATION)

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

Pointer - Waterproofer, Caulker Mechanic - First Year

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$25.00
Supplemental Benefit Rate per Hour: \$3.64

Pointer - Waterproofer, Caulker Mechanic - Second Year

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$27.25
Supplemental Benefit Rate per Hour: \$8.59

Pointer - Waterproofer, Caulker Mechanic - Third Year

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$32.23
Supplemental Benefit Rate per Hour: \$11.34

Pointer - Waterproofer, Caulker Mechanic - Fourth Year

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$38.66
Supplemental Benefit Rate per Hour: \$11.34

(Bricklayer District Council)

ROOFER

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 2)

Roofer - First Year

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2013 - 6/30/2014

Wage and Supplemental Rate Per Hour: 35% of Journeyman's Rate

Roofer - Second Year

Effective Period: 7/1/2013 - 6/30/2014

Wage and Supplemental Rate Per Hour: 50% of Journeyman's Rate

Roofer - Third Year

Effective Period: 7/1/2013 - 6/30/2014

Wage and Supplemental Rate Per Hour: 60% of Journeyman's Rate

Roofer - Fourth Year

Effective Period: 7/1/2013 - 6/30/2014

Wage and Supplemental Rate Per Hour: 75% of Journeyman's Rate

(Local #8)

SHEET METAL WORKER

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

Sheet Metal Worker - First Year

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate Per Hour: 30% of Journeyman's rate

Supplemental Rate Per Hour: \$15.37

Sheet Metal Worker - Second Year

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate Per Hour: 35% of Journeyman's rate

Supplemental Rate Per Hour: \$18.24

Sheet Metal Worker - Third Year (1st Six Months)

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate Per Hour: 40% of Journeyman's rate

Supplemental Rate Per Hour: \$20.06

Sheet Metal Worker - Third Year (2nd Six Months)

Effective Period: 7/1/2013 - 6/30/2014

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Wage Rate Per Hour: 45% of Journeyperson's rate
Supplemental Rate Per Hour: \$21.87

Sheet Metal Worker - Fourth Year (1st Six Months)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Rate Per Hour: \$23.69

Sheet Metal Worker - Fourth Year (2nd Six Months)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 55% of Journeyperson's rate
Supplemental Rate Per Hour: \$25.33

Sheet Metal Worker - Fifth Year (1st Six Months)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 60% of Journeyperson's rate
Supplemental Rate Per Hour: \$27.47

Sheet Metal Worker - Fifth Year(2nd Six Months)

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Rate Per Hour: \$31.23

(Local #28)

SIGN ERECTOR

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Sign Erector - First Year: 1st Six Months

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 35% of Journeyperson's rate
Supplemental Rate Per Hour: \$5.96

Sign Erector - First Year: 2nd Six Months

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 40% of Journeyperson's rate
Supplemental Rate Per Hour: \$6.75

Sign Erector - Second Year: 1st Six Months

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
\$220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 45% of Journeyperson's rate
Supplemental Rate Per Hour: \$7.55

Sign Erector - Second Year: 2nd Six Months

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Rate Per Hour: \$8.34

Sign Erector - Third Year: 1st Six Months

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 55% of Journeyperson's rate
Supplemental Rate Per Hour: \$9.13

Sign Erector - Third Year: 2nd Six Months

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 60% of Journeyperson's rate
Supplemental Rate Per Hour: \$9.92

Sign Erector - Fourth Year: 1st Six Months

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 65% of Journeyperson's rate
Supplemental Rate Per Hour: \$10.72

Sign Erector - Fourth Year: 2nd Six Months

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Rate Per Hour: \$11.51

Sign Erector - Fifth Year

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Rate Per Hour: \$12.30

Sign Erector - Sixth Year

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 80% of Journeyperson's rate
Supplemental Rate Per Hour: \$12.30

(Local #137)

STEAMFITTER

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

Steamfitter - First Year

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate and Supplemental Per Hour: 40% of Journeyman's rate

Steamfitter - Second Year

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate and Supplemental Rate Per Hour: 50% of Journeyman's rate.

Steamfitter - Third Year

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate and Supplemental Rate per Hour: 65% of Journeyman's rate.

Steamfitter - Fourth Year

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate and Supplemental Rate Per Hour: 80% of Journeyman's rate.

Steamfitter - Fifth Year

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate and Supplemental Rate Per Hour: 85% of Journeyman's rate.

(Local #638)

STONE MASON - SETTER

(Ratio Apprentice of Journeyman: 1 to 1, 1 to 2)

Stone Mason - Setters - First 750 Hours

Effective Period: 7/1/2013 - 6/30/2014

Wage and Supplemental Rate Per Hour: 50% of Journeyman's rate

Stone Mason - Setters - Second 750 Hours

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate Per Hour: 60% of Journeyman's rate

Supplemental Rate Per Hour: 50% of Journeyman's rate

Stone Mason - Setters - Third 750 Hours

Effective Period: 7/1/2013 - 6/30/2014
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: 7/1/2013 - 6/30/2014
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: 7/1/2013 - 6/30/2014
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: 7/1/2013 - 6/30/2014
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: 7/1/2013 - 6/30/2014
Wage and Supplemental Rate Per Hour: 40% of Journeyperson's rate

Drywall Taper - Second Year

Effective Period: 7/1/2013 - 6/30/2014
Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

Drywall Taper - Third Year

Effective Period: 7/1/2013 - 6/30/2014
Wage and Supplemental Rate Per Hour: 80% of Journeyperson's rate

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

(Local #1974)

TILE LAYER - SETTER
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

Tile Layer - Setter - First 750 Hours

Effective Period: 7/1/2013 - 6/30/2014
Wage and Supplemental Rate Per Hour: 50% of Journeyman's rate

Tile Layer - Setter - Second 750 Hours

Effective Period: 7/1/2013 - 6/30/2014
Wage and Supplemental Rate Per Hour: 55% of Journeyman's rate

Tile Layer - Setter - Third 750 Hours

Effective Period: 7/1/2013 - 6/30/2014
Wage and Supplemental Rate Per Hour: 65% of Journeyman's rate

Tile Layer - Setter - Fourth 750 Hours

Effective Period: 7/1/2013 - 6/30/2014
Wage and Supplemental Rate Per Hour: 75% of Journeyman's rate

Tile Layer - Setter - Fifth 750 Hours

Effective Period: 7/1/2013 - 6/30/2014
Wage and Supplemental Rate Per Hour: 85% of Journeyman's rate

Tile Layer - Setter - Sixth 750 Hours

Effective Period: 7/1/2013 - 6/30/2014
Wage and Supplemental Rate Per Hour: 95% of Journeyman's rate

(Local #7)

TIMBERPERSON
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 6)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Timberperson - First Year

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 40% of Journeyperson's rate
Supplemental Rate Per Hour: \$30.04

Timberperson - Second Year

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Rate Per Hour: \$30.04

Timberperson - Third Year

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 65% of Journeyperson's rate
Supplemental Rate Per Hour: \$30.04

Timberperson - Fourth Year

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate Per Hour: 80% of Journeyperson's rate
Supplemental Rate Per Hour: \$30.04

(Local #1536)

NYC ADMINISTRATIVE CODE § 6-109 SCHEDULE OF "LIVING WAGES"

Contractors who provide the following services to the City of New York must post a copy of this Living Wage Schedule at their work site(s) as required by New York City Administrative Code § 6-109:

- Building Services,
- Day Care Services,
- Food Services,
- Head Start Services,
- Homecare Services,
- Services to Persons with Cerebral Palsy, and
- Temporary Services.

In accordance with NYC Administrative Code § 6-109, the Comptroller of the City of New York promulgated this schedule of living wages for the above services on contracts for non-emergency work in excess of the small purchase limit set by the Procurement Policy Board; contracting agencies must annex this schedule to such contracts.

A city service contractor or subcontractor that provides homecare services, day care services, head start services or services to persons with cerebral palsy must pay its covered employees that directly render such services in performance of the city service contract or subcontract no less than the living wage and must provide its employees health benefits (supplemental benefits) or must supplement their hourly wage rate by an amount no less than the health benefits supplement rate. This requirement applies for each hour that the employee works performing the city service contract or subcontract.

A city service contractor or subcontractor that provides building services, food services or temporary services must pay its employees that are engaged in performing the city service contract or subcontract no less than the living wage or the prevailing wage, whichever is greater. Where the living wage is greater than the prevailing wage, the city service contractor or subcontractor must either provide its employees health benefits or must supplement their hourly wage rate by an amount no less than the health benefits supplement rate. Where the prevailing wage is greater than the living wage, the city service contractor or subcontractor must provide its employees the prevailing wage and supplements. These requirements apply for each hour that the employee works performing the city service contract or subcontract.

The appropriate schedule of living wages must be posted at all work sites pursuant to NYC Administrative Code 6-109.

The schedule is applicable for work performed during the effective period, unless otherwise noted. You will be notified of any changes to this schedule by addenda published on our web site www.comptroller.nyc.gov. Schedules for future one-year periods will be published annually in the City Record on or about July 1st of each succeeding year and on our web site www.comptroller.nyc.gov.

The living wage rate and the health benefit supplement rate are known through June 30 of each year and those rates are listed in this schedule.

The living wage rates listed in this schedule may not include all hourly wage calculations for overtime, shift differential, Holiday, Saturday, Sunday or other premium time work. Similarly, this schedule does not set forth every living wage practice with which employers must comply.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§6-109 PREVAILING WAGE SCHEDULE

Some of the rates in this schedule are based on collective bargaining agreements. These agreements are available for inspection by appointment. Requests for appointments may be made by calling (212) 669-4443, Monday through Friday between the hours of 9 a.m. and 5 p.m.

Answers to questions concerning prevailing wage practices may be obtained from the Classification Unit by calling (212) 669-7974. Please direct all other compliance issues to; Bureau of Labor Law, Attn: Wasyl Kinach, P.E., Office of the Comptroller, 1 Centre Street, Room 1122, New York, N.Y. 10007; Fax (212) 669-4002.

Contractors are solely responsible for maintaining original payroll records, which delineate, among other things, the hours each employee worked within a given classification. Contractors using rates and/or classifications not promulgated by the Comptroller do so at their own risk. Additionally, prior to bid, an agency's chief contracting officer must contact the Bureau of Labor Law to obtain a wage determination for a work classification not published in this schedule.

The information listed below is intended to assist you in meeting your living wage and prevailing wage obligation. Contractors are advised to review the Comptroller's Living Wage Schedule prior to submitting a bid for City work. Any wage rate error made by the contracting agency in the contract documents will not preclude a finding against the contractor for an underpayment of the applicable living wage or the applicable prevailing wage.

This schedule sets forth the living wage and benefit rates required to be annexed to and form part of the contract specifications for work covered by New York City Administrative Code § 6-109. Contractors performing such work are required to pay not less than the rates specified in this schedule for the applicable trade or occupation.

Benefits are paid for **EACH HOUR WORKED** unless otherwise noted.

Wasyl Kinach, P.E.
Director of Classifications
Bureau of Labor Law

TABLE OF CONTENTS

<u>CLASSIFICATION</u>	<u>PAGE</u>
BUILDING CLEANER AND MAINTAINER (OFFICE).....	4
BUILDING CLEANER AND MAINTAINER (RESIDENTIAL).....	4
CLEANER (PARKING GARAGE).....	4
DAY CARE SERVICES.....	4
FOOD SERVICE EMPLOYEES.....	4
GARDENER.....	5
HEAD START SERVICES.....	5
HOMECARE SERVICES.....	6
SECURITY GUARD (ARMED).....	6
SECURITY GUARD (UNARMED).....	6
SERVICES TO PERSONS WITH CEREBRAL PALSY.....	6
TEMPORARY OFFICE SERVICES.....	7
WINDOW CLEANER.....	8

BUILDING CLEANER AND MAINTAINER (OFFICE)

For the above building service classification, see the Labor Law Section 230 Schedule.

BUILDING CLEANER AND MAINTAINER (RESIDENTIAL)

For the above building service classification, see the Labor Law Section 230 Schedule.

CLEANER (PARKING GARAGE)

For the above building service classification, see the Labor Law Section 230 Schedule.

DAY CARE SERVICES

Day Care Services

'Day Care Services' means provision of day care services through the city's center-based day care program administered under contract with the city's Administration for Children's Services. No other day care programs shall be covered, including family-based day care programs administered by city-contracted day care centers.

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$10.00

Supplemental Benefit Rate per Hour: \$1.50

(NYC Administrative Code §6-109)

FOOD SERVICE EMPLOYEES

Cook

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$15.62

Supplemental Benefit Rate per Hour: \$1.72

Cafeteria Attendant

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§6-109 PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$10.48**

Supplemental Benefit Rate per Hour: **\$1.72**

Counter Attendant

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$9.95**

Supplemental Benefit Rate per Hour: **\$1.72**

Kitchen Helper / Dishwasher

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$9.60**

Supplemental Benefit Rate per Hour: **\$1.72**

Overtime

Time and one half the regular hourly rate after 40 hours in any work week.

(Based on data from NYS Department of Labor Occupational Employment Statistics and US Department of Labor Bureau of Labor Statistics)

GARDENER

For the above building service classification, see the Labor Law Section 230 Schedule.

HEAD START SERVICES

Head Start Services

'Head Start Services' means provision of head start services through the city's center-based head start program administered under contract with the city's Administration for Children's Services. No other head start programs shall be covered.

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$10.00**

Supplemental Benefit Rate per Hour: **\$1.50**

(NYC Administrative Code §6-109)

HEMOCARE SERVICES

Home Care Services

'Homecare Services' means the provision of homecare services under the city's Medicaid Personal Care/Home Attendant or Housekeeping Programs, including but not limited to the In-Home Services for the Elderly Programs administered by the Department for the Aging.

For homecare services provided under the Personal Care Services program, the wage and supplemental benefit rate above shall apply only as long as the state and federal government maintain their combined aggregate proportionate share of funding and approved rates for homecare services in effect as of the date of the enactment of this section.

For contractors or subcontractors providing homecare services, the supplemental benefit rate may be waived by the terms of a bona fide collective bargaining agreement with respect to employees who have never worked a minimum of eighty (80) hours per month for two consecutive months for that covered employer, but such provision may not be waived for any employee once a minimum of eighty (80) hours for two consecutive months has been achieved.

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$10.00

Supplemental Benefit Rate per Hour: \$1.50

(NYC Administrative Code §6-109)

SECURITY GUARD (ARMED)

For the above building service classification, see the Labor Law Section 230 Schedule.

SECURITY GUARD (UNARMED)

For the above building service classification, see the Labor Law Section 230 Schedule.

SERVICES TO PERSONS WITH CEREBRAL PALSY

Services To Person With Cerebral Palsy

'Services to Persons with Cerebral Palsy' means provision of services which enable persons with cerebral palsy and related disabilities to lead independent and productive lives through an agency that provides health care, education, employment, housing and technology resources to such persons under contract with the city or the department of education.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§6-109 PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$10.00

Supplemental Benefit Rate per Hour: \$1.50

(NYC Administrative Code §6-109)

TEMPORARY OFFICE SERVICES

Administrative Assistant

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$32.83

Supplemental Benefit Rate per Hour: None

Cashier

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$11.50

Supplemental Benefit Rate per Hour: None

Clerk (various)

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$14.86

Supplemental Benefit Rate per Hour: None

Computer Assistant

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$21.23

Supplemental Benefit Rate per Hour: None

Data Entry Operator

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$16.21

Supplemental Benefit Rate per Hour: None

Receptionist

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$14.88

Supplemental Benefit Rate per Hour: None

Secretary (various)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§6-109 PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$18.66
Supplemental Benefit Rate per Hour: None

Word Processor

Effective Period: 7/1/2013 - 6/30/2014
Wage Rate per Hour: \$20.02
Supplemental Benefit Rate per Hour: None

Overtime

Time and one half the regular hourly rate after 40 hours in any work week.

(Based on data from NYS Department of Labor Occupational Employment Statistics and US Department of Labor Bureau of Labor Statistics or NYC Administrative Code §6-109)

WINDOW CLEANER

For the above building service classification, see the Labor Law Section 230 Schedule.



THE CITY OF NEW YORK
 OFFICE OF THE COMPTROLLER
 1 CENTRE STREET ROOM 1120
 NEW YORK, N.Y. 10007-2341

TELEPHONE: (212) 669-3621
 FAX NUMBER: (212) 669-8491

Leonard A. Mancusi
 SENIOR ASSISTANT COMPTROLLER

ALAN G. HEVESI
 COMPTROLLER

MEMORANDUM

November 6, 2000

To Agency Chief Contracting Officers

From: Leonard A. Mancusi 

Re: Security at Construction Sites

.....

Prior to the enactment of Administrative Code §6-109, security guards on construction sites were not subject to prevailing wages. Security guards under the New York State labor law are covered under §230 which provides that prevailing wages are to be paid for security guards in existing buildings. §6-109 of the Administrative Code which was enacted in 1996 closed this loophole by including all security guards working pursuant to a city contract as a prevailing wage trade.

Although some construction contract boilerplate language has been amended to include §6-109, sub-contractors performing security services have advised us that they were not aware of this provision and, since traditionally, security guards were not a covered trade on construction sites, and they were not advised by a prime contractor that they would have to pay prevailing wages, they have not been doing so.

To avoid the possibility of issuing stop payments against prime contractors for the failure of their security service sub-contractors to pay

prevailing wages, we suggest that you write to all your existing security guard sub-contractors and their primes and in the future, upon approval of a security guard sub-contractor, advise the contractors of their obligation to pay prevailing wages under §6-109 of the Administrative Code.

As always, your cooperation is appreciated.

-LAM:er
ACCO.SECURITY AT SITES





NEW YORK CITY DEPARTMENT OF
DESIGN + CONSTRUCTION

**INFRASTRUCTURE DIVISION
BUREAU OF DESIGN**

VOLUME 2 OF 3

PROJECT ID: HWQ411B

RECONSTRUCTION OF ALBERT ROAD AREA

INCLUDING SEWER, WATERMAIN, STREET LIGHTING,
AND TRAFFIC SIGNAL WORK

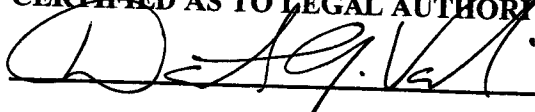
Together With All Work Incidental Thereto

BOROUGH OF QUEENS
CITY OF NEW YORK

Maspeth Supply Co., LLC
85014B0047001 - 850201DHWOOD8C Contractor

Dated June 12, 2014

APPROVED AS TO FORM
CERTIFIED AS TO LEGAL AUTHORITY



Acting Corporation Counsel

 2/20/14

Dated February 20, 2014



**THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE**

30-30 THOMSON AVENUE
LONG ISLAND CITY, NEW YORK 11101-3045
TELEPHONE (718) 391-1000
WEBSITE www.nyc.gov/buildnyc

LAW

VOLUME 3 OF 3

**SCHEDULE A
ADDENDA NOS. 1 TO 6**

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED FOR:

PROJECT ID: HWQ411B

RECONSTRUCTION OF ALBERT ROAD AREA

**INCLUDING SEWER, WATERMAIN, STREET LIGHTING,
AND TRAFFIC SIGNAL WORK**

Together With All Work Incidental Thereto

**BOROUGH OF QUEENS
CITY OF NEW YORK**



FOR THE DEPARTMENT OF TRANSPORTATION
PREPARED BY
IN-HOUSE

FEBRUARY 19, 2014

4-052



SPECIFICATIONS AND STANDARDS OF NEW YORK CITY

The following NYC Department of Transportation reference documents are available on-line at:

http://www.nyc.gov/html/ddc/html/pubs/pubs_infrastdts.shtml 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. New York City Standard Highway Specifications, November 1, 2010
2. New York City Standard Highway Details of Construction, July 1, 2010
3. New York City Division of Street Lighting Specifications
4. New York City Division of Street Lighting Standard Drawings
5. New York City Standard Specifications for Traffic Signals
6. New York City Standard Drawings for Traffic Signals

The following reference documents for Sewer Work are available on-line at:

http://www.nyc.gov/html/ddc/html/pubs/pubs_infrastdts.shtml or for pick up between 8:00 A.M. and 4:00 P.M. at 30-30 Thomson Avenue, 3rd Floor, Division of Infrastructure, Long Island City, N.Y. 11101.

Contact: Mr. William Patalano, Tel. (718) 391-2054

1. New York City DEP Standard Sewer Specifications, August 1, 2009
2. New York City DEP Instructions for Concrete Specifications, Jan. 92
3. New York City DEP General Specification 11-Concrete, November 1991
4. New York City DEP Sewer Design Standards, (September 2007) Revised January 2009

The following reference documents for Water Mains Work are available on-line at: http://www.nyc.gov/html/ddc/html/pubs/pubs_infrastdts.shtml or for pick up between 8:00 A.M. and 4:00 P.M. at 30-30 Thomson Avenue, 3rd Floor, Division of Infrastructure, Long Island City, N.Y. 11101.

Contact: Mr. Robert Kuhlmann, Tel. (718) 391-2145

1. New York City Department of Environmental Protection, Standard Water Main Specifications, dated August 1, 2009
2. New York City Department of Environmental Protection Water Main Standard Drawings
3. Specifications for Trunk Main Work, dated March 2012
4. Standards for Green Infrastructure, latest version, available only on-line at: http://www.nyc.gov/html/dep/pdf/green_infrastructure/bioswales-standard-designs.pdf

The water main work material specifications are available at the Department of Environmental Protection, 59-17 Junction Boulevard, 3rd Floor Low-Rise Building, Flushing, N.Y. 11373-5108.

Contact: Mr. Tarlock Sahansra, P.E., Tel. (718) 595-5302

E-mail: TSAHANSRA@DEP.NYC.GOV

Standard Specifications and Drawings for Fire Department Communications facilities of New York City are available at 87 Union Street, Engineering Office, Brooklyn, N.Y. 11231-1416.

Contact: Mr. Ed Durkin, Tel. (718) 624-3752

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

(NO TEXT ON THIS PAGE)

SCHEDULE A

**(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT
(INCLUDING GENERAL CONDITIONS RELATED TO ARTICLE 22 – INSURANCE)**

PART I. REQUIRED INFORMATION

<p><u>INFORMATION FOR BIDDERS SECTION 26 BID SECURITY</u></p> <p>The Contractor shall obtain a bid security in the amount indicated to the right.</p>	<p>See Attachment 1 (page A-1 of the Bid Booklet).</p>
<p><u>INFORMATION FOR BIDDERS SECTION 26 PERFORMANCE AND PAYMENT BONDS</u></p> <p>The Contractor shall obtain performance and payment bonds in the amount indicated to the right.</p>	<p>See Attachment 1 (page A-1 of the Bid Booklet).</p>
<p><u>CONTRACT ARTICLE 14. DATE FOR SUBSTANTIAL COMPLETION</u></p> <p>The Contractor shall substantially complete the Work in the number of calendar days indicated to the right.</p>	<p>See Page SA-4</p>
<p><u>CONTRACT ARTICLE 15. LIQUIDATED DAMAGES</u></p> <p>If the Contractor fails to substantially complete the Work within the time fixed for substantial completion plus authorized time extensions or if the Contractor, in the sole determination of the Commissioner, has abandoned the Work, the Contractor shall pay to the City the amount indicated to the right.</p>	<p>\$ <u>1500</u> for each consecutive calendar day over substantial completion time</p>
<p><u>CONTRACT ARTICLE 17. SUB-CONTRACTOR</u></p> <p>The Contractor shall not make subcontracts totaling an amount more than the percentage of the total Contract price indicated to the right.</p>	<p>Not to exceed <u>50</u> % of the Contract price</p>
<p><u>CONTRACT ARTICLE 21. RETAINAGE</u></p> <p>The Commissioner shall deduct and retain until the substantial completion of the Work the percent value of the Work indicated to the right.</p>	<p><u>5</u> % of the value of the Work</p>

<p align="center"><u>CONTRACT ARTICLE 22.</u></p> <p align="center"><u>(Per Directions Below)</u></p>	See pages SA-5 through SA-11
<p align="center"><u>CONTRACT ARTICLE 24.</u> <u>DEPOSIT GUARANTEE</u></p> <p>As security for the faithful performance of its obligations, the Contractor, upon filing its requisition for payment on Substantial Completion, shall deposit with the Commissioner a sum equal to the percentage of the Contract price indicated to the right.</p>	1% of Contract price
<p align="center"><u>CONTRACT ARTICLE 24.</u> <u>PERIOD OF GUARANTEE</u></p> <p>Periods of maintenance and guarantee other than the period set forth in Article 24.1 are indicated to the right.</p>	Eighteen (18) Months, excluding Trees Twenty-four (24) Months for Tree Planting
<p align="center"><u>CONTRACT ARTICLE 74.</u> <u>STATEMENT OF WORK</u></p> <p>The Contractor shall furnish all labor and materials and perform all Work in strict accordance with the Contract Drawings, Specifications, and all Addenda thereto.</p>	See Contract Article 74
<p align="center"><u>CONTRACT ARTICLE 75.</u> <u>COMPENSATION TO BE PAID TO CONTRACTOR</u></p> <p>The City shall pay and the Contractor shall accept in full consideration for the performance of the Contract, subject to additions and deductions as provided in Contract Article 75, this said sum being the amount at which the Contract was awarded to the Contractor at a public letting thereof, based upon the Contractor's bid for the Contract.</p>	See Contract Article 75
<p align="center"><u>CONTRACT ARTICLE 78.</u> <u>PARTICIPATION BY MINORITY-OWNED AND</u> <u>WOMEN-OWNED BUSINESS ENTERPRISES IN CITY</u> <u>PROCUREMENT</u></p>	See M/WBE Utilization Plan in the Bid Booklet

<p style="text-align: center;"><u>STANDARD HIGHWAY SPECIFICATIONS</u> <u>SECTION 6.40</u> <u>LIQUIDATED DAMAGES FOR</u> <u>ENGINEER'S FIELD OFFICE</u></p> <p>If the Contractor fails to satisfactorily provide the field office and all equipment specified in Section 6.40 - Engineer's Field Office, and/or if a cited deficiency exceed seventy two (72) hours after notice from the Engineer in writing, or is permitted to recur, liquidated damages will be assessed in the amount specified herein for each subsequent calendar day or part thereof that a cited deficiency resulting in nonpayment, as described in Section 6.40.5, is not corrected.</p>	<p>\$ <u>250.00</u> for each calendar day of deficiency</p>
<p style="text-align: center;"><u>STANDARD HIGHWAY SPECIFICATIONS</u> <u>SECTION 6.70</u> <u>LIQUIDATED DAMAGES FOR</u> <u>MAINTENANCE AND PROTECTION OF TRAFFIC</u></p>	<p>\$ <u>250.00</u> for each instance of failure to comply with the Maintenance and Protection of Traffic requirements within three (3) hours after written notice from the Engineer</p> <p>\$ <u>500.00</u> for each and every hour of failing to open the entire width of roadway to traffic the morning following a night/weekend work operation</p>
<p style="text-align: center;"><u>STANDARD HIGHWAY SPECIFICATIONS</u> <u>SECTION 7.13</u> <u>LIQUIDATED DAMAGES FOR</u> <u>MAINTENANCE OF SITE</u></p> <p>If the Contractor fails to comply, within three (3) consecutive hours after written notice from the Engineer, with the requirements of Section 7.13 - Maintenance of Site, the Contractor shall pay to the City of New York, until such notice has been complied with or rescinded, the sum specified above per calendar day, for each instance of such failure, as liquidated damages and not as a penalty, for such default.</p>	<p>\$ <u>500.00</u> for each calendar day, for each occurrence</p>

Date for Substantial Completion (Reference: Article 14)

The Contractor shall substantially complete the Work within the Final Contract Duration determined in accordance with the terms and conditions set forth herein.

The Base Contract Duration for this project is 1095 consecutive calendar days ("ccds").

The Final Contract Duration shall be the Base Contract Duration when a check mark is indicated before the word "NO", below, and shall be the Base Contract Duration adjusted by the table set forth below when a check mark is indicated before the word "YES", below.

YES NO

When the Final Contract Duration is indicated above to be adjusted by the table below, the table may increase the Base Contract Duration depending on the date of scheduled substantial completion to avoid a scheduled substantial completion of the Work during the winter months. The date of scheduled substantial completion shall be determined by adding the Base Contract Duration to the date specified to commence work in the written Notice to Proceed. The Final Contract Duration shall then be determined as follows:

- (a) Find the row that corresponds to the month of substantial completion based on the Base Contract Duration added to the date specified to commence work in the written Notice to Proceed.
- (b) Find the number of days to be added to the Base Contract Duration in the table below. Add that number of days to the Base Contract Duration to obtain the Final Contract Duration in consecutive calendar days.

Month of Substantial Completion based on the Base Contract Duration	Number of Days of adjustment
January	150
February	120
March	90
April	60
May	30
June	0
July	0
August	0
September	0
October	0
November – December 15	0
December 16 – December 31	180

In addition, should Item No. 9.30, "Storm Water Pollution Prevention," exist in the Contract and the required Storm Water Pollution Prevention Plan (SWPPP) does not conform to NYSDEC's recommended Standards, an additional 60 ccd shall be added to the above Final Contract Duration.

(GENERAL CONDITIONS RELATING TO ARTICLE 22 – INSURANCE)

PART II. TYPES OF INSURANCE, MINIMUM LIMITS AND SPECIAL CONDITIONS

Note: All certificate(s) of insurance submitted pursuant to Contract Article 22.3.3 must be accompanied by a Certification by Broker consistent with Part III below and include the following information:

- For each insurance policy, the name and NAIC number of issuing company, number of policy, and effective dates;
- Policy limits consistent with the requirements listed below;
- Additional insureds or loss payees consistent with the requirements listed below; and
- The number assigned to the Contract by the City (in the “Description of Operations” field).

Insurance indicated by a blackened box (■) or by X in a □ to left will be required under this contract

Types of Insurance (per Article 22 in its entirety, including listed paragraph)	Minimum Limits and Special Conditions
<p>■ Commercial General Liability Art. 22.1.1</p>	<p>The minimum limits shall be \$ <u>3,000,000</u> per occurrence and \$ <u>6,000,000</u> per project aggregate applicable to this Contract.</p> <p>Additional Insureds:</p> <ol style="list-style-type: none"> 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, and 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. <u>National Grid</u>

- 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) NYCT "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.

<input type="checkbox"/> Builders' Risk	Art. 22.1.4	<p>100 % of total value of Work</p> <p>Contractor the Named Insured; the City both an Additional Insured and one of the loss payees as its interests may appear.</p> <p>If the Work does not involve construction of a new building or gut renovation work, the Contractor may provide an installation floater in lieu of Builders Risk insurance.</p> <p>Note: Builders Risk Insurance may terminate upon Substantial Completion of the Work in its entirety.</p>
<input checked="" type="checkbox"/> Commercial Auto Liability	Art. 22.1.5	<p>\$ <u>2,000,000</u> per accident combined single limit</p> <p>If vehicles are used for transporting hazardous materials, the Contractor shall provide pollution liability broadened coverage for covered vehicles (endorsement CA 99 48) as well as proof of MCS 90</p> <p>Additional Insureds:</p> <ol style="list-style-type: none"> (1) City of New York, including its officials and employees, and (2) 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.

<input type="checkbox"/> Contractors Pollution Liability Art. 22.1.6	\$ _____ per occurrence \$ _____ aggregate Additional Insureds: 1. City of New York, including its officials and employees, and 2. _____ 3. _____
<input type="checkbox"/> 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. _____
<input type="checkbox"/> 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. _____
<input type="checkbox"/> Marine Pollution Liability Art. 22.1.7(c)	\$ _____ per occurrence \$ _____ aggregate Additional Insureds: 1. City of New York, including its officials and employees, and 2. _____ 3. _____

[OTHER]

Art. 22.1.8

■ Railroad Protection Liability Policy

(ISO-RIMA or equivalent form) approved by Permitter covering the work to be performed at the designated site and affording protection for damages arising out of bodily injury or death, physical damage to or destruction of property, including damage to the Insured's own property and conforming to the following:

- Policy Endorsement CG 28 31 - Pollution Exclusion Amendment is required to be endorsed onto the policy when environmental-related work and/or exposures exist.
- Indicate the Name and address of the Contractor to perform the work, the Contract # and the name of the railroad property where the work is being performed and the Agency Permit.
- Evidence of Railroad Protective Liability Insurance, must be provided in the form of the Original Policy. A detailed Insurance Binder (ACORD or Manuscript Form) will be accepted pending issuance of the Original Policy, which must be provided within 30 days of the Binder Approval.

\$ 2,000,000 per occurrence

\$ 6,000,000 annual aggregate

Named Insureds:

1. New York City Transit Authority (NYCTA), the Manhattan and Bronx Surface Transit Operation Authority (MaBSTOA), the Staten Island Rapid Transit Operation Authority (SIRTOA), MTA Capital Construction Co., the Metropolitan Transportation Authority (MTA) including its subsidiaries and affiliates, and the City of New York (as Owner) and all other indemnified parties.

[OTHER]

Art. 22.1.8

Professional Liability

- A. The Contractor's Professional Engineer shall maintain and submit evidence of Professional Liability Insurance in the minimum amount of \$1,000,000 per claim. The policy or policies shall include an endorsement to cover the liability assumed by the Contractor under this Contract arising out of the negligent performance of professional services or caused by an error, omission or negligent act of the Contractor's Professional Engineer or anyone employed by the Contractor's Professional Engineer.
- B. Claims-made policies will be accepted for Professional Liability Insurance. All such policies shall have an extended reporting period option or automatic coverage of not less than two (2) years. If available as an option, the Contractor's Professional Engineer shall purchase extended reporting period coverage effective on cancellation or termination of such insurance unless a new policy is secured with a retroactive date, including at least the last policy year.

[OTHER]

Art. 22.1.8

Engineer's Field Office

Section 6.40, Standard Highway Specifications

Fire insurance, extended coverage and vandalism, malicious mischief and burglary, and theft insurance coverage in the amount of \$40,000

[OTHER]

Art. 22.1.8

The Following Additional Insurance Must Be Provided:

Umbrella/Excess Liability Insurance - The Contractor shall provide Umbrella/Excess Liability Insurance in the minimum amount of \$10,000,000 per Occurrence and \$10,000,000 in Aggregate. The policy terms and condition should be at least as broad as the underlying policies. The underlying policies should comply with the insurance provision as outlined by the contract. Defense cost should be in addition to the limit of liability. The City of New York, including its officials and employees, should be included as additional insured as respects to the noted project.

SCHEDULE A

(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)

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

ATTACH TO CONTRACT DOCUMENTS

THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
INFRASTRUCTURE DIVISION
BUREAU OF DESIGN

PROJECT ID: HWQ411B

RECONSTRUCTION OF ALBERT ROAD AREA

INCLUDING SEWER, WATERMAIN, STREET LIGHTING,
AND TRAFFIC SIGNAL WORK

Together With All Work Incidental Thereto

BOROUGH OF QUEENS
CITY OF NEW YORK

ADDENDUM NO. 1

DATED: February 24, 2014

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

The New York City Department of Transportation Standard Highway Specifications, dated November 1, 2010, (which include, but are not limited to, "General Conditions", "Basic Materials of Construction", "Combined Materials of Construction", "Construction Methods", "Inspection and Testing of Materials, Adjustments for Deficiencies, and Maintenance", and "Supplemental Construction Methods"), as modified by addenda issued prior to the opening of bids, shall apply to and become a part of the contract.

All references contained herein are to the New York City Department of Transportation, Standard Highway Specifications, dated November 1, 2010. The said Specifications are hereby revised. Included hereunder are the following REVISIONS:

1. Amendments to Standard Highway Specifications, Volume I
2. Amendments to Standard Highway Specifications, Volume II, including Section 7.88 (Revised) and new Sections 6.44 PO and 6.52 CG.
3. New Sections
4. Special Provisions

1. AMENDMENTS TO STANDARD HIGHWAY SPECIFICATIONS, VOLUME I

The following amendments to the Contract Requirements shall become a part of and apply to the contract:

[Added 12-09-2010]

1. Refer to Page 15, **Subsection 1.06.23.(C) CONFORMANCE WITH FEDERAL, STATE AND CITY AGENCIES;**

Add the following new paragraphs:

"The Contractor is notified that all vehicles that are owned, leased or operated by the Contractor or its subcontractors and used in connection with the Project shall comply with the following requirement:

Every truck, tractor, and tractor-trailer or semitrailer combination, having a gross vehicle weight rating of twenty-six thousand pounds or more, and a conventional cab configuration in which more than half of the engine length is forward of the foremost point of the windshield base, and the steering wheel hub is in the forward quarter of the vehicle length shall be equipped with a convex mirror on the front of such vehicle or combination of vehicles. Such convex mirror shall be adjusted so as to enable the operator of such vehicle or combination of vehicles to see all points on an imaginary horizontal line which is three feet above the road, is one foot directly forward from the midpoint of the front of such vehicle or combination of vehicles, and extends the full width of the front of such vehicle or combination of vehicles.

Any vehicle that does not comply with this provision may be prohibited from entering the Project site and/or supplying equipment or materials to the Project. The Contractor shall not be entitled to any damages as a result of such prohibition."

[Added 01-09-2011]

2. Refer to Page 240, **Subsection 4.16.5.(B) STUMP REMOVAL;**
Delete **Subsection 4.16.5.(B) STUMP REMOVAL**, in its entirety:
Substitute the following revised **Subsection 4.16.5.(B)**:

"(B) STUMP REMOVAL

1. Tree stumps designated to be removed and their roots shall be completely excavated to a minimum depth of three (3) feet below the existing grade. A portable stump cutter may be required in some locations. It may be necessary to remove concrete, asphalt, pavers, and/or other types of material surrounding the base of the stump. All excess debris, including chips from tree stumps, shall be removed and disposed of by the Contractor, away from the site prior to backfilling and the area shall be restored by completion of the workday, to the satisfaction of the Engineer. The disposal of tree stumps by burning in open fires will not be permitted.

2. All voids and excavations left after the removal of the stump and roots shall be backfilled to grade with clean earth fill. Fill shall be placed and compacted to a minimum of 95 percent of Standard Proctor Maximum Density by acceptable methods to the satisfaction of the Engineer. Where paving blocks exist, they are to be reset to the existing grade as directed.

3. Maximum safety and care must be used by Contractor during stump removal. The Contractor shall carefully protect against damage all existing trees, plants, curbs, sidewalks and utilities and other features to remain. The Contractor is responsible for locating and protecting underground utilities from damage during stump removal procedures. During stump grinding operations, plywood must be used to protect adjacent vehicles, real property, and pedestrians. If, when removing stumps, existing sidewalks or curbs are disturbed, the Contractor shall restore and/or reset these sidewalks and curbs, at no additional cost to the City. Restoration work shall be done to match the existing, to the satisfaction of the Engineer. All damaged trees, curbs, sidewalks, real property, vehicles and utilities must be addressed within three (3) days."

[Added 04-18-2011]

3. Refer to Pages 218 and 219, **Subsection 4.13.4.(H) PIGMENT**;
Delete the first three (3) paragraphs on page 219;
Substitute the following revised three (3) paragraphs:

"Where the color of the concrete is required to simulate the color of dark gray bluestone, the concrete shall be integrally pigmented to produce a gray color equivalent to: Davis Colors No. 884-3%; Lansco Color No. 437 "Strong Black" 5 lbs. per 94 lbs. Light Grey Portland Cement and 3 parts sand; L.M. Scofield "Cool Black No. 4"; Bayferrox Limestone 330, 2 lbs. per 94 lbs. Light Gray Portland Cement; or an approved equivalent, unless otherwise specified.

Where the color of the concrete is required to simulate the color of light to medium gray granite, the concrete shall be integrally pigmented to produce a gray color equal to: Davis Colors No. 884-1%; Lansco Color No. 437 "Strong Black" 2.5 lbs. per 94 lbs. Light Grey Portland Cement and 3 parts sand; L.M. Scofield "Cool Black No. 1"; Bayferrox Silver 330, 1 lb. per 94 lbs. Light Gray Portland Cement; or an approved equivalent, unless otherwise specified.

Where the sidewalk is designated to have a saw cut joint finish the color of the concrete shall be integrally pigmented to produce a gray color equivalent to L.M. Scofield "Landmarks Grey" K-157-4; L.M. Scofield "Cool Black No. 4"; Davis Colors No. 884-3%; Lansco Color No. 437 "Strong Black" 5 lbs. per 94 lbs. Light Grey Portland Cement and 3 parts sand; Bayferrox NYC Landmark Commission Gray, 3.5 lbs. per 94 lbs. Light Gray Portland Cement; or an approved equivalent, unless otherwise specified."

[Added 07-01-2011]

4. Refer to Page 14, **Subsection 1.06.23.(A) PERMITS**;
Delete line (b) under the first paragraph;
Substitute the following text:

"(b) Any planned work requiring a DOT Construction Permit that may potentially be within 100 feet of a bridge structure will be placed on a Bridge Hold. If any proposed work is within 100 feet of a bridge structure, permittees must submit a scaled drawing showing the work and exact location, along with the following:

- Plan layout of the project area.
- The scope of work.
- The contractor's means and methods.
- Indicate if work will be done of the bridge itself or its abutments, and the type of work.

If the work is more than 100 feet away from the bridge structure, permittees may send a certification by e-mail stating so. Either response must be sent to the Division of Bridges at bridgeshold@dot.nyc.gov for review and release prior to commencing work. Emergency work will not be placed on hold and shall proceed in accordance with the New York City Highway Rules, section 2-11 (g);

- (c) Permits from the Department of Sanitation for use of City landfills;"

[Added 07-27-2011]

5. Refer to Page 37, **Subsection 1.06.46.(A) 6. Sign Graphics;**
Delete article "a." beginning with the words "All visual components of the sign are in an Adobe *.pdf file, . . ." and ending with the words ". . . DDC to the Contractor (on a CD or via E-mail) for printing.", in its entirety;
Substitute the following revised article "a":

"a. All visual components of the sign are in an Adobe *.pdf file, which is provided by the Commissioner's representative. The file is not to be altered for composition, type font or image from the version provided by DDC. The Commissioner's representative shall provide a complete file with data and image. The digital file shall be provided by DDC to the Contractor (on a CD or via E-mail) for printing."

[Added 09-27-2012]

6. Refer to Page 36, **Subsection 1.06.46. Project Sign;**
Delete the words "Unless otherwise specified in the Special Provisions of the contract, the following shall apply:";
Substitute the following revised text:

"The Contractor is notified that he shall be required to furnish, install, maintain, and remove, when directed, Construction Project Information Signs (CPIS) as per Sec. 2-02(c)(4) and (5) of the NYC DOT Highway Rule and the cost shall be deemed included under all scheduled items of the contract. In addition, unless otherwise specified in the Special Provisions of the contract, the following Project Sign shall also apply:"

[Added 04-08-2013]

7. Refer to Page 200, **Subsection 4.11.2.(B), first paragraph, sixth line;**
Delete the word "porcelain,".
8. Refer to Page 201, **Subsection 4.11.3.(B) FILL AND BACKFILL, second and third paragraphs;**
Delete the second and third paragraphs under Subsection 4.11.3.(B), in their entirety;
Substitute the following revised two paragraphs:

"Glass or Recycled Porcelain Aggregate (RPA) from recycling facilities that meets the requirements of **Subsection 4.11.3.(E)** for Glass and **Subsection 4.11.3.(F)** for RPA shall be considered suitable material for mixing with fill provided the Contractor maintains the gradations specified herein. However, glass shall not be placed in contact with synthetic liners, geogrids, geotextiles or other geosynthetics.

Glass and/or RPA incorporated into fill shall be thoroughly mixed with other suitable material so that glass, RPA or combination of both constitutes no more than 30 percent by volume anywhere in the fill as visually determined by the Engineer."

9. Refer to Page 202, **Subsection 4.11.3.(E) GLASS;**
Add the following new **Subsection 4.11.3.(F) RECYCLED PORCELAIN
AGGREGATE (RPA) :**

“(F) RECYCLED PORCELAIN AGGREGATE (RPA)

All porcelain to be used as RPA shall be crushed by a New York City Department of Environmental Protection (NYCDEP) approved recycling facility to a maximum particle size of 3/8 inch and graded to meet the gradation specified above for use in either fill, backfill or select fill, as may be required. RPA from any other source will not be permitted. The NYCDEP approved recycling facility will also certify that the RPA being furnished is free from organic material and other unsuitable material.

Should the Contractor desire to use RPA in his fill or backfill material, he shall contact Mr. Vasyl Kravchuk at NYCDEP (Tel. No. 718-595-7512) to determine the availability of RPA and from which recycling facility it can be obtained.

The Contractor shall be required to make arrangement with the recycling plant, at least two (2) weeks in advance of when he would need the material, to schedule the time, date and quantity available for pickup. The Contractor shall be required to furnish the recycling facility with a complete list of his trucks involved in transporting the material, which shall include the name of the registered owner (Contractor), Consumer Affairs or DOS Permit numbers, body license plate number, and truck volume. This information must be supplied to the facility prior to the start of picking up the RPA.

Weight ticket receipt slips given by the recycling facility to each truck driver picking up RPA shall be collected by the Contractor and given to the Engineer upon delivering fill or backfill material to the site that contains RPA, and the Contractor agrees and warrants that in obtaining the RPA that such material has originated only from a NYCDEP approved recycling plant and it has not been mixed with porcelain material from any other source.

The Contractor shall be required to transport said material from the approved recycling facility to his yard for storage and mixing with his fill material; however, there is not guarantee that the material will actually be available.

The Contractor is advised that there is no guarantee that RPA will in fact be available for his use from a NYCDEP approved recycling plant and he shall make no claim against the City for loss of anticipated profits should the material not be available upon request by the Contractor.

All excess RPA not used in the fill or backfill shall remain the property of the DDC Contractor.

The Contractor must comply with all rules and regulations of the Department of Transportation and the Department of Environmental Protections governing the use of RPA in its fill and backfill material.”

10. Refer to Pages 218 and 219, **Subsection 4.13.4.(H) PIGMENTING,**
first four paragraphs;
Delete the first four paragraphs under Subsection 4.13.4.(H), in
their entirety;
Substitute the following revised four paragraphs:

“Where pigmenting is specified, the concrete sidewalks shall be pigmented with an admixture complying with the requirements of **Section 2.19** and the following requirements:

‘Commercial Gray’: In commercial districts C4-4 through C4-7, C5 and C6, as defined in the Zoning Resolution of the City of New York, and in areas under the jurisdiction of the Lower Manhattan Development Corporation the color of the concrete shall be integrally pigmented to produce a gray color equivalent to L.M. Scofield ‘Landmarks Grey’ K-157-4; L.M. Scofield ‘Cool Black No. 4’; Davis Colors No. 884-3%; Lansco Color No. 437 ‘Strong Black’ 5 lbs. per 94 lbs. Light Grey Portland Cement and 3 parts sand; Bayferrox NYC Landmark Commission Gray, 3.5 lbs. per 94 lbs. Light Grey Portland Cement; or an approved equivalent, unless otherwise specified.

'Bluestone': Where the color of the concrete is required to simulate the color of dark gray bluestone, the concrete shall be integrally pigmented to produce a gray color equivalent to: Davis Colors No. 884-3%; Lansco Color No. 437 'Strong Black' 5 lbs. per 94 lbs. Light Grey Portland Cement and 3 parts sand; L.M. Scofield 'Cool Black No. 4'; Bayferrox Limestone 330, 2 lbs. per 94 lbs. Light Gray Portland Cement; or an approved equivalent, unless otherwise specified.

'Granite': Where the color of the concrete is required to simulate the color of light to medium gray granite, the concrete shall be integrally pigmented to produce a gray color equal to: Davis Colors No. 884-1%; Lansco Color No. 437 'Strong Black' 2.5 lbs. per 94 lbs. Light Grey Portland Cement and 3 parts sand; L.M. Scofield 'Cool Black No. 1'; Bayferrox Silver 330, 1 lb. per 94 lbs. Light Gray Portland Cement; or an approved equivalent, unless otherwise specified."

[Added 05-24-2013]

11. Refer to Page 14, **Subsection 1.06.23. (A) PERMITS**, first paragraph as modified by Article 4 on page A1-1b;
Add the following new text:

"(d) All necessary permits from the Department of Environmental Protection which may include, but are not limited to, permits for use of City water."

12. Refer to Page 14, **Subsection 1.06.23. (A) PERMITS**, second paragraph;
Add the following as the third paragraph:

"No fee permits for use of City water necessary to complete roadway pavement reconstruction project in conjunction with installation of sewers and/or water mains, will be issued by the Department of Environmental Protection. However, for all other type projects (such as installation of sidewalks, installation of pedestrian ramps, pavement milling, resurfacing, rehabilitation of retaining walls, and bridge reconstruction type projects) the Contractor will be required to obtain the water use permit at its own cost."

[Added 08-05-2013]

13. Refer to page 116, second paragraph up from the bottom of the page, first line;
Change the words "Concrete of Type IA and IIA shall have..." to read "Concrete of Type IA, IIA and IIIA shall have..."

[Added 09-04-2013]

14. Refer to page 100, **Subsection 3.01.3. (C) 1. (c)**;
Delete the last two lines of text beginning with the words "The proportion of reclaimed asphalt pavement permitted within each mix...";
Substitute the following sentence: "The proportion of reclaimed asphalt pavement permitted within each mix shall be not less than 30 percent for the top and bottom courses as per Local Law #71 of 2011."

15. Refer to page 110, **Subsection 3.05.2. (A)**, **Table 3.05-I**;
Insert the following text at the bottom of **Table 3.05-I**:

"Note: The above proportions shown for non-High-Early mixes shall be modified by pozzolan substitutes as per **Subsection 3.05.4.**"

16. Refer to page 112, **Subsection 3.05.3.(C)**, second paragraph;
Delete the second paragraph in its entirety;
Substitute the following paragraph:

"Water shall be potable and drawn from municipal water mains."

17. Refer to page 113, first line of text, beginning with the words
"condition making up one (1) cubic yard of concrete.";
Insert the following sentence between the words "condition making up one
(1) cubic yard of concrete." and "The range of water-cement ratio within which the ...":

"The calculated yield of the mix shall be within \pm 2% of the Theoretical (1) cubic yard."

18. Refer to Page 113, second paragraph beginning with the words "The
Contractor may substitute Portland cement . . .";
Delete the second paragraph under **Subsection 3.05.4.**, in its
entirety;
Substitute the following revised paragraph:

"With the exception of high-early strength concrete, the Contractor shall be required to substitute Portland cement with pozzolans (Fly Ash or GGBFS) such that the maximum amount of Portland cement per cubic yard of concrete does not exceed 400 pounds, and with the use of an approved non-corrosive, non-chloride admixture as required to obtain a minimum compressive strength of 3,000 psi in seven (7) days. For high-early strength concrete the Contractor may substitute Portland cement with pozzolans (Fly Ash or GGBFS), pound for pound, up to 20% (or up to 25% for tidal/sea water spray areas) of the weight of cement specified for any concrete mixture provided the Contractor can obtain a minimum compressive strength of 3,000 p.s.i. in three (3) days. The Contractor, immediately following but not later than eight weeks after the date of the Contractor's Notice to Proceed, shall file with the Engineer, Age-Strength data of the job mix he proposes to use for the various ambient temperatures anticipated during the period of concrete placement. This data shall be presented in both tabular and graphical form for those various ambient temperatures with a maximum setting period of seven (7) days for Class B-32 concrete or seventy-two (72) hours for High-Early Strength Concrete."

19. Refer to Page 115, **TABLE 3.05-III - INGREDIENT MATERIALS**;
Change in the third row, second column, the type of Portland
Cement from "Type III*" to read "Type II or Type III*"

20. Refer to page 132, **Subsection 3.06.3.(D)**;
Change the words "Water shall be drawn from mains owned by The City of New York." to
read "Water shall be potable and drawn from municipal water mains."

21. Refer to page 133, **Subsection 3.07.3.(D)**;
Change the words "Water shall be drawn from mains owned by or supplying water to The
City of New York." to read "Water shall be potable and drawn from municipal water
mains."

22. Refer to page 134, **Subsection 3.08.4.(D)**;
Change the words "Water shall be drawn from mains owned by or supplying water to The
City of New York." to read "Water shall be potable and drawn from municipal water
mains."

23. Refer to Page 166, **Subsection 4.05.2. (A)** ;
Delete **Subsection 4.05.2. (A)**, in their entirety;
Substitute the following revised **Subsection 4.05.2. (A)** :

“(A) Concrete Pavement shall be of the following types:

- Type 1--Non-reinforced
- Type 2--Reinforced (Unpigmented or pigmented if specified)
- Type 3--High Early Strength Reinforced (Unpigmented or pigmented if specified)

Type 2 and Type 3 pavements shall consist of a concrete surface course, which shall be unpigmented or pigmented if specified, laid on a concrete base course, which may or may not be pigmented at the Contractor's option, while the base course is still plastic, of the thickness shown on the Contract Drawings, with reinforcement placed between the surface and base courses.”

24. Refer to Page 166, **Subsection 4.05.3. (A)** ;
Insert the following new **Subsection 4.05.3. (A1)** :

“(A1) PIGMENTING

Where pigmenting is specified, the surface course of the concrete bus pad shall be pigmented with an admixture complying with Section 2.19 and the following requirements:

Where the color of the concrete is required to simulate the red color of the Red Bus Lane Pavement Overlay (Item 6.44 POR in Section 6.44 PO), the surface course concrete shall be integrally pigmented to produce a red color equivalent to Scofield's quarry red.

Except for the use of an air-entraining agent complying with ASTM Designation C 260 and water reducing admixtures complying with ASTM Designation C 494 used in combination with the Pigment Admixture as per the pigment manufacturer's instruction, no other admixtures (including, but not limited to, calcium chloride) shall be used unless stated in writing by the manufacturer of the Pigment Admixture to be of no consequence to the colorfastness of the concrete mixture and is approved by the Engineer.

All pigmented concrete at different locations shall be identical, unless otherwise directed. Variations in color/tint/hue will not be acceptable. Therefore, the same brand and type of cement and the same source and type of aggregate shall be used throughout the project.

Prior to the mix design being made, the cement intended for use shall be checked to determine that its lightness/darkness is similar to the cement used in the original approved sample. The Pigmented Admixture shall be added in the standard proportion specified by the manufacturer.”

25. Refer to Page 170, **Subsection 4.05.5. (A) GENERAL** ;
Insert the following two new paragraphs:

“For pigmented concrete, the Contractor shall within eight weeks of the notice to proceed, submit the name of its proposed roadway installer upon which his bid is based, along with their respective work history experience in placing pigmented concrete. The installer shall have documented experience in working with pigmented concrete.

Prior to making any field samples and the placing of any pigmented concrete, the Contractor, its concrete supplier, installer, cement producer, laboratory, the pigmented admixture's representative, and the Engineer shall meet and agree on the specifications and methods of handling the pigmented concrete.”

26. Refer to Page 183, **Subsection 4.05.9. PRICES TO COVER**, 4th line;
Insert in the fourth line, the words "pigment when specified" between the
words "specifications, including, but not limited to," and "furnishing and installing...":

27. Refer to Page 183, **Subsection 4.05.9. PRICES TO COVER**;
Insert the following two new Items to the list of Item Nos. at the
bottom of **Subsection 4.05.9**:

"4.05 ACP	REINFORCED CONCETE PAVEMENT (BUS STOPS)(PIGMENTED)	C.Y.
4.05 AXP	HIGH-EARLY STRENGTH REINFORCED CONCRETE PAVEMENT (BUS STOPS)(PIGMENTED)	C.Y."

2. AMENDMENTS TO STANDARD HIGHWAY SPECIFICATIONS, VOLUME II

[Added 01-25-2012]

1. Refer to Pages 365 and 366, **Subsection 6.40.2.(C)(c)(1) Personal Computer(s) - Workstation Configuration;**

Delete the text under **Subsections (a), (b), (c), (d), (h), (i), and (m)**, in their entirety;

Substitute the following revised text:

- “(a) Make and Model: Dell; HP; Gateway; Acer; or, an approved equivalent. (Note: an approved equivalent requires written approval of the Assistant Commissioner of ITS.)
- (b) Processor: i5-2400 (6MB Cache, 3.1GHz) or faster computer - Single Processor.
- (c) System Ram: Minimum of 4GB (Gigabytes) Dual Channel DDR3 SDRAM at 1333MHz – 2 DIMMSs
- (d) Hard Disk Drive(s): 500 GB (Gigabytes) Serial ATA (7200RPM) w/DataBurst Cache, or larger.”
- “(h) Video Display Card: HD Graphics (VGA, HDMI) with a minimum of 64 MB of RAM.
- (i) Monitor: 22" W, 23.0 Inch VIS, Widescreen, VGA/DVI LCD Monitor.”
- “(m) Software Requirements: Microsoft Windows 7 Professional SP1, 64 bit; Microsoft Office Professional 2010; Microsoft Project 2010; Adobe Acrobat reader; Anti-Virus software package with 2 year updates subscription; and, either Auto Cad 2012 LT or Microsoft Visio 2010 Standard Edition, as directed by the Engineer.”

2. Refer to Page 366, **Subsection 6.40.2.(C)(c)(2)(b)**;
Delete the text under **Subsection (b)**, which begins with the words
“(b) One (1) 600 DPI HP Laser Jet . . .”, in its entirety;
Substitute the following revised text:

“(b) One (1) 600 DPI HP Color Laser Jet all-in-one Printer/Scanner/Copier/Fax (twelve (12) pages per minute or faster) with one (1) Extra Paper Tray (Legal Size) networked to all office computers.”

3. Refer to Page 367, Subsection 6.40.3. SPECIFIC REQUIREMENTS FOR ENGINEERS FIELD OFFICE (TYPE A, B, C, CU, D OR DU), first paragraph;
Delete the text in the first paragraph of Subsection 6.40.3., in its entirety;
Substitute the following revised text:

6.40.3. SPECIFIC REQUIREMENTS FOR ENGINEER'S FIELD OFFICE (TYPE A, B, C, CU, D, OR DU). In addition to the general requirements, each type of Field Office shall have the minimum floor area indicated in Table 6.40-I calculated based on usable area only, excluding any loss factors. Loss factors are defined as those areas such as lobby, sidewalk window ledge, elevator shafts and stairways. The Contractor shall provide and maintain furnishings for each type of Field Office in the quantity specified in Table 6.40-I. The furnishings shall be new or used equipment satisfactory to the Engineer:

4. Refer to Page 368, TABLE 6.40-I, ADDITIONAL REQUIREMENTS SPECIFIC REQUIREMENTS;
Delete the requirements for a Photocopy Machine shown in the 15th row of TABLE 6.40-I, in its entirety;
Substitute the following revised requirements:

Photocopying Machine – Stand-alone, heavy duty, electric, dry-process color photocopying type with a minimum production rate of 70 pages per minute and an adequate supply of copy paper, toner, etc. The machine shall be capable of duplex copying paper sizes of 8-1/2 x 11 inches, 8-1/2 x 14 inches and 11 x 17 inches, and have separate trays for each paper size. It shall have a document feeder, collator, stapler, and the capability to reduce/enlarge copies between each paper size. The supply of each size copy paper, toner, etc. shall be replenished and the machines shall be maintained for the duration of the contract by the Contractor as required by the Engineer. Make and model can be Minolta, Canon, IBM, Epson, or an approved equivalent, and shall be networked to the office computers.	1	1	1	1	1	1
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5. Refer to Page 368, TABLE 6.40-I, ADDITIONAL REQUIREMENTS SPECIFIC REQUIREMENTS;
Insert the following two additional requirements:

Heavy duty commercial grade diamond cut shredder with automatic start. The shredder shall be able to receive 8-1/2 inch wide paper and shred a minimum of 15 sheets simultaneously along with CDs and staples.	1	1	1	1	1	1
Projector – 1080p LCD with a min. of 2200 ANSI Lumens, 1920 x 1080, 16:9, 40,000:1 contrast ratio, HDMI, VGA, USB, and a 10 feet diagonal, 16:9 Projection Screen.	-	-	1	1	1	1

6. Refer to Page 496, Subsection 7.20.4. **METHODS**, last paragraph beginning with the words "When directed by the Engineer, due to the original conditions . . .";
Add the following sentence to the end of the last paragraph under **Subsection 7.20.4:**

"However, if the owner at his own expense supplies the replacement frame and doors or hatch covers the Contractor shall install the replacement frame and doors or hatch covers under this Item 7.20, as a basement access reset, in lieu of the steel safety closure plate."

[Added 07-16-2012]

7. Refer to Page 365, Subsection 6.40.2.(C)(c)(1) "**Personal Computer(s) - Workstation Configuration**";
Delete the text under **Subsections (g) and (k)**, in their entirety;
Substitute the following revised text:

- (g) I/O Ports: Must have at least one (1) Serial Port, one (1) Parallel Port, and three (3) USB Ports.
- (k) Network Interface: Integrated 10/100/1000 Ethernet card."

8. Refer to Page 366, Subsection 6.40.2.(C)(c)(2) "**All field offices requiring computers shall be provided with the following:**";
Delete the text under **Subsection (a)**, in its entirety;
Substitute the following revised text:

- "(a) One (1) broad-band internet service account. Wideband Internet connectivity at a minimum throughput of 15 Mbps download and 5 Mbps upload is required at each field office location with 1-5 staffers. For larger field offices see table below for minimum required upload speeds. Telephone service should be bundled together with Internet connectivity. Because of throughput requirements Verizon FIOS is the preferred connectivity provider where available.

Office Personnel #	Upload Speeds (Minimum)
1 - 5	5 Mbps
6 - 10	10 Mbps
11 - 15	15 Mbps
16 - 20 ...	20 Mbps

This account will be active for the life of the project. The e-mail name for the account shall be the DDC Field Office/project Id (e.g. FLD K HWK666 McGuinness@earthlink.com)."

[Added 08-09-2012]

9. Refer to Page 366, **Subsection 6.40.2.(C)(c)(2)(b)**, as amended by Article 2 on page A1-2 of this Addendum;
Delete the text under **Subsection (b)**, in its entirety;
Substitute the following words: **"(b) (No Text)."**

10. Refer to Page 368, TABLE 6.40-I, ADDITIONAL REQUIREMENTS SPECIFIC REQUIREMENTS;
Delete the requirements for a Photocopy Machine shown in the 15th row of TABLE 6.40-I, as modified by Article 4 on page A1-2a of this Addendum, in its entirety;
Substitute the following revised requirements:

Photocopying Machine – Stand-alone, heavy duty, electric, dry-process color photocopying type with color scan and send capability via e-mail, a minimum production rate of 70 pages per minute and an adequate supply of copy paper, toner, etc. The machine shall be capable of duplex copying paper sizes of 8-1/2 x 11 inches, 8-1/2 x 14 inches and 11 x 17 inches, and have separate trays for each paper size. It shall have a document feeder, collator, stapler, and the capability to reduce/enlarge copies between each paper size. The supply of each size copy paper, toner, etc. shall be replenished and the machines shall be maintained for the duration of the contract by the Contractor as required by the Engineer. Make and model can be Minolta, Canon, IBM, Epson, or an approved equivalent, and shall be networked to the office computers.	1	1	1	1	1	1
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[Added 11-26-2012]

11. Refer to Pages 504 through 508, **SECTION 7.88 – Rodent and Waterbug Pest Control**;
Delete **Section 7.88**, in its entirety;
Substitute SECTION 7.88 (Revised), as contained on the following pages A1-2d through A1-2i.

[Added 02-08-2013]

12. (NO TEXT)

SECTION 7.88 (Revised)
Rodent and Waterbug Pest Control

7.88.1. DESCRIPTION. The Contractor shall provide all labor, materials, plant and equipment, and incidentals required to survey and monitor rodent activity and control any infestation or outbreak of rodents and waterbugs (American cockroaches) within the project limit.

7.88.2. MATERIALS. All materials shall be approved by the New York State Department of Environmental Conservation and comply with the New York City Health Code for the intended usage.

Rodenticide weatherproof bait blocks shall be multiple dose anticoagulants such as Chlorophacinone or Dephacinone, or single feed rodenticides such as ContraMeal, ContractBait block, Quintox pellets or TalonG pellets, or an approved equivalent.

Tamper proof bait station boxes shall be designed to exclude other mammals and shall be used with poisoned bait to attract rats. Information on "tamper proof bait station boxes" is available from the NYC Bureau of Regulatory & Environmental Health Services, Pest Control Office (718-956-7103/4).

Live traps shall be of proper dimensions for trapping rats and shall not be used with poisoned bait.

Insecticide bait shall be a residual type such as phenol methyl carbamate (2%) bait or an approved equivalent.

(A) **SUBMITTALS**

Prior to commencement of construction activities the Contractor shall submit to the Engineer manufacturer's installation instructions for all materials required for rodent and waterbug pest control work and product data which shall include illustrations, catalog data, product characteristics, typical use, performance, and limitation criteria of all rodent and waterbug pest control materials required.

7.88.3. PERSONNEL. The Contractor shall employ two independent licensed exterminators: one to engage in survey and monitoring work to establish the level of infestation of rodents and insects and provide recommendations for specific Integrated Pest Management (IPM) actions, and one to execute the rodent and waterbug pest control work to deal with such infestations. All pest control personnel employed by each exterminator company must be supervised by an exterminator licensed in categories 7A & 8. The Contractor shall submit the names and license credentials of the two exterminator companies to the Engineer for approval prior to the commencement of any work under this section.

7.88.4. METHODS. Application and dosage of all materials shall be done in strict compliance with the manufacturer's recommendations. All surveying, monitoring, baiting, and/or live trapping work shall be performed in the presence of the Engineer, without which no payment will be made under this Section.

(A) GENERAL

The Contractor's construction activity is expected to disturb any established rodent and/or waterbug population that may exist within the project limits, possibly causing their dispersion. The Contractor shall take all appropriate action to eliminate and/or control these populations within the construction corridor: the construction corridor shall be defined as being the full width of streets under the contract and intersecting streets up to the limits of construction, from property line to property line, excluding buildings and under sidewalk building vaults.

Under the Maintenance of Site requirements for the contract, any unsanitary conditions, such as uncollected garbage or debris, resulting from the Contractor's activities which will provide food and shelter to the resident rodent population shall be corrected by the Contractor immediately after notification of such condition by the Engineer. Non-compliance shall be subject to the application of the "Nonconformance" provisions of the Item for Maintenance of Site, and no payment will be made for any additional application of rodenticide or insecticide needed to control resultant infestations.

(B) SURVEY AND MONITORING WORK

(1) Prior to Construction - The Contractor's designated survey and monitoring exterminator shall execute a survey of the project area and estimate the level of rodent (Norway rat, House mouse) infestation and the waterbug population within the construction corridor. An appropriate sample of utility manholes (sewer, electrical, telephone, etc.) and catch basins should be opened and surveyed to the satisfaction of the Engineer. Contractor shall maintain all survey records in the manner described in 7.88.6., Records and Reports.

(2) During Construction - The Contractor shall monitor the rodent activity through trapping (snap, glue traps or live traps), fecal count methods, and inspection of the conditions of all installed baits every week during construction activity or as otherwise directed by the Engineer. Contractor shall maintain all monitoring records in the manner described in 7.88.6., Records and Reports.

(C) RODENT CONTROL WORK

(1) Wetlands, Woodlands and Areas Within Seventy-five (75') feet of a Stream. In wetlands, woodlands and areas adjacent to a stream, special precautions must be taken to protect water quality and to ensure the safety of other wildlife. To prevent poisoned bait from entering streams, no poisoned bait shall be used in areas within seventy-five (75') feet of either streambank. Live traps must be used in these seventy-five (75') feet buffer zone areas and within wetland and woodland areas.

(2) Outside Wetland Areas, Woodland Areas and Beyond Seventy-five (75') feet of a Stream. In areas outside the seventy-five foot zone of protection adjacent to streams, and areas outside wetlands and woodlands, tamper proof bait stations with poisoned bait shall be established during the period of construction and any consumed or decomposed bait shall be replenished as directed.

Rodent control shall be achieved in two stages as follows:

Stage I. At least one month prior to initiation of the construction work, and periodically thereafter, live traps and/or rodenticide bait, as directed above, shall be placed at locations [e.g., burrows, utility manholes (sewer, electrical, phone, etc.), and catch basins] that are inaccessible to pets, human beings, children and other non-target species, particularly wildlife (e.g., birds) in the construction corridor. Locations of initial bait placement and quantities of bait shall be determined by the survey and monitoring exterminator's written report of his survey and monitoring results, or as otherwise directed by the Engineer.

Stage II. During Construction - Infested sites as determined by the survey and monitoring exterminator's monitoring report shall be baited and/or rebaited, and live traps shall be collected and replaced, the rates and quantities of which shall be determined by the written monitoring reports submitted weekly or as otherwise directed by the Engineer in consultation with the City's Office of Pest Control.

The baiting exterminator shall be responsible for collecting and disposing of all trapped and poisoned rodents found in live traps and tamper proof bait stations. The baiting exterminator shall also be responsible for posting and maintaining signs announcing the baiting of each particular location.

The Contractor, under his maintenance of site operations, shall be responsible for the immediate collection and disposal of any visible rodent remains found on streets or sidewalk within the project limits. Any visible remains shall be placed into double plastic bags. No more than five (5) carcasses shall be placed into each bag. Each bag shall be a minimum of 3 mils thick, black plastic. No additional payment will be made for this work.

It is anticipated that public complaints will be addressed to the Engineer's Field Office. The Contractor, where directed by the Engineer, shall take appropriate Integrated Pest Management (IPM) actions, such as baiting, trapping, proofing, etc., to remedy the source of a complaint within the next six (6) hours of normal working time, which is defined herein, for the purposes of this section, as 7 A.M. to 6 P.M. on Mondays through Saturdays.

(D) WATERBUG (AMERICAN COCKROACH) CONTROL

Infested sites (e.g., sewers) shall be baited at least 2 times per month with insecticides, or as directed by the Engineer in consultation with the exterminator monitoring the work and the City's Office of Pest Control.

7.88.5. EDUCATION & TRAINING. The Contractor shall post notices in all Construction Bulletin Boards advising workers, employees, and residents to call the Engineer's Field Office to report rodent and waterbug infestations. The Contractor shall provide and distribute literature pertaining to IPM techniques of rodent control to affected businesses and superintendents of nearby residential buildings to ensure their participation in maintaining their establishments free of unsanitary conditions, harborage removal and rodent proofing.

Prior to application of any chemicals, the Contractor shall furnish copies or sample labels for each pesticide, antidote information, and Material Data Safety Sheets (MSDS) for each chemical used.

7.88.6. RECORDS AND REPORTS.

(A) GENERAL

The Contractor shall be responsible for assigning within the construction corridor an identifying number to each manhole, catch basin, and other location where bait and/or live trap placement and/or waterbug control work is proposed by the survey and monitoring exterminator. The Contractor shall then provide that list of locations and corresponding reference numbers along with a drawing showing the locations, as a reference for the exterminator(s) performing the work, to indicate locations of bait placement and waterbug control work and rodent and waterbug activity (droppings, bait consumed, dead rodents, etc.).

(B) SURVEY AND MONITORING WORK

(1) Prior to Construction – Contractor shall submit to the Engineer, for approval, a written survey report including proposed IPM procedures, including specific materials, quantities, locations, methods, and time schedule for the implementation of the exterminating work. The written report shall also include a survey with a drawing (provided by the Contractor) marked with locations indicating all signs of rodent (Norway rat, House mouse) infestation and waterbug activity discovered during the execution of the survey indicating that rodent and waterbug pest control work is necessary.

(2) During Construction - Based on monitoring results, Contractor shall submit to the Engineer a weekly written monitoring report identifying all locations and conditions of installed bait and/or other rodent control work. The monitoring report shall also include any other recommended IPM techniques, such as baiting, trapping, proofing, etc., proposed for rodent and waterbug pest control.

The survey and monitoring exterminator shall keep a record of all rodent and waterbug infestation surveys s/he has conducted. The Contractor shall be required to submit a copy of all survey and monitoring reports to the Engineer each week, prior to payment.

(C) RODENT AND WATERBUG CONTROL WORK

The baiting exterminator shall maintain records of all locations baited along with the type and quantity of rodenticide and insecticide bait used. These records will be kept by the City Inspector. A weekly report shall be prepared, signed and certified by the approved licensed exterminator, and such reports shall be submitted to the Engineer each week, prior to payment.

7.88.7. NONCONFORMANCE. If the Contractor fails to perform as directed to control the rodent and/or waterbug population at any location within the project limits for a period of more than one week, the Engineer will correct the adverse conditions by any means he deems appropriate, including but not limited to, the use of "outside services" and shall deduct the cost of the corrective work from any monies due to the Contractor. The deducted cost of this work shall be in addition to the non-payment for rodent and waterbug pest control.

7.88.8. MEASUREMENT.

(A) RODENT INFESTATION SURVEY AND MONITORING

The quantity to be measured for payment under Item No. 7.88 AA, RODENT INFESTATION SURVEY AND MONITORING, shall be a Lump Sum measurement.

(B) RODENT BAIT STATIONS

The quantity to be measured for payment under Item No. 7.88 AB, RODENT BAIT STATIONS, shall be the number of tamper-proof rodent bait station boxes and/or live traps satisfactorily installed or reinstalled after inspection within the construction corridor, as approved by the Engineer. However, the initial baiting, and subsequent rebaiting as may be required, of any bait station will be paid for under Item 7.88 AC.

(C) BAITING OF RODENT BAIT STATIONS

The quantity to be measured for payment under Item No. 7.88 AC, BAITING OF RODENT BAIT STATIONS, shall be the number of tamper-proof rodent bait station boxes, utility manholes, catch basins, or other locations approved by the Engineer, satisfactorily baited or rebaited to replenish consumed or decomposed bait within the construction corridor, as approved by the Engineer.

(D) WATERBUG BAIT APPLICATION

The quantity to be measured for payment under Item No. 7.88 AD, WATERBUG BAIT APPLICATIONS, shall be the number of blocks satisfactorily treated with insecticide bait within the construction corridor, as approved by the Engineer. A block shall be defined as the area of street, measured between property lines, from intersection to intersection. Each rebaiting of any block shall be considered as a new block for measurement purposes.

7.88.9. PRICES TO COVER.

(A) RODENT INFESTATION SURVEY AND MONITORING

Payment will be made at the lump sum price bid for RODENT INFESTATION SURVEY AND MONITORING which shall include the cost of furnishing all the labor, materials, plant, equipment (traps, etc.), insurance, and other incidentals required, including but not limited to providing all required maintenance of traffic equipment, to perform a rodent infestation survey of the project area and then monitor the site each week for rodent activity, all in accordance with the specifications and the directions of the Engineer.

Ten (10%) percent of the lump sum price bid will be paid when the initial survey of the project area has been completed and the written survey report has been submitted to the satisfaction of the Engineer. The remainder will be paid in proportion to the percentage of contract completion.

(B) RODENT BAIT STATIONS

The Contract price bid for RODENT BAIT STATIONS shall be a unit price per each tamper proof bait station box and/ or live trap installed or reinstalled after inspection and shall cover the cost of furnishing all labor, materials, plant, equipment (bait stations, etc.), insurance, and other incidentals, including but not limited to providing all required maintenance of traffic equipment, required to control the rodent population found within the project limits in accordance with the specifications and the directions of the Engineer.

In addition to the payment for Rodent Bait Stations installed or reinstalled under this Item 7.88 AB, the Contractor will also be paid for each baiting or rebaiting, when required, of each bait station, under Item No. 7.88 AC.

(C) BAITING OF RODENT BAIT STATIONS

The Contract price bid for BAITING OF RODENT BAIT STATIONS shall be a unit price per each bait station, utility manhole, catch basin or other location approved by the Engineer satisfactorily baited or rebaited, when required, and shall cover the cost of furnishing all labor, materials, plant, equipment (bait), insurance, and other incidentals, in accordance with the specifications and directions of the Engineer. Installation or resetting of the bait station will be paid for under Item 7.88 AB.

(D) WATERBUG BAIT APPLICATION

The Contract price bid for WATERBUG BAIT APPLICATION shall be a unit price per block treated by the exterminator and shall include the cost of furnishing all the labor, materials, plant, equipment (bait, etc.), insurance, and other incidentals, including but not limited to providing all required maintenance of traffic equipment, necessary to control the waterbug population found within the project limits for the duration of the contract in accordance with the specifications and the directions of the Engineer.

Payment will be made under:

Item No.	Item	Pay Unit
7.88 AA	RODENT INFESTATION SURVEY AND MONITORING	L.S.
7.88 AB	RODENT BAIT STATIONS	EACH
7.88 AC	BAITING OF RODENT BAIT STATIONS	EACH
7.88 AD	WATERBUG BAIT APPLICATION	BLOCK

[Added 05-24-2013]

13. Refer to Page 366, **Subsection 6.40.2.(C)(c)(1)(m) Software Requirements**, as modified by Article 1 on page A1-2;
Delete the text under **Subsection (m)**, in its entirety;
Substitute the following revised text:

“(m) **Software Requirements:** Microsoft Windows 7 Professional SP1, 32 bit; Microsoft Office Professional 2010; Microsoft Project 2010; Adobe Acrobat reader; Anti-Virus software package with 2 year updates subscription; and, either Auto Cad LT or Microsoft Visio Standard Edition, as directed by the Engineer.”

[Added 09-04-2013]

14. Refer to Page 384, the end of **Section 6.44 - White and Yellow Thermoplastic Reflectorized Pavement Markings**;
Insert new **SECTION 6.44 PO**, after **Section 6.44**, as contained on the following pages A1-2k through A1-2m.

[Added 02-10-2014]

15. Refer to Pages 393 and 394, **SECTION 6.52 - Uniformed Full-Time Flagperson**;
Delete **Section 6.52** on pages 393 and 394, but do not delete examples on pages 395 and 396;
Substitute **SECTION 6.52 CG**, as contained on the following pages A1-2n and A1-2o.

SECTION 6.44 PO
Lane Pavement Overlay

6.44PO.1. DESCRIPTION. This section describes the furnishing and application of an approved Green Asphalt Pavement Color Scheme along designated bicycle lanes and Brick-Red Asphalt Pavement Color Scheme matching Quest's StreetBondCL Terracotta color along designated Select Bus Service (SBS) lanes, as indicated in the Contract Drawings or as directed by the Engineer.

6.44PO.2. REFERENCES.

- A. ASTM D-4541 Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Tester.
- B. ASTM D-4060 Test Method for Abrasion Resistance of Organic Coatings by the Taber Abrasion.
- C. ASTM D-522-93A Standard Test Method for Mandrel Bend Test of Attached Organic Coatings.
- D. ASTM G-155 QUV Accelerated Weathering Environment. Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials.
- E. ASTM D-2486 MEK rub test for chemical resistance.
- F. ASTM D-570 Standard Test Method for water absorption of plastics.
- G. ASTM E-303 British Pendulum test for friction.
- H. EPA 24 ASTM D3960-05 Volatile Organic Compounds.

6.44PO.3. SUBMITTALS.

- A. A copy of the current year accreditation certificate available from the Contractor or subcontractor who will be performing this work, or written verification from the coating supplier that the Contractor or subcontractor is qualified to perform this Work.
- B. Written and published specification for the application of the selected asphalt pavement coating.
- C. Confirmation of coating color.
- D. Proof of coating performance through a Certificate of Analysis or equivalent document as provided by the Contractor or the coating supplier.

6.44PO.4. MATERIALS.

The following table outlines minimum performance properties of a typical asphalt pavement coating.

Characteristic	Test Specification	Measured result
Durability: Taber Abrasion resistance	ASTM D-4060 7 day cure, H-10 wheel (wet test)	< 5.0 g/1000
Water sensitivity	ASTM D-570 Water absorption after 9 days: Remaining absorption after 1 hour of recovery:	< 10% < 1.0%
Color stability	ASTM G-155 QUV 2,000 hours (CIE units)	New York City Bike Lane Green $\Delta E < 1.5$
Color stability	ASTM G-155 QUV 2,000 hours (CIE units)	Brick color $\Delta E < 1.5$

Flexibility: Mandrel Bend	ASTM D-522-93A Flexibility as measured by Mandrel bend 0.5mm thick sample passes 10 mm at 21°C 0.5mm thick sample passes 125mm at -18°C	
Chemical resistance	ASTM D-2486 Modified MEK scrubs 16 dry mils, number of scrubs until 50% substrate exposed	>5000
Adhesion to Asphalt	ASTM D-4541	Substrate Failure
Friction Wet	ASTM E-303 British Pendulum Tester	>55
Environmental Sensitivity	EPA 24 ASTM D-3960-05 Volatile Organic Compounds	VOC < 150

These properties shall be evidenced by Certificates of Analysis produced by an independent qualified testing facility.

Green Bicycle and Red Bus Lane Pavement Overlays furnished by the following manufacturers, or approved equivalent, are acceptable for use in this contract:

Ennis Paint, Inc.
1509 S. Kaufman Street
Ennis, TX 75119

Integrated Pavement Concepts, Inc.
102-17957 55th Avenue
Surrey, BC Canada V3S 6C4

Crafco, Inc.
420 N. Roosevelt Avenue
Chandler, AZ 85226

6.44PO.5. METHODS. The asphalt pavement coating system shall be applied to the pavement in accordance with the manufacturer's specification. In its hardened state the color shall be as specified, and as approved by the Engineer. The material shall present a marking whose color and chemical resistance will not degrade under normal exposure to calcium chloride, sodium chloride or automotive oils and fuels. Color pigments used shall remain stable under exposure to ultra violet light. A minimum of four (4) layers of coating material shall be applied to the pavement surface.

The Contractor shall be required to use the proper equipment in the application of the asphalt pavement coating, as per the recommendation of the coating supplier, and as approved by the Engineer.

Asphalt pavement must be stable, well compacted and generally in excellent condition for the application of the asphalt pavement coating to be successful. The Engineer shall make the final determination as to the suitability of the existing asphalt pavement.

The asphalt pavement surface shall be dry and free from all foreign matter, including but not limited to dirt, dust, de-icing materials, and chemical residue.

The asphalt pavement coating shall only be applied in the correct environmental conditions as instructed by the coating supplier, and as approved by the Engineer.

Refer to the instructions provided by the coating supplier regarding when the painted lane may be opened to traffic. Wait time is typically a function of the dry rate of the coating, and climate conditions.

The Engineer may, at his discretion, require the Contractor to remove all extraneous marks on the pavement made by the agents or employees of the Contractor, or made by others due to improper control or protection of the work area by the Contractor, his agents or employees. Any installation which, in the opinion of the Engineer, is not acceptable, whether by reason of poor workmanship, poor appearance, poor performance, poor materials, improper width or improper alignment, shall be reworked by the Contractor at no cost to the City. The Contractor shall replace rejected installation as directed by the Engineer, within fifteen (15) days after receiving written notification of the rejection of such completed work.

6.44PO.6. MEASUREMENT. The quantities to be measured for payment shall be the number of square yards of Lane Pavement Overlay, of each color, placed as specified to the satisfaction of the Engineer.

6.44PO.7. PRICES TO COVER. The unit prices bid per square yard of Green Bicycle Lane Pavement Overlay and Red Bus Lane Pavement Overlay shall cover the cost of all labor, materials, plant, equipment, insurance, and necessary incidentals required including, but not limited to, testing, cleaning, preparation of surfaces, and application of the lane pavement overlay materials, all in accordance with the contract plans and specifications, and as directed by the Engineer.

Payment will be made under:

Item No.	Item	Pay Unit
6.44 POG	GREEN BICYCLE LANE PAVEMENT OVERLAY	S.Y.
6.44 POR	RED BUS LANE PAVEMENT OVERLAY	S.Y.

SECTION 6.52 CG

Crossing Guard

6.52CG.1. INTENT. This section describes the employment of full-time uniformed crossing guards to direct and detour traffic.

6.52CG.2. DESCRIPTION. The Contractor shall furnish an adequate number of competent crossing guards to control vehicular and pedestrian traffic when it is necessary to maintain alternating one-way traffic in one lane of a two-way roadway, and at all other locations where construction operations, construction vehicles and equipment, and temporary traffic patterns related to the construction operations require positive temporary traffic control for safe, efficient traffic operations.

6.52CG.3. METHODS. All crossing guards, whether paid for under this item or not, shall be proficient in speaking, writing and reading English and adequately trained in controlling vehicular and pedestrian traffic by a recognized training program such as that provided by the American Traffic Safety Services Association, the National Safety Council, unions or construction industry associations, or by an individual who holds a current certification as a flagger training instructor from such a program.

All crossing guards, whether paid for under this item or not, their apparel, hand-signaling devices, and procedures to be used by them shall be in compliance with the requirements of Chapter 6E. FLAGGER CONTROL, in the Federal "Manual on Uniform Traffic Control Devices for Streets and Highways" 2009 Edition, or later edition, and shall each be equipped with an active two-way radio.

Prior to the start of crossing guard operations, the Contractor shall provide to the Engineer a list of certified crossing guards to be used in the contract, identifying the source of crossing guard training for each individual. When requested by the Engineer, crossing guards shall demonstrate their competency in crossing guard procedures. Crossing guards not competent in controlling vehicular and pedestrian traffic procedures to the satisfaction of the Engineer shall be retrained or replaced at once. Each crossing guard paid under this item must be a full-time crossing guard. If any worker performing services under this item is also assigned the task of directing construction equipment (as per attached Example #2, worker acting as a flagperson 'A') or any laborer tasks, then such worker shall be deemed to be subject to the provisions of Labor Law §220 Prevailing Wage Schedule and will not be paid for under this item.

6.52CG.4. MEASUREMENT. The quantity to be measured for payment shall be the number of person-hours of uniformed crossing guard service actually performed, as authorized by the Engineer. Laborers who are not full-time crossing guard will not be measured for payment as crossing guards under this or any other item. Each uniformed crossing guard shall be required to work a minimum of eight (8) hours a day and the Contractor will be given a minimum of twelve (12) hours advanced notice by the Engineer as to when to furnish a crossing guard.

6.52CG.5. PRICE TO COVER. The contract price per person-hour shall cover the cost of all labor, materials, equipment, and insurance necessary to employ a uniformed full-time crossing guard, and equip him/her with safety vests, hard hats, and signaling devices, including all other incidental costs necessary to control and detour traffic, as shown on the Contract Drawings, the Examples #1 and #2 on pages 395 and 396 (excluding worker acting as a flagperson "A" in Example #2), or as directed by the Engineer.

Payment for flagperson "A" in Example #2, shall be deemed to be included under other items of work, as appropriate.

Where there is no scheduled item for Crossing Guard, the cost of furnishing Crossing Guards as required shall be deemed included in the unit price bid for the Maintenance and Protection of Traffic item.

Payment will be made under:

Item No.	Item	Pay Unit
6.52 CG	CROSSING GUARD	PERSON-HOUR (P/HR)

[Added 02-24-2014]

16. Refer to Pages 480 and 481, **Subsection 7.13.2.(B) MAINTENANCE OF STREETS**, 4th paragraph, beginning with the words "The Contractor shall maintain the traveled way . . . ;"
Delete the 4th paragraph, in its entirety;
Substitute the following text:

"The Contractor shall maintain the traveled way in such a condition and conduct operations in such a manner that snow and ice may be readily removed by others as and when necessary, and in such a manner that proper drainage is provided for the melting of snow in the banks resulting from normal plowing. However, the Contractor will not be responsible for snow or ice removal on the pavement or traveled way opened for public usage, except within the limits of the work zone(s) which may include, but is not be limited to, stairways, promenades, esplanade areas, and sidewalk, including those fronting his office and the Engineer's field office all of which will be the responsibility of the Contractor."

3. NEW SECTIONS

SECTION 4.08 AFM
Concrete Curb, Mountable (23" Deep)

4.08AFM.1 DESCRIPTION. Mountable Concrete Curb shall be made of concrete and be constructed to the dimensions and at the locations shown on the Contract Drawings and where directed by the Engineer.

4.08AFM.2 MATERIALS AND METHODS. All materials and methods shall be done in accordance with the applicable requirement of the Section 4.08, except that the curb shall be mountable to provide a smooth transition between the sidewalk and the roadway as shown on the Contract Drawings. Shape of the curb and its construction shall be as shown on the Contract Drawings. The length and shape of transitional curbs between standard and mountable curbs shall be 1'-6" in length and of a shape approved by the Engineer.

4.08AFM.3. MEASUREMENT. The quantity to be measured for payment shall be the combined length of both mountable concrete curb and its transitional curb, constructed, complete, in place, as required, measured along the top of the exposed face of curb, and adjusted in accordance with Section 5.04 of the Standard Highway Specifications.

4.08AFM.4. PRICE TO COVER. The contract price per linear foot of Mountable Concrete Curb, of the depth specified, shall cover the cost of all labor, materials, equipment, insurance, and incidentals required to construct the curb complete in place, including, but not limited to, excavation (other than rock excavation) and backfilling, in full compliance with the requirements of the specifications, to furnish such samples for testing and to provide such testing equipment, laboratory space and facilities, as may be required, and the cost of maintaining the curb in good condition as specified in Section 5.05 of the Standard Highway Specifications.

When the proposed adjacent sidewalk is designated to be pigmented, no additional payment will be made for the cost of pigmenting the concrete curb to match the proposed adjacent pigmented sidewalk in color.

Payment will be made under:

Item No.	Item	Pay Unit
4.08 AFM	CONCRETE CURB, MOUNTABLE (23" DEEP)	L.F.

SECTION 4.08 AX
Curbs, Concrete (41" Deep)

4.08AX.1. INTENT. This section describes construction of Concrete Curb.

4.08AX.2. DESCRIPTION. Concrete Curb shall be made of concrete six (6") inches wide on top, eight (8") inches wide on the bottom, and forty-one (41") inches deep, measured on the back.

4.08AX.3. MATERIALS AND METHODS. All materials and methods shall comply with the requirements of Section 4.08, of the Standard Highway Specifications, except that backfilling behind the curb shall proceed simultaneously with the placement of Open Graded Stone Base in front of the curb, as shown on the Contract Drawings or as otherwise directed by the Engineer, to support and prevent movement of the curb.

4.08AX.4. MEASUREMENT. The quantity to be measured for payment shall be the length of concrete curb, constructed, complete, in place, as required, measured along the top of the exposed face of curb, and adjusted in accordance with Section 5.04 of the Standard Highway Specifications.

4.08AX.5. PRICE TO COVER. The contract price per linear foot of Concrete Curb, of the depth specified, shall cover the cost of all labor, materials, equipment, insurance, and incidentals required to construct the curb complete in place, including, but not limited to, excavation (other than rock excavation) and backfilling (not paid for under other items), in full compliance with the requirements of the specifications, to furnish such samples for testing and to provide such testing equipment, laboratory space and facilities, as may be required, and the cost of maintaining the curb in good condition as specified in Section 5.05 of the Standard Highway Specifications. However, the cost of excavation of roadway pavement in front of the curb line to the depth and width required to install the open graded stone base, under Item GI-2.07, will be paid for under Item 6.02 AAN.

Payment will be made under:

Item No.	Item	Pay Unit
4.08 AX	CONCRETE CURB (41" DEEP)	L.F.

SECTION 4.09 P

Curb, Concrete, Steel Faced (41" Deep)

4.09P.1 DESCRIPTION. Steel Faced Curb shall be constructed to the dimensions and at the locations shown on the Contract Drawings and where directed by the Engineer.

4.09P.2 MATERIALS AND METHODS. All materials and methods shall comply with the requirement of Section 4.09, of the Standard Highway Specifications, except that backfilling behind the curb shall proceed simultaneously with the placement of Open Graded Stone Base in front of the curb, as shown on the Contract Drawings or as otherwise directed by the Engineer, to support and prevent movement of the curb.

4.09P.3. MEASUREMENT. The quantity to be measured for payment shall be the number of linear feet of each type steel faced concrete curb constructed, complete, in place, as required, measured along the top of the exposed face of steel, and adjusted in accordance with Section 5.04 of the Standard Highway Specifications.

Curb constructed in accordance with New York City Department of Transportation's Standard Details of Construction Standard Drawing No. H-1015, as modified by the Contract Drawings, will be measured for payment under the appropriate Straight or Depressed Steel Faced Curb item.

Transitional steel faced concrete curb at driveways shall be measured for payment as Depressed Steel Faced Concrete Curb. All additional lengths of steel faced curb, outside of the depressed and transitional curb in driveways, will be measured for payment as straight steel faced concrete curb.

4.09P.4. PRICES TO COVER. The contract price per linear foot of steel faced concrete curb for each type of steel faced curb shall cover the cost of all labor, materials, equipment, insurance, and incidentals required to construct the curb complete in place, including, but not limited to, excavation (other than rock excavation) and backfilling, in full compliance with the requirements of the specifications, to furnish such samples for testing and to provide such testing equipment, laboratory space and facilities as may be required, and maintaining the curb in good condition as specified in Section 5.05 of the Standard Highway Specifications. However, the cost of excavation of roadway pavement in front of the curb line to the depth and width required to install the open graded stone base, under Item GI-2.07, will be paid for under Item 6.02 AAN.

Payment will be made under:

Item No.	Item	Pay Unit
4.09 PAT	STRAIGHT STEEL FACED CONCRETE CURB (41" DEEP)	L.F.
4.09 PBT	DEPRESSED STEEL FACED CONCRETE CURB (41" DEEP)	L.F.

**SECTION 6.47 PCS
PRECAST POROUS CONCRETE PAVING SLABS**

6.47PCS.1. DESCRIPTION. Under this Section, the Contractor shall be required to furnish and install a Precast Porous Concrete Paving Slab system in the roadway gutter adjacent to the curb and pedestrian sidewalk applications. The Precast Porous Concrete Paving Slab system shall include, but not be limited to, modular precast porous concrete paving slabs, edge restraints, an un-compacted/screed crushed stone leveling (base) layer, and a compacted crushed stone storage reservoir (subbase) course over a prepared subgrade, and may also include drainage pipe and impermeable liner, if shown on the Contract Drawings; all in accordance with the Contract Drawings, the specifications and directions of the Engineer.

6.47PCS.2. MATERIALS.

A. PRECAST POROUS CONCRETE PAVING SLAB

1. Manufacturer: Stormcrete™ Precast Porous Concrete Paving Slab System manufacturers shall include, but not be limited to, the following:

Porous Technologies, LLC
8 Blue Moon Drive
North Yarmouth, ME 04097
1-877-271-9055

Faddis Concrete Products
1805 Horseshoe Pike
Honey Brook, PA 19344
610-269-4685 Office

Pre-cast Concrete Products of Maine, Inc.
139 Main Street
P.O. Box 307
Topsham, ME 04086
800-696-8265

Camp Precast Concrete, Inc
78 Precast Road
Milton, VT 05468

2. Each precast porous concrete paving slab shall have permanent lifting points imbedded in the top of the slabs for ease of slab installation, maintenance, removal, and reinstallation; and, shall be reinforced with epoxy coated steel bars as per the Manufacturer's recommendations.
3. Typical dimensions of precast porous concrete slabs in plan shall be: 5 ft. by 8 ft. for full-sized slabs and shall be 5 ft. by 4 ft. for half-sized end slabs; 5 ft. by 4 ft. or 5 ft. by 2.5 ft., as shown on the Contract Drawings, for gutter sections; and 5 ft. by 1-1/2 ft. for bioswale gutter sections. Precast porous concrete slabs shall be 5 in. thick. Joints between adjacent rows of panels shall be staggered not less than 2 ft.
4. Average core compressive strength of at least 3,000 psi at 28 days per ASTM C42/C42M; and shall conform to ACI 522R-06.

5. Infiltration rate in accordance with ASTM C 1701/C 1701M; and shall conform to ACI 522R-06.
6. Concrete average unit weight shall be 125 lb/cf (+/- 5%) conforming to ACI 522R-06.
7. Slab units shall include a minimum of 2 lifting permanent lifting points for the 2.5 ft. x 5 ft. and 1.5 ft. x 5 ft. units, and a minimum 4 permanent lifting points for the 4 x 5 ft. and 5 x 8 ft. units.
8. Precast porous concrete slabs shall be cured by the manufacturer's approved methods. Slabs shall not be shipped until the porous concrete has achieved 85% of the minimum compressive strength.

B. EDGE RESTRAINT

1. Edge restraint installed at exterior sides of precast porous concrete paving slabs shall be as follows:
 - a. Expansion Joint Material and either: Precast Concrete, Cut Stone or Cast-in-Place Concrete to be furnished and installed under other contract items, as shown on the Contract Drawings.
 - b. Manufacturer: Expansion Joint Material shall be from a manufacturer listed in the current New York State Department of Transportation's approved list of Premoulded Resilient Joint Fillers. Precast Concrete, Cut Stone and Cast-in-Place edge restraint shall comply with the requirements of other contract items.
 - c. Material Standards for Expansion Joint Material shall comply with the requirements of Section 2.15, Type IV, in the New York City, Department of Transportation, Standard Highway Specification, as currently amended, and shall be either one-quarter (1/4") inch or one-half (1/2") inch thick, at the Contractor's option.

C. CRUSHED STONE RESERVOIR (SUBBASE) AND LEVELING COURSE

1. Use of screened rounded gravel is prohibited.
2. All crushed stone shall be double-washed and clean and free of all fines and debris.
3. Crushed stone reservoir (subbase) course shall be furnished and installed under Item 6.67 PCP-SR.
4. Un-compacted/screed crushed stone for leveling course shall be 3/8" (nominal) size conforming to ASTM C 33, Size Number 8 in TABLE 2 Grading Requirements for Coarse Aggregates. Thickness of un-compacted/ screed leveling course layer shall be three (3") inches, unless otherwise shown on the Contract Drawings.
5. Product Substitutions: Substitutions may be allowed for gradations of crushed stone storage reservoir (subbase) and leveling course. Compacted crushed stone for storage reservoir (subbase) shall have a minimum porosity of 0.40. All substitutions shall be as approved by the Engineer.

D. DRAINAGE PIPE (If shown on the Contract Drawings)

1. Drainage pipe shall be smooth-wall perforated polyvinyl chloride (PVC) plastic pipe,

coupling and fittings intended for use in underdrains. Perforated PVC underdrain pipe and fittings shall conform to AASHTO M278, Class PS46. Acceptance of the perforated PVC underdrain pipe will be based on the manufacturer's certification of compliance with these specifications.

E. IMPERMEABLE LINER (If shown on the Contract Drawings)

1. Impermeable liner will be accepted on the basis of the name brand and supplier being on the current New York State Department of Transportation (NYSDOT) approved list for Geomembranes (737-02).

6.47PCS.3. SUBMITTALS.

A. The Contractor shall furnish: Shop drawings, in accordance with the requirements of Subsection 1.06.13. of the NYC Department of Transportation, Standard Highway Specifications, showing the installation plan layout of each full and partial precast porous concrete paving slab complete with lifting points in surface, edge restraint detail(s), and geotextile manufacturer specification sheets, indicate materials outside perimeter and profiles/sections.

B. Test results performed by an independent testing laboratory of the following:

1. Particle-size analysis in accordance with ASTM C 136 for the crushed stone storage reservoir (subbase) and crushed stone choker (base) with source(s) of supply noted.
2. Infiltration rate in accordance with ASTM C 1701/C 1701M and bulk density for the precast porous concrete paving slabs conforming to ACI 522R-06.
3. Average Core Compressive strength in accordance with ASTM C42/C42M of cores obtained from the precast concrete paving slabs; conforming to ACI 522R-06.

6.47PCS.4. METHOD OF CONSTRUCTION.

A. CONTRACTOR'S QUALITY CONTROL PLAN

1. A Quality Control Plan shall be furnished by the Contractor at least five (5) working days prior to installing the precast porous concrete paving slab system for the Engineer's approval before commencing work. The plan shall include, but not be limited to, horizontal and vertical layout of the work, installation of edge restraint, fine grading of subgrades, installing impermeable liner (if shown on the Contract Drawings) in accordance with the respective manufacture's recommendations, placing and compacting crushed stone reservoir course (subbase) under Item 6.67 PCP-SR, place and screed crushed stone leveling course (base), and placing precast porous concrete paving slabs.
2. The installation contractor/subcontractor shall have documented experience with the successful installation of precast porous concrete paving slabs similar in complexity of this project.
3. The installation contractor/subcontractor shall use adequate forces to perform this work and shall indicate what equipment and work force he will be using.
4. Precast porous concrete paving slabs shall be visually inspected by the manufacturer for completeness, texture and consistency with installation drawings. A small amount of "skinning", not to exceed 5% of the top or bottom of slab surface areas, will be allowed.

5. A review of the Contractor's installation plan will be done in a pre-construction meeting with the manufacturer's representatives, paving slab installation contractor/subcontractor, the Resident Engineer, and the project's Design Engineer.

B. GENERAL

Before slab units are installed, the Contractor shall ensure that all materials and preparation for subbase and edge restraints are acceptable to installer and manufacturer of precast pervious concrete paving slabs. Preparation of subbase materials shall include proper compaction procedures, placement of impervious liner (if shown on the Contract Drawings), conditions of subgrade soils, and any other potential obstructions to a satisfactory installation as specified herein.

C. WEATHER CONSIDERATIONS

1. Do not place and/or compact crushed stone subbase in rain or snow, or on saturated or frozen subgrade.
2. Do not place and/or screed crushed stone base in rain or snow, or on saturated or frozen subbase.
3. Do not install precast porous concrete slabs in rain or snow, or on saturated or frozen base.

D. DELIVERY, HANDLING AND STORAGE

1. Coordinate delivery to not interfere with other construction and avoid delays.
2. Slabs shall be offloaded two at-a-time by forklift operated by a trained and experienced operator. Forklift must be equipped with 6-ft. long forks to safely offload slabs. Slabs delivered on pallets can be offloaded in its entirety.
3. Verify safe load capacity of forklift in accordance with Occupational Safety & Health Administration (OSHA) recommended practices. Only use forklifts with adequate safe load capacity.
4. Store slabs on level ground and propped with 4-in. by 4-in., minimum, timbers placed parallel to one another located directly beneath imbedded lifting points. Place timbers between each slab.
5. Slabs shall be stored in stacks not more than 6 slabs high.
6. Store slabs such that they are kept free from mud, dirt, grass cuttings, accumulation of foliage and debris.

E. STOCKPILING AND SAMPLING OF CRUSHED STONE RESERVOIR AND LEVELING COURSE AGGREGATE

All material shall be stockpiled, unless otherwise directed. Stockpile construction requirements, sampling, testing and acceptance/rejection procedures shall be as stipulated in the appropriate New York State Department of Transportation publication in affect at the time of advertisement.

No material shall be added to a stockpile after the stockpile has been sampled for approval. Only material from approved stockpiles shall be placed on the subgrade for this section. The presence of any oversize particles in the stockpile will be cause for rejection of the entire stockpile. No material shall be removed for use from any stockpile

until the stockpile has been sampled, tested, and approved in writing, by the Engineer, for placement on the subgrade. It shall be the duty of the Contractor to furnish suitable and approved excavating equipment for such sampling. Approval of a stockpile for placement on the subgrade shall not relieve, in any degree, the full responsibility of the Contractor to furnish, in its compacted position, a subbase course of select granular materials, the final condition of which conforms to all the requirements of the specifications for this section. In the event the Contractor shall have a plant or procedure resulting in subbase course material of uniform quality, at a rate satisfactory to the Engineer, and such that satisfactory samples for tests can be obtained, the requirement for stockpiling may be waived. Prior approval of the Engineer must be obtained and the work must be done in accordance with such conditions as may be imposed in the approval. Such waiver shall remain in force only so long as a satisfactory material is produced.

F. EXCAVATION AND EARTH SUBGRADE

Excavation shall be made to dimensions sufficient to accommodate placement of the crushed stone reservoir course material to be furnished and placed under Item 6.67 PCP-SR.

G. INFILTRATION SYSTEM SUBGRADE PREPARATION

1. Verify that the crushed stone reservoir course (under Item 6.67 PCP-SR) has been properly placed within the trench and compacted as approved and accepted by the Engineer.
2. The subgrade under the crushed stone reservoir course shall not be compacted or permanently covered with geotextile, unless otherwise shown on the Contract Drawings or directed by the Engineer.
3. Prepared subgrades shall not be subject to construction equipment traffic.
4. Where erosion has caused accumulation of sediment or ponding on the subgrade, remove sediment with light equipment and/or manually. Scarify the underlying soils to a minimum depth of 6 inches with a York type rake, or equivalent equipment.
5. Restore any subgrade areas damaged by erosion, ponding, or traffic compaction to design line and grades prior to installation of storage reservoir course (layer) under Item 6.67 PCP-SR.

H. INSTALLATION

1. Acceptance of Site Conditions:

The Contractor shall inspect, accept and document in writing to both the Engineer and the slab installation contractor/subcontractor that site conditions meet specifications for the following prior to installation of concrete paving slabs.

- a. Verify that subgrade is dry and relative compaction, surface tolerances and elevations conform to construction drawings and specified requirements.
 - b. Verify location, type, and elevations of edge restraints, utility structures, and manholes.
 - c. Do not proceed with installation of precast porous concrete paving system until site conditions are corrected by the Contractor or designated subcontractor.
2. General.
 - a. Any excess thickness of soil placed over the soil subgrade to trap sediment

transported by runoff from adjacent construction areas shall be removed before placement of geotextile when shown on the Contract Drawings and the storage reservoir layer.

- b. Keep areas where precast porous concrete paving slabs are to be installed free of sediment during the entire construction period. Geotextiles when shown on the Contract Drawings and storage reservoir crushed stone contaminated with sediment shall be removed and replaced with clean materials.
- c. Do not damage drainpipes, underdrains, observation wells, roadway boxes, manholes or any other utilities during installation. Report any damage immediately to the Engineer.

3. Geotextiles (Impermeable Liner)

- a. For infiltrating systems, place geotextile on prepared subgrade side slopes and extend it 1/2 foot under the bottom of the stone reservoir course, as shown on the Contract Drawings. Do not place geotextile under other areas of the infiltrating system.
- b. Secure geotextiles in place to prevent shifting, wrinkling or folding during placement of the crushed stone reservoir course, under Item 6.67 PCP-SR, and the leveling course, under this item 6.47 PCS.
- d. Overlap geotextile edges a minimum of 12 inches in the direction of drainage flow.

4. Crushed Stone Reservoir Course

- a. The crushed stone reservoir course shall be furnished and placed in accordance with the requirements of Section 6.67 PCP-SR.
- b. Compacted storage reservoir area shall not substantially exceed that which is covered by paving slabs by the end-of-day.

5. Un-compacted/Screed Crushed Stone Leveling Course Layer. Prior to placing the choker (base) layer, the subbase surface tolerance shall not be more than $\pm 3/8$ inch over a 10 ft. straight edge.

- a. Place and spread ASTM C 33 Size Number 8 crushed stone evenly over the screed rails to a thickness of 2 to 3 inches. Level surface of crushed stone with screed.
- b. Do not compact or disturb screed leveling layer.
- c. The surface tolerance of the screed leveling layer shall be + 1/4 inch under a 10 ft. straightedge.
- d. Screed leveling layer placed shall not substantially exceed that which is covered by paving slabs by the end-of-day.

I. EDGE RESTRAINT

- 1. Install edge restraints under other items as shown on the Contract Drawings.

J. PAVING SLAB PLACEMENT

- 1. Since the uniformity of the leveling (base) layer determines the differential settlement

between precast porous concrete paving slabs, the slab installer shall not be permitted to correct deficiencies in the leveling layer surface with additional stone, raking, compaction or by other similar means. The Contractor shall be required to check and accept the surface of the leveling layer, in writing to Engineer, prior to placing precast porous concrete paving slabs.

2. Lay slabs in pattern(s) shown on approved drawings.
3. Slabs shall only be lifted and placed using swivels and spreader chains. Chains, cables or slings should never be wrapped around slabs for lifting under any circumstances. Swivels shall be securely bolted snug but not over-tightened to avoid damage to the surface.
4. Place units hand tight without using metal hammers, pry bars or drift pins. Make horizontal adjustments to placement of laid slabs with wood wedges and levers, and rubber mallets as needed. Joint widths and lines shall be continually straightened as paving proceeds.
5. Unless otherwise recommended by the manufacturer of the precast porous concrete paving slabs, provide joints between slabs of 1/4" wide using spacers provided by the manufacturer of the precast porous concrete paving slabs. No joints shall exceed 1/4" in width.
6. Joints shall be left open. No stone or sand is to be placed in joints.
7. Joint lines shall not deviate more than $\pm 1/2$ inch over 50 ft. from string lines.
8. Fill gaps at the edges of the paved area with properly-sized end slabs.
9. Cut end slabs to be placed along the edge or corners with a masonry saw. Cut units shall be no shorter than 1/4 of a whole slab.
10. In pedestrian sidewalk applications, adjust bond pattern at pavement edges such that cutting of edge slabs is minimized. Do not expose cut slabs to vehicular traffic. Cut slabs at edges as indicated on the drawings.
11. Keep skid steer and forklift equipment off unrestrained paving slabs.
12. After an area is completely paved, set the precast porous concrete slabs into the screed crushed stone leveling course layer by trafficking with light rubber-tired equipment.
13. Remove and replace any slabs cracked or damaged during installation with new ones. Reset slabs not in conformance with specified installation tolerances
14. Check final surface elevations of set slabs for conformance to design drawings. The final surface tolerance from grade elevations shall not deviate more than $\pm 3/8$ inch under a 10 ft. straightedge.
15. The surface elevation of set slabs shall be flush with manholes or the top of utility structures.

K. PROTECTION

After work in this section is complete, the general contractor shall be responsible for protecting the precast porous paving slab system from damage and/or contamination with mud, dirt, grass cuttings, accumulation of foliage and debris. Use plastic caps to fill permanent lifting points to protect the holes from filling with dirt or debris.

6.47PCS.5. METHOD OF MEASUREMENT.

The quantity to be measured for payment shall be the area in square yards of each type of Precast Pervious Concrete Paving Slabs actually installed at the site to the satisfaction of the Engineer.

6.47PCS.6. PRICES TO COVER.

The contract price bid per square yard of each type of Precast Pervious Concrete Paving Slabs shall cover the cost of all labor, materials, plant, equipment, insurance, and incidentals required to furnish and install the precast pervious concrete paving slab units including, but not limited to, expansion joint edge restraints, drainage pipe and leveling course materials; all in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

The cost of saw cutting of pavement, excavation, furnishing and placing compacted crushed stone reservoir (subbase) course, geotextile, and restoration of street pavement, if required, shall be paid for separately under the appropriately scheduled items.

Payment will be made under:

Item No.	Item	Pay Unit
6.47 PCS5.0	PRECAST PERVIOUS CONCRETE PAVING SLABS (5' WIDE)	S.Y.
6.47 PCSG4.0	PRECAST PERVIOUS CONCRETE PAVING SLABS (4' WIDE)	S.Y.
6.47 PCSG2.5	PRECAST PERVIOUS CONCRETE PAVING SLABS (2-1/2' WIDE)	S.Y.
6.47 PCSBS1.5	PRECAST PERVIOUS CONCRETE PAVING SLABS (1-1/2' WIDE)	S.Y.

SECTION 6.67 PCP-SR

Crushed Stone Reservoir Course for
Precast Pervious Concrete Paving Slabs

1. Intent. This section describes the work to be done in connection with the construction of a crushed stone reservoir course subbase, of the thickness specified, for precast pervious concrete paving slabs to be furnished and installed under Item Nos. 6.47 PCSG4.0 and 6.47 PCSBS1.5.

2. Description. Under this section, the Contractor shall furnish, place and compact a crushed stone storage reservoir (subbase) course over a prepared subgrade, in conformity with the lines, grades, thickness and typical sections indicated on the Contract Drawings, or as determined by field conditions and ordered by the Engineer.

3. Materials.

All crushed stone material acceptable under this section shall be sound, hard, durable, unweathered stone freshly broken. The crushed stone shall be double-washed and clean and free of all fines and debris, not contaminated with clay, and free from any organic or other deleterious material.

The 3/4" (nominal) size crushed stone shall conform to ASTM C 33, Size Number 6 in TABLE 2 Grading Requirements for Coarse Aggregates.

Use of screened rounded gravel is prohibited.

Product Substitutions: Substitutions may be allowed for gradations of crushed stone storage reservoir (subbase). Compacted crushed stone for storage reservoir (subbase) shall have a minimum porosity of 0.40. All substitutions shall be as approved by the Engineer.

The quality of the stone particles shall be determined by the Magnesium Sulphate Soundness Test. The maximum percent loss at 4 cycles, by weight, shall be 20.

Prior to the placement of any material under this section, the Contractor shall submit a representative sample and test results to the Engineer and obtain approval, in writing.

Should, at any time during work and for any reason, the material fails to conform to the specified quality and gradation requirements, the Contractor shall, by the addition of selected acceptable material, and/or satisfactory manipulation, produce a material meeting the above requirements.

4. Methods.

(A) EXCAVATION AND EARTH SUBGRADE

Excavation shall be made to dimensions sufficient to accommodate placement of the crushed stone reservoir (subgrade) course material.

The earth subgrade, immediately before foundation material is placed on it, shall be compacted to at least 95% Modified Proctor relative compaction per ASTM D 1557, Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft³ (2,700 kN-m/m³

The earth subgrade, immediately before the crushed stone reservoir course material is placed on it, shall not be in a muddy or frozen condition and unsuitable material shall be removed and replaced with acceptable material.

(B) STOCKPILING AND SAMPLING

All material shall be stockpiled, unless otherwise directed. Stockpile construction requirements, sampling, testing and acceptance/rejection procedures shall be as stipulated in the appropriate New York State Department of Transportation publication in effect at the time of advertisement.

No material shall be added to a stockpile after the stockpile has been sampled for approval. Only material from approved stockpiles shall be placed on the subgrade for this section. The presence of any oversize particles in the stockpile will be cause for rejection of the entire stockpile. No material shall be removed for use from any stockpile until the stockpile has been sampled, tested, and approved in writing, by the Engineer, for placement on the subgrade. It shall be the duty of the Contractor to furnish suitable and approved excavating equipment for such sampling. Approval of a stockpile for placement on the subgrade shall not relieve, in any degree, the full responsibility of the Contractor to furnish, in its compacted position, a subbase course of select granular materials, the final condition of which conforms to all the requirements of the specifications for this section. In the event the Contractor shall have a plant or procedure resulting in subbase course material of uniform quality, at a rate satisfactory to the Engineer, and such that satisfactory samples for tests can be obtained, the requirement for stockpiling may be waived. Prior approval of the Engineer must be obtained and the work must be done in accordance with such conditions as may be imposed in the approval. Such waiver shall remain in force only so long as a satisfactory material is produced.

(C) PLACING

Do not place and/or compact crushed stone subbase in rain or snow, or on saturated or frozen subgrade.

Prior to placing the compacted crushed stone subgrade course, the soil subgrade surface shall not extend above the design elevation at any location and the impermeable liner material shall have been set in place on the prepared subgrade side slopes and extend a maximum of 1/2 foot under the bottom of the stone reservoir course, as shown on the Contract Drawings.

Place the 3/4" crushed stone over the prepared subgrade and spread and level evenly by raking to minimum thickness specified by the Engineer, or a minimum of 6 inches. Do not disturb prepared subgrade or shift, wrinkle or fold the impervious liner (if it is required to be placed under Item 6.47 PCS). Place crushed stone to protect the impervious liner while pulling formwork used to construct the adjacent roadway pavement. The crushed stone reservoir course material shall be spread in equal thickness layers. The spreading of any layer of this material shall be done with spreader equipment approved by the Engineer, and to such thickness that the maximum depth of the layer, after compaction, will be 6 inches. Spreading from piles dumped on the roadway will not be permitted. No segregation of large or fine particles will be allowed, but the material, as spread, shall be well graded, with no pockets of fine material. Water shall be added in such amounts as the Engineer may consider necessary to obtain satisfactory compaction.

Compact layers with an approved vibrating plate compactors or impact rammers until there is no visible movement, weaving or deflection in the surface of the crushed stone reservoir course.

The surface tolerance of the compacted crushed stone reservoir course shall be + 3/4 in. under a 10 ft. straightedge.

Compacted storage reservoir area shall not substantially exceed that which is covered by paving slabs by the end-of-day.

The Contractor shall assume full responsibility for any contamination and/or degradation of any part of this base during construction and shall, at his own expense, remove any and all portions of this base which do not conform to the requirements of these specifications and replace these portions with specified material.

5. Measurement. The quantity to be measured for payment shall be the number of cubic yards of compacted crushed stone reservoir course material placed as shown on the Contract Drawings or as ordered by the Engineer in accordance with the specifications.

6. Price to Cover. The contract price bid per cubic yard of Crushed Stone Reservoir Course shall cover the cost of all labor, materials, equipment, and necessary incidentals required and completing the work in accordance with the plans, the specifications and the directions of the Engineer. No direct payment will be made for any losses of material which may result from shrinkage,

compaction, waste, overflow, erosion, leakage, or any other causes; the cost of such losses shall be included in the price bid for this item.

Furnished and installed the Porous Concrete Paving Slabs along with its leveling course and impermeable liner material will be paid for separately under Item No. 6.47 PCS.

Payment will be made under:

Item No.	Item	Pay Unit
6.67 PCP-SR	CRUSHED STONE RESERVOIR COURSE FOR PRECAST PERVIOUS CONCRETE PAVING SLABS	C.Y.

**SECTION GI-2.03
CONCRETE APRON****GI-2.03.1. INTENT**

This section describes concrete aprons. The Contractor shall construct concrete aprons of the types shown on the Standards for Green Infrastructure.

GI-2.03.2. KIND

Concrete aprons shall be either precast concrete or cast-in-place.

GI-2.03.3. MATERIALS

(A) All materials required shall comply with the requirements of **NYC Department of Transportation (DOT) Standard Highway Specifications, Subsections 4.05.3, 4.05.4 and 4.05.5**, and ASTM C1262.

(B) Unless otherwise specified grout shall be Cement Grout composed of neat cement and water.

GI-2.03.3. PHYSICAL REQUIREMENTS

(A) The minimum acceptable average compressive strength of five-apron samples is 4000 psi, with no individual apron less than 3500 psi. The maximum acceptable average freeze/thaw loss of five- block samples, subjected to 42 freeze/thaw cycles in a 3% NaCl solution, shall not exceed 1.0%, with no individual sample exceeding 1.5%.

GI-2.03.4. MATERIALS

(A) All materials as required shall comply with the requirements of the NYC Department of Transportation (DOT) Standard Highway Specifications, **Subsection 4.05.3**.

GI-2.03.5. CONSTRUCTION METHODS

(A) All equipment and methods of construction shall comply with the requirements of the NYC DOT Standard Highway Specifications, **Subsections 4.05.4. and 4.05.5**, with the following modifications and additions:

(1) At each bioswale there shall be a pair of concrete aprons consisting of one inlet type and one outlet type concrete apron, unless otherwise directed. For installations in existing pavement, the Contractor shall be required to first full-depth saw cut and remove the pavement to the dimensions of the aprons as shown on the Contract Drawings and directed by the Engineer. If sawcutting is not sufficient to meet the necessary grades for curbs and or proper drainage, the Contractor shall excavate the necessary pavement to achieve adequate transition to the inlet. The Contractor shall then backfill the excavated area to insure that the concrete apron will be placed to its proper elevation with foundation material which shall comply with the requirements of the NYC DOT Standard Highway Specifications, **Subsection 4.05.5.(C)**.

The earth subgrade, immediately before foundation material is placed on it, shall be compacted to a minimum of 95 percent of Standard Proctor Maximum Density, smooth, parallel to and at the required depth below the finished concrete apron surface and be dampened with water sufficient only to be absorbed by the subgrade. The subgrade shall not be in a muddy or frozen condition and unsuitable material shall be removed and replaced with acceptable material thoroughly compacted.

Fill or backfill material shall then be wetted to the optimum moisture content, based on a laboratory 5 point Proctor density test, and thoroughly compacted using an approved plate compactor. Compaction of foundation material shall range between 90% and 95% of the Standard Proctor Maximum Density, as directed by the Engineer, depending upon material used. Unsatisfactory subgrade material shall be removed and replaced with acceptable material thoroughly compacted to a minimum of 95% of Standard Proctor Maximum Density. The top surface of the foundation material shall be parallel to the finished grade and at a distance below the grade equal to the specified thickness of concrete.

(2) Following the placing and spreading of concrete, it shall be struck-off and finished to conform to the cross-sections shown on the Contract Drawings. The final finish shall be made by brooming after the water sheen has disappeared as per the requirements for Bus Stop Pavements.

(3) Where the Contractor chooses to precast the concrete apron, it shall be constructed in accordance with the following requirements:

Fabrication

a. Precast concrete aprons shall be fabricated to conform to the shapes and sizes shown on the Contract Drawings.

b. The Contractor shall provide the Engineer with shop drawings and detailed construction procedures for the aprons. Shop drawings shall show the form dimensions and location and type of reinforcement in the precast concrete aprons. The drawings shall be delivered to the Engineer for approval ten (10) working days before fabrication is to begin. No work shall begin until the drawings are approved.

c. The tolerance on placement of reinforcing steel in the apron shall be ± 1 inch. The chairs, spacers or other devices used to maintain the reinforcement in position shall have rust resistant tips. The cost of any steel reinforcement required to transport the precast aprons shall be deemed included in the cost of these concrete apron items.

d. Concrete shall be consolidated in the forms by internal vibrators. Exposed surfaces shall be free from objectionable imperfections, such as honeycomb and air voids as determined by the Engineer. If air voids collect at the interface of the concrete and forms, the forms shall be tapped on the outside with rubber mallets or similar devices to displace the entrapped air.

Curing

a. The precast aprons may be cured as per the requirements for cast in place concrete aprons.

b. If the precast concrete aprons are steam cured, the aprons shall be cured in an enclosure free from outside drafts, and cured in a moist atmosphere. The temperature shall be maintained at a temperature between 125 degrees and 160 degrees F. by the injection of steam for a period of not less than 12 hours. Steam curing shall not begin in less than 2 hours from the time that the last concrete was placed. Care shall be taken by the Contractor to prevent localized "hot spots" caused by the steam lines. A continuous temperature time recorder is required for each enclosure. The temperature of the curing atmosphere for any method shall not be increased or decreased at a greater rate than 40 degrees F. per hour.

Repair

a. Where approved by the Engineer, occasional imperfections in manufacture or those caused by mishandling may be repaired. The repairs shall be properly finished and cured. The color of the repaired area shall match as closely as possible with the rest of the apron color. Repairs may be made with a mixture of sand and cement, and shall be made to the satisfaction of the Engineer.

(B) Apron dimensions shall be as required in the contract documents. Dimensions shall not vary by more than 1/4 inch from those specified. Aprons shall be sound and free from cracks or other defects that would interfere with their proper placement or performance.

(C) Basis of Acceptance - The precast apron shall be accepted at the job site based on the following:

(1) The manufacturer's name must appear on the N.Y.S. Department of Transportation's Approved List of "Precast Concrete Manufacturers Approved for QC/QA Production" for either Product Group 1, 2, or 4.

(2) A manufacturer's certification.

- (3) An acceptable product evaluation made by the Engineer.
- (4) Prior to installation, the subgrade must be compacted and carefully graded such that the concrete apron slab will be seated flush on the subgrade, at the proper elevation and slope as shown on the Contract Drawings.
- (5) Precast concrete apron slabs shall be set in place using a non-shrink grout conforming to the requirements of **Section 3.06** in the NYCDOT Standard Highway Specifications.

GI-2.03.6. MEASUREMENT

The quantity to be measured for payment shall be the number of cubic feet of concrete used in concrete aprons constructed at the site to the satisfaction of the Engineer, measured in place to the nearest tenth of a cubic foot.

GI-2.03.7. PRICE TO COVER

The contract price bid per cubic foot of concrete apron shall cover the cost of all labor, materials, equipment, insurance, and incidentals necessary to complete the work including, but not limited to, sawcutting and excavation of existing pavement, finishing and placing foundation material, concrete, steel reinforcement, grout, and restoration of any disturbed adjacent pavement, as may be required, to satisfactorily complete the work; preparation and submission of shop drawings and concrete mix design criteria; supports, forms, joint filler, and joint sealer; curing; damping of the subgrade; to furnish samples for testing; and to maintain the concrete aprons in good condition as specified in **Section 5.05** of the NYC DOT Standard Highway Specifications; all in accordance with the Contract Drawings, the specifications and the directions of the Engineer

Payment will be made under:

Item No.	Item	Pay Unit
GI-2.03	CONCRETE APRON	C.F.

**SECTION GI-2.05
STONE STRIP BED**

GI- 2.05.1. INTENT

This section describes the stone strip bed with and without epoxy bonding. The Contractor shall install the stone strip bed, with and without epoxy coating, of the size, depth and limits as shown on the Standards for Green Infrastructure.

GI- 2.05.2. MATERIALS

- (A) Crushed stone shall conform to the NYCDOT Standard Highway Specification **Section 2.02**, Type 1 - Broken Stone, Grade B, and shall be washed and conform to the following gradation:

Percentage of Dry Weight

Sieve Size	Passing Designated Sieve Size
2"	100
1.5"	25-50
1"	0-10

- (B) Epoxy bonding agent shall consist of an approved exterior grade industrial type, clear, non-toxic, UV-stable bonding material.

GI-2.05.3. RELATED SECTIONS

GI-2.06 – L-Shaped Edging

GI-2.05.4. CONSTRUCTION METHODS

Stone Strip shall be placed as per Contract Drawings. Then Epoxy Bonding Agent shall be applied to Stone Strip in places where indicated on the Contract Drawings.

Epoxy bonding agent is to be spray on clean and dry stone surfaces to sufficiently bond top layer of stone but at a rate no less than recommended by the manufacturer. Do not install if rain is expected within 12 hours. Do not cover area with plastic. Install when outdoor temperature is 50 degrees or above and will not drop below 50 degrees F. for at least 12 hours. Allow 24 hours to cure. If the temperature is around 50 - 50 degrees F. then it may take up to 48 hours to cure.

SUBMITTALS:

Prior to the procurement of epoxy bonding agent, the following information and samples are required for review and approval for each source:

1. Product Data: Submit product data provided by manufacturer.
2. Submit a copy of the MSDS for Epoxy Bonding Agent.

GI-2.05.4. MEAUREMENT AND PAYMENT

The quantity of STONE STRIP BED to be measured for payment shall be the number of cubic yards of crushed stone incorporated in the finished work, measured in place, to the satisfaction of the Engineer.

The contract price bid per cubic yard of STONE STRIP BED shall cover the cost of all labor, materials, equipment, insurance, and incidentals necessary to furnish and place an approved crushed stone bed at the site to complete the work and shall include, but not be limited to, furnishing and applying epoxy bonding material where specified; all in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

Payment will be made under:

Item No.	Item	Pay Unit
GI-2.05	STONE STRIP BED	C.Y.

**SECTION GI-2.06
L-SHAPED EDGING**

GI-2.06.1. INTENT

This section describes the landscape L-shaped edging adjacent to the stone strip bed in bioswales.

GI-2.06.2. KIND

Edging shall consist of an L-shaped rigid PVC or aluminum edge restraint product, a minimum of six (6) inches high by five (5) inches wide, in up to ten (10) foot lengths. The thickness of the material shall be a minimum of 0.15 inches for PVC or 0.115" for aluminum. Drainage holes flush with the horizontal leg shall be present on both the sides of the L-shaped edging. Nine (9) inch minimum length stakes shall be installed a minimum of every two (2) feet on center. The color of the edging shall be black.

Edging shall be Teco-Edg Specialty Edge Restraint manufactured by Oly Ola Edgings, Inc. in Villa Park, IL; GeoEdge Aluminum Green Building Edging manufactured by Permaloc Corporation in Holland, MI; or an approved equivalent edging. Submit product cut sheets as shop drawings for the Engineer's approval prior to ordering the product.

GI-2.06.3. DESCRIPTION

Edging shall be installed to support and contain the stone strip bed in bioswales where required, as shown on Contract Drawings and in accordance with the specifications and the directions of the Engineer.

GI-2.06.4. CONSTRUCTION METHODS

Edging shall be installed true to line and grade in accordance with the drawings and as directed by the Engineer. The foot of the "L" of the edging shall face towards the curb, and the top of the "L" shall be at the concrete apron inlet and outlet elevations and in line with top of curb between these locations and at the ends of the Right-of-Way Bioswale (R.O.W.B.). The stone strip bed, under Item GI-2.05, shall then be placed on top of the edging as per the Contract Drawings and as directed by the Engineer.

GI-2.06.5. RELATED SPECIFICATIONS

Section GI-2.05 – Stone Strip Bed

GI-2.06.6. MEASUREMENT AND PAYMENT

The quantity of L-Shaped Edging to be measured for payment shall be the number of linear feet of edging incorporated in the finished work, to the satisfaction of the Engineer.

The contract price bid per linear foot of L-Shaped Edging shall cover the cost of all labor, materials, equipment, insurance, and incidentals necessary to furnish and place approved "L" shaped Edging at the site to complete the work including, but not limited to, furnishing and installing 9" stakes, "H" clips and caps for joining lengths of edging; all in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

Payment will be made under:

Item No.	Item	Pay Unit
GI-2.06	L-SHAPED EDGING	L.F.

SECTION GI-2.07
OPEN GRADED STONE BASE

GI-2.07.1. INTENT

This section describes the open graded stone base.

GI-2.07.2. KIND

All materials for this work shall comply with the latest New York State Department of Transportation, Standard Specifications, Coarse Aggregate, **Section 703.02**. The material shall be #5 crushed stone (or larger) that is washed and sorted between 3" and 4".

GI-2.07.3. DESCRIPTION

The thicknesses and locations of the "open-graded stone base" shall be as shown on the Standards for Green Infrastructure or as determined by field conditions and ordered by the Engineer.

GI-2.07.4. CONSTRUCTION METHODS

(A) Prior to the placement of any stone base material, the Contractor shall submit a representative sample of the open graded stone base material to the Engineer for his written approval.

(B) Prior to backfilling with the Open Graded Stone Base material, the subgrade of the bioswale footprint shall be scarified to ensure no compaction of the subgrade and the sides of the bioswale excavation shall be prepared by removing any sharp objects which may tear or damage the geotextile fabric, or the HDPE Barrier, to be furnished and installed under Item No. GI-2.08, where directed, and Item No. GI-2.09, around the sides and top of the open graded stone base as shown on the Contract Drawings and as directed by the Engineer. The Contractor shall be required to anchor the geotextile fabric in place around the sides of the excavation and the HDPE Barrier in place where directed, in a manner approved by the Engineer, until the fabric and the HDPE Barrier is supported by the open graded stone base. Then after the open graded stone base has been placed to the elevation shown on the Contract Drawings, the geotextile shall be overlapped on top of the stone base by at least thirty-six (36") inches. If the geotextile is damaged during installation, the rupture shall be removed and the damaged area shall be covered with a patch of new fabric which will overlap the undamaged fabric at least six (6") inches in all directions. All repaired fabric surface costs will be deemed part of the price bid.

(C) The open graded stone base material shall be placed by gravity with no additional compaction, except for the application of water. Spreading from piles dumped on the roadway or sidewalk will not be permitted. No segregation of large or fine particles will be allowed, but the material, as spread, shall be well graded, with no pockets of fine material. Water shall then be added in such amounts as the Engineer may consider necessary to obtain satisfactory compaction.

(D) The Contractor shall assume full responsibility for any contamination and/or degradation of any part of this base during construction and shall, at his own expense, remove any and all portions of this base which do not conform to the requirements of these specifications and replace these portions with specified material.

GI-2.07.5. MEASUREMENT

The quantity of OPEN GRADED STONE BASE to be measured for payment shall be the number of cubic yards of open graded stone incorporated in the finished work, measured in vehicles used for delivery at the project site(s), to the satisfaction of the Engineer.

GI-2.07.6. PRICE TO COVER

The contract price bid per cubic yard of OPEN GRADED STONE BASE shall cover the cost of all labor, materials, equipment, insurance, and necessary incidentals required and completing the work, including, but not limited to, furnishing and laying open graded stone, and furnishing and applying water; all in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

Payment for furnishing and installing **GEOTEXTILE FABRIC** will be made under Item No. GI-2.09.

Payment will be made under:

Item No.	Item	Pay Unit
GI-2.07	OPEN GRADED STONE BASE	C.Y.

**SECTION GI-2.08
HDPE BARRIER****GI-2.08.1. INTENT**

This section describes the HDPE BARRIER. The purpose of the HDPE Barrier is to provide an impermeable layer which does not allow water to pass through it. The HDPE barrier shall be installed where required, as shown on Contract Drawings and in accordance with the specifications and the directions of the Engineer.

GI-2.08.2. KIND

The HDPE barrier shall consist of High Density Polyethylene (HDPE) Geomembrane sheets not less than 60 mil thickness, meeting or exceeding Geosynthetic Research Institute (GRI) Test Method GM13.

GI-2.08.3. SUBMITTALS

(A) The Contractor, prior to the start of work, shall submit to the Engineer for approval samples of the geomembrane sheet in accordance with the requirements of Section 1.06.31, in the NYCDOT Standard Highway Specifications.

(B) Certified material test reports showing that the geomembrane meets the specified requirements shall be submitted for each shipment and identified with specific lots prior to installing materials. Material test reports shall meet the requirements of ASTM and GRI test method GRI GM 13.

(C) The manufacturer shall submit certified test data to cover each shipment of the material.

GI-2.08.4. CHEMICAL AND PHYSICAL REQUIREMENTS

(A) HDPE geomembrane sheets supplied for the project shall meet or exceed all required physical characteristics as defined below:

1. HDPE Geomembrane - High quality, high density polyethylene (HDPE) geomembrane specially formulated with virgin formulated polyethylene.
2. Thickness - Thickness shall not be less than (minimum average) 60 mil, measured in accordance with ASTM D5199.
3. Density - The Density shall not be less than 59 lb/ft³, measured in accordance with ASTM D1505.
4. Tear resistance - Tear resistance shall not less than 40 lb., measured in accordance with ASTM D1004.
5. Puncture Resistance - Puncture Resistance shall not be less than 100 lb., measured in accordance with ASTM D4833.
6. The HDPE Barrier shall be strong enough to resist both rot and insects.

GI-2.08.5. CONSTRUCTION METHODS

(A) Delivery - Deliver materials to site in manufacturer's original, unopened packaging, with labels clearly identifying product name and manufacturer.

(B) Storage - Store materials in a clean, dry area in accordance with manufacturer's instructions.

(C) Handling - Protect materials during handling and installation to prevent damage.

(D) Prior to the installation of the HDPE Barrier, the Contractor shall excavate the Bioswale area to the satisfaction of the Engineer.

(E) Install HDPE Barrier as indicated on the Standards for Green Infrastructure.

(F) The HDPE Barrier shall be placed in one piece directly on the vertical face of the excavation. No splicing will be permitted.

(G) No equipment, materials or machinery shall be placed on or be transported over exposed HDPE Barrier.

(H) The HDPE Barrier shall be placed as shown on the Contract Drawings and as directed by the Engineer. Care shall be taken in the placement of backfill under other items so as to prevent dislocation of the HDPE Barrier. If the HDPE Barrier is ruptured during installation, the rupture shall be covered with a patch of new HDPE Barrier that will overlap and adhered to the undamaged area by at least six (6") inches in all directions using a standard HDPE joining method to restore its waterproof integrity. No additional payment will be made for the repair.

GI-2.08.6. MEASUREMENT

The quantity of HDPE Barrier to be measured for payment shall be the number of square feet of geomembrane installed at the site to the satisfaction of the Engineer. Measurement shall be made to the nearest square foot installed at each bioswale.

GI-2.08.7. PRICE TO COVER

The contract price for HDPE Barrier shall be a unit price bid per square foot and shall cover the cost of all labor, material, equipment, insurance, and incidentals necessary to furnish, handle, store, and install HDPE Barrier sheets, including, but not limited to, sheeting and bracing, cutting holes in the sheets for utilities, furnishing and installing stainless steel anchor bars and fastenings at the top of the sheet and caulking bead along the top seam of the HDPE membrane and the concrete curb or header; all in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

Payment will be made under:

Item No.	Item	Pay Unit
GI-2.08	HDPE BARRIER	S.F.

**SECTION GI-2.09
GEOTEXTILE FABRIC**

GI-2.09.1. INTENT

This section describes geotextile fabric. The Contractor shall furnish and install non-woven geotextile - drainage fabric in accordance with the Standards for Green Infrastructure and as directed by the Engineer.

GI-2.09.2. KIND

Geotextile fabric shall comply with the requirements specified in **Subsections GI-2.09.4. and GI-2.09.5.**, below.

GI-2.09.3. SUBMITTALS

All submittals shall be submitted for review and approval prior to purchase and shall be made in accordance with the requirements of the NYCDOT Standard Highway Specifications, General Conditions, **Subsection 1.06.31.**

(B) Samples: The Contractor shall furnish two (2) labeled samples of the geotextiles intended for use in the work for approval and the Engineer's use. The label shall include the manufacturer's product name, the type of fabric, and the weight of grade of the material. Geotextiles used in the work shall conform to the approved samples.

(C) Certified laboratory test results meeting or exceeding the below criteria shall be supplied with the submittal information.

GI-2.09.4. CHEMICAL AND PHYSICAL REQUIREMENTS

(A) Drainage application is defined as a soil to geotextile system that allows for long-term, adequate liquid flow normal to the geotextile with limited soil loss across the plane of the geotextile.

(B) Fibers used in the manufacture of drainage geotextiles, and the threads used in joining geotextiles by sewing, shall consist of long-chain, synthetic polymers, composed of at least 95 percent by weight polyolefins, polyesters, or polyamides. They shall be formed into a stable network such that the filaments or yarns retain their dimensional stability relative to each other, including selvages. The geotextile shall have no tears or defects which adversely alter its physical properties. Geotextiles used in drainage applications shall conform to the following properties for Non-Woven Geotextile Drainage:

Property	ASTM Test	Requirements
Structure		Non-Woven
Elongation	ASTM D4595	≥ 50%
Grab Strength (Min.)	ASTM D4632	700N (157 LBS)
Tear Strength (Min.)	ASTM D4533	250N (56 LBS)
Puncture Strength (Min.)	ASTM D4833	250N (56 LBS)
Permittivity (Min.)	ASTM D4491	0.21 / sec.
Apparent Opening Size (Max.)	ASTM D4751	0.25 mm (0.0098 inch) Std. No. 60 sieve

GI-2.09.5. BRAND

(A) Geotextiles shall be as manufactured by Advanced Drainage Systems, Inc., Hillard, OH; by Carthage Mills, Cincinnati, OH; by Mirafi, Inc., Charlotte, NC; or by another approved manufacturer.

GI-2.09.6. CONSTRUCTION METHODS

(A) Each geotextile roll shall be wrapped with a material that will protect the geotextile, including the ends of the roll, from damage due to shipment, water, sunlight, and contaminants. The protective wrapping shall be maintained during periods of shipment and storage. During storage, geotextile rolls shall be elevated off the ground and adequately covered to protect them from the following: site construction damage, precipitation, extended ultraviolet radiation including sunlight, chemicals that are strong acids or strong bases, and any environmental condition that may damage the physical property values of the geotextile.

(B) Prior to installation of geotextile, the ground shall be prepared by removing stumps and other organic material, along with any large boulders and sharp objects which may tear or damage the fabric. Install geotextile at elevations and alignments as indicated on the drawings or as directed by the Engineer. The drainage geotextile shall be placed loosely with no wrinkles or folds. Care will be taken to place the geotextile in intimate contact with the soil so that no void spaces occur between the geotextile and trench or ground. Where the geotextile is to be installed in a trench, the geotextile shall be overlapped at the top of the trench, twelve (12) inches or the full width of the trench, whichever is less. If the geotextile is damaged during installation, the rupture shall be removed and the damaged area shall be covered with a patch of new fabric which will overlap the undamaged fabric at least six (6) inches in all directions. All repaired fabric surface costs will be deemed part of the price bid.

Overlaying material shall be place within a period of two (2) weeks whether the fabric is subject to damage from sunlight or not.

GI-2.09.7. MEASUREMENT

The quantity of GEOTEXTILE FABRIC to be measured for payment shall be the number of SQUARE YARDS actually installed at the site, in its final position, to the satisfaction of the Engineer. No quantity will be included for material used for repair of tears or for material used to provide overlaps.

GI-2.09.8. PRICE TO COVER

The unit price bid per SQUARE YARD for GEOTEXTILE FABRIC shall cover the cost of furnishing all labor, material, equipment, insurance, submittals, soil testing, if necessary, and incidental expenses required to complete the work; all in accordance with the Contract Drawings, the specifications and directions of the Engineer.

Payment for Excavation, Open Graded Stone Base, Engineered Soil, Gabions, and backfill or clean borrowed fill shall be paid for separately under other contract items as appropriate.

Payment will be made under:

Item No.	Item	Pay Unit
GI-2.09	GEOTEXTILE FABRIC	S.Y.

SECTION GI-2.10
STEEL TREE PIT GUARDS

GI-2.10.1 INTENT

This section describes steel tree pit guards. The Contractor shall furnish and install Steel Tree Pit Guards in accordance with the Standards for Green Infrastructure, and as directed by the Engineer.

GI-2.10.2 KIND

Steel tree pit guards shall conform to Specifications C1015 of the American Iron and Steel Institute (ANSI).

GI-2.10.3 SUBMITTALS

(A) The Contractor shall submit for the approval of the Engineer finished samples of parts of the tree pit guards. The workmanship and finish of the final product shall be equal to the approved samples. Also, the Contractor shall submit detailed shop drawings of tree pit guards for the approval of the Engineer.

(B) Paint Substitution: A written request for paint substitution must be submitted to the Engineer for approval. Contractor shall submit this request, along with manufacturer's data sheets for approval, a minimum of two weeks prior to the intended date of paint application. All paint substitutes must be approved in writing prior to use.

GI-2.10.4. CHEMICAL AND PHYSICAL REQUIREMENTS

Steel Tree Pit Guards shall be constructed of bars, posts, and rails of the sizes shown on the plans. All material shall conform to Specifications C1015 of the A.I.S.I.

GI-2.10.5. MATERIALS

(A) All metal for the steel tree pit guards shall conform to Specifications C1015 of the A.I.S.I.

(B) Concrete for encasement of the tree guard posts shall comply with the requirement of NYC Department of Transportation Standard Highway Specifications, Section 3.05, Class B-32, Type IA.

GI-2.10.6. CONSTRUCTION METHODS

(A) After the open graded stone base has been furnished and placed under Item GI-2.07 within the excavated bioswale area, the Contractor shall set in place the round column forms used to embed the spikes of the steel tree pit guards in concrete. The round column forms shall be set on top of the open graded stone base and partially embedded in the Engineered Soil under Item GI-2.13, as shown on the Contract Drawings, prior to embedding the steel spikes for encasement in concrete.

(B) Steel Tree Pit Guards shall be fabricated in strict accordance with the plans and approved shop drawings. Posts, pickets, bars, and rails shall be formed into panels of the shapes shown on the Contract Drawings. Joints shall be completely welded with welds of proper size and shape. All welds shall be ground smooth to a neat finish. Connections shall be provided as indicated on the plans. Welding shall conform to current industry requirements for this type of application.

(C) Steel spikes shall be concrete encased as shown on the Contract Drawings.

(D) Posts and pickets shall, in all cases, be set truly vertical. Rails and bars shall be parallel to grade as shown on the Contract Drawings. Panels shall be curved as required by the work. Dimensions of individual tree pit guards may vary as required by existing site conditions, in accordance with the directions of the Engineer.

(E) Steel tree pit guards shall receive three (3) shop applied coats of paint. A field applied touch-up coat shall be applied at the discretion of the Engineer. Immediately prior to painting, all surfaces of framework shall be thoroughly cleaned free of debris. All surfaces that are rust free shall be treated in accordance with SP-1, Solvent Cleaning. Treatment shall be performed with a solvent such as mineral spirits, xylol, or turpentine to remove all dirt, grease, and foreign matter. Surfaces that show evidence of scale and rust shall be cleaned in accordance with SP-2, Hand Tool Cleaning, a method generally confined to wire brushes, sandpaper, hand scrapers, or hand impact tools or SP-3, Power Tool Cleaning,

a method generally confined to power wire brushes, impact tools, power sanders, and grinders in order to achieve a sound substrate. After the steel tree pit guards have been cleaned and prepared, they shall be painted as follows:

- (1) First Coat (Shop Applied): Sherwin Williams # E41N1 Metal Primer, Brown, or approved equivalent. Primer is an alkyd oil, flat finish coating having a dry film thickness of 3 to 4 mils. Paint requires twenty four (24) hours drying time before recoating. Performance shall meet or exceed the standards of Federal Specification TT-P-86H.
- (2) Second Coat (Shop Applied): Sherwin Williams High Solids Alkyd Metal Primer, B50 Series, Reddish Brown, or approved equivalent. Primer is an alkyd, low luster coating having a dry film thickness of 3-5 mils. Paint requires four (4) hours drying time before recoating (with alkyds)
- (3) Third Coat (Shop Applied): Sherwin Williams Silicone Alkyd Low VOC B56Z Black, or approved equivalent. Topcoat is a silicon alkyd, high gloss coating having a dry film thickness of 2 - 4 mils. Paint requires sixteen (16) hours drying time @ 45° F; eight (8) hours @ 77°F. (tack free).

(F) Alternative paint manufacturers shall be Devoe and Reynolds, Co.; Pratt and Lambert, Inc.; Pittsburgh Plate Glass Company; Sapolin; or other approved manufacturer. All paints used shall be compatible and the product of the same manufacturer.

(G) All paints shall be applied when ambient air temperature is forty-five (45) degrees F. and rising and when surfaces to be painted are moisture free. No painting will be allowed below the minimum ambient air temperature. In addition, no painting will be allowed below the temperature at which moisture will condense on surfaces. Refer to the Dew Point Chart at the end of this section to find the minimum allowed moisture free temperature.

DEW POINT CALCULATION CHART (FAHRENHEIT)
AT 30 Hg BAROMETRIC PRESSURE

		Ambient Air Temperature °F										
		20	30	40	50	60	70	80	90	100	110	120
% Relative Humidity	90	18	28	37	47	57	67	77	87	97	107	117
	85	17	26	36	45	55	65	75	84	95	104	113
	80	16	25	34	44	54	63	73	82	93	102	110
	75	15	24	33	42	52	62	71	80	91	100	108
	70	13	22	31	40	50	60	68	78	88	96	105
	65	12	20	29	38	47	57	66	76	85	93	103
	60	11	19	27	36	45	55	64	73	83	92	101
	55	9	17	25	34	43	53	61	70	80	89	98
	50	8	15	23	31	40	50	59	67	77	86	94
	45	4	13	21	29	37	47	56	64	73	82	91
	40	1	11	18	26	35	43	52	61	69	78	87
	35	-2	6	16	23	31	40	48	57	65	74	83
30	-6	4	13	20	28	36	44	52	61	69	77	

Dew Point: The temperature at which moisture will condense on the surface. No coatings should be applied unless the surface temperature is a minimum of 5°F above this point. Temperature must be maintained during curing.

Example: If air temperature is 70°F and relative humidity is 65%, the dewpoint is 57°F. No coating should be applied unless the surface temperature is 62°F minimum.

(H) After placement of the open graded stone base, under Item No. GI-2.07 as shown on the Contract Drawings, the Contractor shall set and support the fence in place at the proper lines and grade for encasement of the posts in concrete on top of the stone base as shown on the Contract Drawings. The lowest portion of the steel band at the bottom of all side rails shall be set one (1") inch above the

finished grade of the adjacent sidewalk. Any guards not set plumb and true to line and grade shall be removed and replaced at the Contractor's expense.

GI-2.10.7 MEASUREMENT

The quantity of each type of STEEL TREE PIT GUARD to be measured for payment shall be the number of LINEAR FEET of tree pit guards erected, complete, in place to the satisfaction of the Engineer, measured along the top rail.

GI-2.10.8. PRICES TO COVER

The unit price bid per LINEAR FOOT of each type of STEEL TREE PIT GUARD shall cover the cost of all labor, material, equipment, insurance, and incidentals required to fabricate, furnish and erect tree pit guards including, but not limited to, welding and painting, furnishing, placing and trimming the 6" diameter tube forms, and furnishing and placing concrete for encasement of the steel tree pit guard spikes; all in accordance with the Contract Drawings, the specifications and as directed by the Engineer.

Payment will be made under:

Item No.	Item	Pay Unit
GI-2.10A	STEEL TREE PIT GUARD - TYPE 'A'	L.F
GI-2.10B	STEEL TREE PIT GUARD - TYPE 'B'	L.F
GI-2.10C	STEEL TREE PIT GUARD - TYPE 'C'	L.F
GI-2.10D	STEEL TREE PIT GUARD - TYPE 'D'	L.F.

SECTION GI-2.11
PLANTING WOODY AND HERBACEOUS PLANT MATERIAL IN THE BIOSWALE

GI-2.11.1. INTENT

This section describes planting of woody and herbaceous plant material. The Contractor shall furnish, plant, and maintain all material specified in the plant schedule in accordance with the plans and specifications or as directed by the Engineer. The Contractor shall be liable for any damages to property caused by his planting operations and all areas and construction disturbed shall be restored to their original condition to the satisfaction of the Engineer.

GI-2.11.2. DESCRIPTION

The Contractor shall provide all labor, materials, equipment, insurance and incidentals required to furnish and plant the scheduled woody and herbaceous plant material in the bioswale planting beds, as shown on the Standards For Green Infrastructure and in accordance with the specifications and the directions of the Engineer. The Contractor shall be liable for any damages to property caused by planting operations, and all areas and construction disturbed shall be restored to their original conditions, to the satisfaction of the Engineer, at no cost to the City.

GI-2.11.3. MATERIALS

(A) Plant names, size, and grading standards shall conform to those prepared by the American Association of Nurserymen Horticultural Standards, 1998 Edition, unless otherwise specified. No substitution shall be permitted, except with the written permission of the Engineer in consultation with the NYC Department of Parks and Recreation's Chief of Forestry & Horticulture.

(B) Burlap: Burlap shall be a natural fabric. No nylon burlap shall be permitted.

(C) Cord or Rope: Cord or rope shall be sisal twine. Nylon rope shall not be permitted.

GI-2.11.4. QUALITY

(A) All plants shall be typical of their species or variety. They shall have normal, well-developed branches and vigorous fibrous root systems. They shall be sound, healthy, vigorous plants free from defects, disfiguring knots, sun scald injuries, dead or broken branches, abrasions of the bark, plant diseases, insect eggs, borers, and all forms of infestation and weeds. All plant material shall be tagged by the Department of Parks and Recreation's Central Forestry, Horticulture & Natural Resources staff or the Engineer shall reject all plant materials not meeting the above specifications.

(B) All plants shall be nursery-grown, unless otherwise stated. All shrubs shall have been growing under similar climatic conditions as the locations of this project for at least two (2) years prior to the date of the contract. Plants held in storage will be rejected if they show signs of growth during storage. Collected plants shall be taken from a subgrade favorable to good root development. All collected material shall be clean sound stock, free from decaying stumps.

(C) Herbaceous plants, vines, and groundcover shall be vigorous healthy plants, a minimum two (2) years old, from cuttings, seed, or division, with well-developed root systems and crowns, as specified in the Plant Schedule. Bulbs, corms, tubers and rhizomes shall be firm, non-desiccated, and certified free of disease and viral infection, of the sizes, grades, and varieties indicated in the Plant Schedule.

GI-2.11.5. PLANT SOURCES FOR NATIVE PLANTS ONLY, WHERE APPLICABLE

(A) Native plant stock must be used when specified on designs and should be used whenever possible and appropriate. Native plant material must be derived from the local genotypes of the native plants specified. For purposes of this native plant material paragraph, "local" shall mean within 250 miles from the planting site. However, a reasonable effort shall be made to obtain sources of plant material as close to the planting site as possible. All plants must have been grown in a hardiness zone no warmer than Zone 7 or colder than Zone 5 as determined by the USDA Agricultural Research Service, Plant Hardiness Zone Map. Plant quality shall be typical of their species. Plant material should exhibit the range of variation typical of local genotypes of the species as determined by the Engineer. They shall

have normal branching and vigorous fibrous root systems. They shall be sound, healthy plants, free from sunscald injuries, or other mechanical injury, plant diseases, insect eggs, borers and all forms of infestations. All plants shall be nursery grown unless otherwise stated. Collected material will not be accepted. Except as may otherwise be specified in this native plant material paragraph, all other sections of this Plant Material specification shall also apply to the Native Plants. The native plant material, subject to availability and adherence to the requirements of this paragraph, may be purchased from the following nurseries or approved equivalent nurseries:

Greenbelt Native Plant Center, Staten Island, NY: 781-370-9044.

Pineland's Nursery, Columbus, NJ

Wild Earth, Freehold, NJ

Sylva Native, New Freedom, PA

GI-2.11.6. ORDERING PLANT MATERIALS

(A) The Contractor shall notify the Engineer of the unavailability of any tree, shrub, herbaceous plant, or bulb species designated in the contract, as well as provide confirmation to the Engineer of all orders from all sources of supply. Any request for species substitution due to unavailability must be submitted in writing to the Engineer, within fifteen (15) days of the award of contract. The Contractor must include the names and addresses of at least ten (10) nurseries they have contacted in an effort to locate these species, and the list shall be submitted to the Engineer. All nurseries supplying material shall be required to have a registration certificate from the Department of Agriculture and Markets, Division of Plant Industry, New York, or any other state where plant material is obtained, certifying that plant material is apparently free of injurious insects and diseases.

GI-2.11.7. CHEMICAL AND PHYSICAL REQUIREMENTS

(A) Plant material

Plant material shall be as shown on the Planting Schedule as shown on the Contract Drawings. Where applicable, the Contractor shall provide freshly dug plant material. Cold storage or previously dug plants will not be acceptable. The Contractor shall not prune prior to delivery unless otherwise directed and approved by the Engineer or representative. Plants that are pruned without authorization from the Engineer will be rejected. Plant material shall be delivered to the site in such a manner as to not damage the bark, break branches, or destroy the natural shape of the plant. To protect plant material from desiccation, the Contractor shall when deemed appropriate and only on appropriate plant material, apply an approved anti-desiccant 48 hours prior to transporting and fully cover plant material during transportation to the planting site. Plant material shall not be dropped or in any way be mishandled during unloading. Plants damaged during transportation to the site will be immediately rejected. Unacceptable conditions shall include, but not be limited to, the following: loose burlap or rope, soil spilling from B&B or containers, plants that move independently of root ball or container, soil missing from B&B or containers, and irregularly shaped root balls.

(B) Dimensions

A plant shall be dimensioned as it stands in its natural position. Stock furnished shall be a fair average of the minimum and maximum sizes specified. Larger plants cut back to sizes specified will not be accepted.

Container grown herbaceous plants, groundcover, and vines shall be well rooted in the container size indicated on the Plant Schedule, grown in the container at least one year prior to planting. Bulbs, corms, tubers and rhizomes shall be Top Size, or as indicated on the Plant Schedule. Annual flowering plants shall be vigorous, well rooted, with no indications of disease or stress.

(C) Preparation of Plants

All precautions customary in good trade practice shall be taken in preparing plants for moving. Workmanship that fails to meet the highest standards will be rejected. All plants shall be dug immediately before moving unless otherwise specified. All plants shall be dug to retain as many fibrous roots as

possible. Balled and burlapped and balled and platformed plants shall have a solid ball of earth of minimum specified size, securely held in place by burlap and stout rope or twine. Oversized or exceptionally heavy plants are acceptable if the size of the ball or spread of roots is proportionately increased, to the satisfaction of the Engineer. Loose, broken, or manufactured balls will be rejected. Bare root plants shall be puddled immediately after digging by immersing the roots in a hydrogel slurry, so as to completely coat the roots.

(D) Delivery

Plants shall be packed, transported, and handled with utmost care to insure adequate protection against injury. When transported in closed vehicles, plants shall receive adequate ventilation to prevent sweating. When transported in open vehicles, plants shall be protected by tarpaulins or other suitable cover material. All bare root plants shall be adequately protected from drying out and immediately after inspection shall be heeled in moist soil. Balled and burlapped plants shall be set on the ground and the ball covered with soil. Until planted, all material shall be properly maintained and kept adequately moist, to the satisfaction of the Engineer.

(E) Inspection

Inspection may be made before digging if the Engineer directs, but no plant material shall be planted by the Contractor until inspected by the Engineer at the site of the work. Plant material will be rejected if delivered with broken or damaged root balls, or if damaged on site by rough handling. All rejected material shall be immediately removed from the site and replaced with acceptable material at no additional cost to the City. Final inspection shall be made upon completion of the contract.

GI-2.11.8. PLANT SCHEDULE

(A) ABBREVIATIONS

- Cal. Indicates the caliper of the trunk of the tree.
- B & B Indicates tree or shrub to be balled and burlapped.
- B.R. Indicates a tree or shrub to be delivered "bare root".
- O.C. Indicates "on center" or spacing between plants in all directions.
- Ht. Indicates overall height of tree.
- Item No. Indicates specific species of plant material, including a description.

(B) ITEM NO.

Genus species & Plant description.

SHRUBS: Sizes shall be as indicated. Rootball or container sizes shall correspond to A.A.N. Standards for the corresponding shrub height. Heavy root system, all shrubs shall be well branched to the ground. Sizes shall be as indicated.

VINES, GROUNDCOVER, AND HERBACEOUS PLANTS: Container size shall be as indicated on the plans. All plants shall have vigorous root systems and have grown in the container for at least one year prior to planting.

PLUGS: Plugs shall have vigorous root systems.

ANNUALS: Annual flowering plants shall be vigorous, well rooted, with no indications of disease or stress.

BULBS, CORMS, TUBERS AND RHIZOMES: All bulbs, corms, tubers and rhizomes shall be top size, firm, and non-desiccated.

All trees shall be branched six (6') feet from the ground. No tree shall have any limb cuts over 3/4" which have not completely calloused over. Sizes shall be as indicated.

All B&B trees shall be dug with firm root balls free of noxious weeds. There should be no excess soil on top of the root ball or around the trunk. Loose, broken, or manufactured balls will be rejected. Well-branched top and fibrous root system essential.

Items PM-05 through PM-24 are listed by estimated size and/or shared similarities; they include—but shall not be limited to—the genus and species listed beneath each item.

1. ITEM # GI-2.11PM-05 LARGE EVERGREEN SHRUBS – CLASS A

Ilex x meserveae 'Blue Prince' & 'Blue Princess', 'Blue Boy' & 'Blue Girl', Blue Prince & Blue Princess Holly, Blue Boy & Blue Girl Holly: 5' to 6' H, B&B, 20", heavy well-branched tops.

Ilex 'Nellie Stevens', Nellie Stevens Holly: 5' to 6' H, B&B, 20", heavy well-branched tops.

Ilex opaca, American Holly: 5' to 6' H, B&B, 20", heavy well-branched tops.

Taxus cuspidata 'Capitata', Cap Yew: 4' to 5' H, B&B, Pyramidal form, densely compact

2. ITEM # GI-2.11PM-06 LARGE EVERGREEN SHRUBS – CLASS B

Juniperus chinensis 'Hetzii Columnaris': 5' to 6' H, B&B, single leader; symmetrical & fully branched.

Juniperus scopulorum 'Moonglow': 5' to 6' H, B&B, single leader; symmetrical & fully branched.

Rhododendron maximum, Rosebay Rhododendron: 3' to 4" H., B&B.

Rhododendron 'PJM', PJM Rhododendron: 3' to 4' H, B&B

3. ITEM # GI-2.11PM-07 LARGE DECIDUOUS SHRUBS

Chionanthus virginicus, White Fringetree: 24" to 36" H, #5 can, well-branched with at least 4 canes.

Cotinus ssp, Smokebush: 2' to 3'H., #5 can, well-branched with at least 4 canes.

Hamamelis x intermedia 'Arnold's Promise', Witch Hazel: 3' to 4' H., B & B or #5 can, heavy well branched top.

Hamamelis vernalis, Vernal Witchhazel: 4' to 5' H., B&B or #5 can, Heavy well-branched top.

Lagerstroemia indica, Crapemyrtle: 3' to 4' H, B&B or #5 can, well branched, heavy.

Viburnum carlesii, Koreanspice Viburnum: 3' to 4' H, B&B or #5 can, well-branched top with at least 4 canes. Extra heavy.

Viburnum dentatum, Arrowwood Viburnum: 4' to 5' H, B&B or #5 can, well-branched top with at least 4 canes 3' and over. Extra heavy.

Viburnum dilatatum, Linden Viburnum: 4' to 5' H, B&B or #5 can, well-branched top with at least 4 canes. Extra heavy.

Viburnum plicatum var. tomentosum, Doublefile Viburnum: 3' to 4' H, B&B or #5 can, well-branched tops with at least 4 canes. Extra heavy.

Viburnum trilobum 'Compactum', Compact American Cranberrybush Viburnum: 2' to 3' H, B&B or #5 can, well-branched tops.

Viburnum x rhytidophyllum, Leatherleaf Viburnum: 3' to 4' H, B&B or #5 can. Well-branched, Extra Heavy.

4. ITEM # GI-2.11PM-08 MEDIUM EVERGREEN SHRUBS – CLASS A
- Acuba japonica**, Acuba: 3' to 4' H, #5 can., heavy well-branched tops.
- Prunus laurocerasus**, Cherry Laurel: 24" to 30" H, #5 can; 'Schipkaensis' if specified.
- Rhododendron 'Yaku Prince'**: 2' to 3' H, #3 can, compact & symmetrical
- Taxus x media**, Spreading Yew: 24" to 30" H, B&B, bushy, compact and symmetrical plant of uniform texture, color, and quality with a 12" spread of top. Hatfieldii', 'Hicksii' when specified.
- Taxus x media 'Wardii'**, Ward's Anglojap Yew: 24" to 30" H, B&B, compact and symmetric plant of uniform texture and color with a 12" spread of top.
- Pieris Japonica 'Mountain Fire'**, Mountain Fire Andromeda: 18 to 24" H, #3 can, compact and symmetric plant
5. ITEM # GI-2.11PM-09 MEDIUM EVERGREEN SHRUBS – CLASS B
- Chamaecyparis pisifera 'Filifera Aurea Nana'**: 18" to 24" H, #3 can, bushy, compact and plant of uniform texture and quality with a 18" spread of top and at least 3 canes 18" and up.
- Ilex glabra**, Inkberry: 24" to 30" H, B&B or #5 can. Heavy symmetrical top with at least 8 canes 18" and up, furnished to the ground, spread of top 18". 'Shamrock' or 'Compacta' when specified.
- Ilex x meserveae 'Blue Boy' & 'Blue Girl', 'Blue Prince' & 'Blue Princess', 'China Boy' & 'China Girl'**: 24" to 30" H, #3 can, heavy well-branched tops.
- Kalmia latifolia**, Mountain Laurel: 15" to 18" H, #3 can, well branched top with at least 4 canes 18" and up.
- Pinus mugo**, Mugo Pine: 18" to 24" Spread, #3 can, full, well-branched tops.
6. ITEM # GI-2.11PM-10 MEDIUM EVERGREEN SHRUBS – CLASS C
- Buxus spp.**, Boxwood: 12" to 18" H, #3 can, heavy well-rounded top, well-furnished to the ground
- Cephalotaxus harringtonia**, Japanese Plum Yew: 12" to 18" H, #3 can, bushy, well-branched, well-furnished to the ground
- Ilex crenata 'Convexa,'** Japanese Holly: 18" to 24" H, B&B or #3 can, bushy, heavy rounded top, well furnished to the ground.
- Juniperus chinensis spp. 'Sea Green', 'San Jose,' 'Old Gold,' 'Gold Lace' 'Grey Owl,' & 'Sargentii'**, Chinese Juniper: 18" to 24", #3 can.
- Juniperus chinensis, 'Pfitzeriana'** Compact Juniper: 18" to 24" H, #3 can, bushy, compact and plant of uniform texture and quality with a 18" spread of top and at least 3 canes 18" and up. 'Glauca' when specified.
7. ITEM # GI-2.11PM-11 MEDIUM DECIDUOUS SHRUBS – CLASS A
- Callicarpa spp.**, Beautyberry: 3' to 4' H, #3 can, heavy well-branched tops.
- Ceanothus americanus**, New Jersey Tea: 2' to 3', #3 can, heavy, well-branched tops
- Enkianthus campanulatus**, Redvein Enkianthus: 30" to 36" H, #3 can., heavy well-branched tops.
- Fothergilla gardenii**, Dwarf Fothergilla: 18" to 24" H, #3 can, heavy well branched top.

Hydrangea anomala subsp. petiolaris, Climbing Hydrangea: 2' to 3' H, #3 can, at least 4 canes 24" and up.

Lindera benzoin, Spicebush: 24" to 30" H, #3 can, well branched top with at least 4 canes 20" and up.

Prunus x cistena, Purpleleaf Sand Cherry: 2' to 3' H, #5 can, well branched.

Vaccinium angustifolium, Low-bush Blueberry: 18" to 24" H, #2 can, well-branched top, with at least 3 canes.

Vaccinium corymbosum, Highbush Blueberry: 18" to 24", #3 can, spread of top 15".

8. ITEM # GI-2.11PM-12 MEDIUM DECIDUOUS SHRUBS – CLASS B

Aronia arbutifolia, Red Chokeberry: 2' to 3' H, #3 can, heavy well-branched tops.

Aronia Melanocarpa, Black Chokeberry: 2' to 3' H, #3 can, heavy well-branched tops.

Buddleia davidii, Butterfly Bush: 2' to 3' H, #3 can, heavy well-branched tops.

Clethra alnifolia, Summersweet Clethra: 24" to 36" H, #3 can, heavy well branched tops with at least 8 canes 24" and up.

Cornus ssp.: 2' to 3' H, #3 can, heavy, well-branched tops.

Euonymus kiautschovicus 'Manhattan', 'Manhattan' Spreading Euonymus: 18" to 24" H, #3 can, heavy well-branched tops.

Hydrangea macrophylla 'Nikko Blue,' 'Endless Summer,' 'Blushing Bride': Bigleaf Hydrangea: 18" to 24" H, #3 can. Must be well-established in pot.

Hydrangea quercifolia 'Snow Queen', Oakleaf Hydrangea: 2' to 3' H, #3 can, well-branched top with at least 4 canes 24" and up.

Ilex verticillata, Winterberry: 2' to 3' H, B&B or #3 can, heavy symmetrical top, furnished to the ground, spread of top 15".

Itea virginica, Virginia Sweetspire: 18" to 24" H, #3 can, well-branched top with at least 4 canes.

Kerria japonica, Japanese Globe Flower: 18" to 24" H, #3 can, well-branched tops.

Myrica pennsylvanica, Northern Bayberry: 2' to 3' H, B&B or #3 can, well-branched, spread of top 18".

Physocarpus opulifolius, Common Ninebark: 2' to 3' H, #3 can, well branched, must have at least 4 canes, 24" and up; 'Diablo' where specified.

Rhus aromatica 'Gro-Low', Gro-Low Fragrant Sumac: 18" to 24" Spread, #3 can, well branched.

Sambucus nigra 'Gerda', Black Beauty: 24" to 30" H, #3 can, well-branched and full tops.

Weigela florida, Old Fashioned Weigela: 18" to 24" H, #3 can, heavy well-branched tops.

9. ITEM # GI-2.11PM-13 SMALL EVERGREEN SHRUBS

Calluna vulgaris, Scotch Heather: 15" to 18" H, #2 can.

Cotoneaster salicifolius 'Emerald Carpet,' 'Scarlet Leader,' 'Autumn Fire,' 'Repens' / 'Repandens,' Willow-leaved Cotoneaster: 12" to 24" H, #3 can, with at least 5 runners 15" and up, must be well established in pot.

Euonymus fortunei 'Emerald Gaiety', Wintercreeper Euonymus: 12" to 15" H, 2 Gal., at least 5 runners 12" and up, must be well established in pot.

Juniperus conferta 'Blue Pacific', 'Blue Pacific' Shore Juniper: 12" to 18" H, #3 can.

Juniperus horizontalis 'Bar Harbor', Bar Harbor Juniper: 12" to 15" H, #3 can, at least 3 canes 12" and up.

Juniperus horizontalis 'Wiltonii': 12" to 15" H, #3 can, at least 3 canes 12" and up.

Yucca filamentosa, Yucca: #3 can, 12" to 18", at least 3 fully developed whorls. 'Golden Sword,' 'Bright Edge,' when specified

10. ITEM # GI-2.11PM-14 SMALL DECIDUOUS SHRUBS

Abelia grandiflora, Glossy Abelia: 18" to 24" H, #3 can, heavy well branched tops with at least 4 canes 18" and up.

Berberis thunbergii 'Crimson Pygmy,' 'Rose Glow,' Gold Nugget,' 'Green Ornament,' Dwarf Red Barberry: 18" to 24" H, #3 can., heavy well-branched tops.

Caryopteris clandonensis 'Blue Mist', Blue Spirea: #3 can.

Chaenomeles speciosa: #2 can, 1' to 2' H, #3 can. vigorous stems. 'Cameo,' 'Jet Trails,' 'Texas Scarlet.'

Corylopsis pauciflora, Winterhazel, #3 can, 12" to 14" H, vigorous stems.

Corylopsis spicata, Spike Winterhazel: #3 can, 12" to 18" H, vigorous stems

Cotoneaster apiculatus, Cranberry Cotoneaster: 18" to 24" H, #3 can with at least 5 runners. Must be well established in pot.

Cotoneaster horizontalis, Rockspray Cotoneaster: 18" to 24" H, #3 can.

Deutzia gracilis, Slender Deutzia, #3 can, 12" to 18" H, heavy, well-branched.

Forsythia viridissima 'Bronxensis', Bronx Greenstem Forsythia: 18" to 24" H, #3 can, full, well-branched head with at least 4 canes.

Potentilla fruticosa, Shrubby Cinquefoil: 12" to 18" H, #3 can, spread of top 18", must have at least 4 canes 12" and up.

Rubus calycinoides, Creeping Raspberry: 6" to 12" H, 1 Gal. indefinite spread, semi-deciduous, holds dark bronze leaves into winter

Spirea betulifolia var. aemiliana, Birch-leaf Spirea: 18" to 24" H, #3 can, well-branched top with at least 4 canes 18" and up.

Spirea japonica, Japanese Spirea: 18" to 24" H, #3 can, well-branched top with at least 4 canes 18" and up.

Spirea nipponica 'Snowmound', Snowmound Nippon Spirea: 18" to 24" H, #3 can, well-branched top with at least 4 canes 18" and up.

Spirea x bumalda 'Anthony Waterer', Anthony Waterer Bumalda Spirea: 18" to 24" H, #3 can, well-branched top with at least 4 canes 18" and up.

Spirea x vanhouttei, Vanhoutte Spirea: 18" to 24" H, #3 can, well-branched top with at least 4 canes 18" and up.

Symphoricarpos albus, Snowberry: 18" to 24" H, #2 can, well-branched top, with at least 3 canes.

Symphoricarpos orbiculatus, Coralberry: 18" to 24" H, #2 can, well-branched top, with at least 3 canes.

11. ITEM # GI-2.11PM-15 ROSES (#2 / #3 can)

Rosa 'Meidiland': 18" to 24", #3 can (hardy varieties, which mature into shrub form or groundcovers).

Rosa 'Carefree Delight' & 'Carefree Wonder': 18" to 24" H, #3 can (matures to tight compact alternative to Rosa Rugosa).

Rosa spp. Flower Carpet Roses ®: 18" to 24" H, 2 Gal., must have at least 3 canes, 15" and up.

Rosa 'Knock Out', Knock Out Rose: 18" to 24", 2 Gal., must have at least 3 canes 15" and up.

Rosa palustris, Swamp Rose: 18" to 24" H, #3 can, must have at least 3 canes 15" and up.

Rosa rugosa, Rugosa Rose: 18" to 24" H, #3 can, must have at least 3 canes 15" and up.

Rosa 'The Fairy', The Fairy Rose: 18" to 24" H, 2 Gal. Heavy well-rounded top.

12. ITEM # GI-2.11PM-16 PERENNIALS #1 can

Ornamental perennials including but not limited to the genus Armeria, Aster, Baptisia, Dryopteris, Echinacea, Epimedium, Hemerocallis, Heuchera, Hosta, Hypericum, Iris, Juncus Effusus, Lavandula, Leucanthemum, Monarda, Nepeta, Nipponanthemum, Polystichum, Rudbeckia, Salvia, Sedum and Tiarella. #1 can, must be in full leaf, well established in pot.

13. ITEM # GI-2.11PM-17 PERENNIALS #2 can

Ornamental perennials including but not limited to the genus Armeria, Aster, Baptisia, Dryopteris, Echinacea, Epimedium, Hemerocallis, Heuchera, Hosta, Hypericum, Iris, Lavandula, Leucanthemum, Monarda, Nepeta, Nipponanthemum, Polystichum, Rudbeckia, Salvia, Sedum and Tiarella. #2 can, must be in full leaf, well established in pot.

14. ITEM # GI-2.11PM-18 PERENNIALS 1 QT

Ornamental perennials including but not limited to the genus Armeria, Aster, Baptisia, Dryopteris, Echinacea, Epimedium, Hemerocallis, Heuchera, Hosta, Hypericum, Iris, Lavandula, Leucanthemum, Monarda, Nepeta, Nipponanthemum, Polystichum, Rudbeckia, Salvia, Sedum and Tiarella. 1 Qt., must be in full leaf, well established in pot.

15. ITEM # GI-2.11PM-19 PERENNIALS 2 QT

Ornamental perennials including but not limited to the genus Armeria, Aster, Baptisia, Dryopteris, Echinacea, Epimedium, Hemerocallis, Heuchera, Hosta, Hypericum, Iris, Lavandula, Leucanthemum, Monarda, Nepeta, Nipponanthemum, Polystichum, Rudbeckia, Salvia, Sedum and Tiarella. 2 Qt., must be in full leaf, well established in pot.

16. ITEM # GI-2.11PM-20 GRASSES #1 can

Grasses: Ornamental Grasses including but not limited to the genus Acorus, Arundo, Calamagrostis, Carex, Festuca, Hakonechloa, Imperata, Miscanthus, Molinia, Ophiopogon, Panicum, Pennisetum, and Schizachyrium: #1 can, vigorous specimens typical of the species specified in the plans.

17. ITEM # GI-2.11PM-21 GRASSES #2 can
Grasses: Ornamental Grasses including but not limited to the genus *Acorus*, *Arundo*, *Calamagrostis*, *Carex*, *Festuca*, *Hakonechloa*, *Imperata*, *Miscanthus*, *Molinia*, *Ophiopogon*, *Panicum*, *Pennisetum*, and *Schizachyrium*: #2 can, vigorous specimens typical of the species specified in the plans.
18. ITEM # GI-2.11PM-22 GRASSES #3 can
Grasses: Ornamental Grasses including but not limited to the genus *Acorus*, *Arundo*, *Calamagrostis*, *Carex*, *Festuca*, *Hakonechloa*, *Imperata*, *Miscanthus*, *Molinia*, *Ophiopogon*, *Panicum*, *Pennisetum*, and *Schizachyrium*: #3 can, vigorous specimens typical of the species specified in the plans.
19. ITEM # GI-2.11PM-23 GROUNDCOVERS - QUARTS
Ajuga reptans, quart: vigorous, well-established
Convollaria majalis, quart: 'Rosea' when specified
Euonymous coloratus, quart: vigorous, well-established
Iberis sepmervirens, quart, well-established
Lysimachia nummularia, quart, well-established
Pachysandra terminalis, quart: vigorous, well-established
Sedum brevifolium: quart, vigorous, well-established
Sedum spurium 'John Creech': quart; vigorous, well-established.
Thymus praecox, quart: vigorous, well-established
Vinca minor, quart: vigorous, well-established
20. ITEM # GI-2.11PM-24 GROUNDCOVERS #1 can
Arctostaphylos uva ursi, #1 can: vigorous, well-established in pot
Campsis radicans, #1 can; vigorous, well-established in pot.
Euonymous coloratus, # 1 can; vigorous, well-established in pot.
Hedera helix, English Ivy: #1 can; vigorous specimens, well-established in pot.
Liriope muscari, Liriope: #1 can; must have well-rounded leafing pattern. 'Big Blue', 'Variegata'
Liriope spicata, Liriope: #1 can; vigorous specimens, well-established in pot.
Pachysandra terminalis, Japanese Pachysandra: #1 can; vigorous specimens, well established in pot.
Vinca minor, quart: vigorous, well-established

GI-2.11.9. CONSTRUCTION METHODS

(A) Unless otherwise directed by the Engineer, herbaceous plant material shall be planted and transplanted from April 15 to May 15 and from August 15 to September 15; deciduous material shall be planted from March 15th to May 15th or to when weather permits and from October 15th to December 15th or to when weather permits. Evergreen material shall be planted from April 1st to May 15th and from September 15th to October 31st or as weather permits. In case the planting season is missed for any reason, the Contractor shall cover the soil with jute mesh. Jute mesh shall comply with the requirements of Section GI-2.14.

Alternate Schedule for Transplanted trees: Unless otherwise directed by the Engineer, material shall be transplanted only from March 1st to May 1st and from October 15th to December 1st.

(B) Planting shall be performed by an approved Contractor. No planting shall be done except in the presence of the Engineer. All material shall be inspected by the Engineer as it is removed from the truck, prior to placing in an approved storage area or the designated planting site. All rejected material shall be removed from the site and replaced with acceptable material at no additional cost to the City.

Bare root material shall be adequately protected from drying out and immediately heeled in after inspection. The bundles of heeled-in plants shall be set upright on the ground, covered with mulch (jute mesh), and kept adequately moist until the time of installation. Until the time of planting, all plant material shall be stored in an approved location, securely fenced and maintained, to the satisfaction of the Engineer, at no additional cost to the City. All plants not planted immediately shall be watered as necessary to maintain optimal health until planting.

For each plant, dig a hole to correct depth for the placement of the plant material. Place balled and burlapped material in the prepared planting pit by lifting, and carry it by the rootball. Set the tree or shrub straight and in the center of the pit, with the most desirable side facing toward the predominant view. All material shall set, after settlement, at the same level at which they have grown in the nursery. Care shall be exercised in setting the plants plumb. All ropes, stones, etc. shall be removed from the pit before backfilling. Soil for backfilling shall be loose and friable and not frozen or solid.

Cut and remove rope or wire from the top fifty (50) percent of the rootball and pull the burlap back to the edge of the ball. Remove as much woven product and twine as possible. All plastic or synthetic fabric must be removed from the ball at the time of planting. Any wire basket enclosed root ball will need to have at least two-thirds (2/3) of the wire basket cut away from the sides and top of the ball and removed. Remaining lateral wires must be cut to prevent future root interference. Wire must not be galvanized or aluminum wire.

Balled and burlapped plants shall be handled so that the ball will not be loosened. After the soil has been thoroughly firmed under and around the ball, the burlap shall be cut away from the upper half of the ball, and the remaining burlap adjusted to prevent the formation of air pockets. Where directed by the Engineer, the burlap shall be entirely removed. Soil shall be firmed at six (6) to eight (8) inch intervals and thoroughly settled with water. Plants with exposed roots shall be placed in the proper position in the center of the pit after the soil in the bottom of the pit has been firmed. Roots shall be arranged in their natural position and existing soil worked in among them, firmed at intervals and thoroughly settled with water. Care shall be taken to avoid bruising or breaking the roots when tamping the soil. All large and fleshy roots which are bruised or broken shall be pruned, making a clean cut before planting.

Groundcover plants shall be carefully removed from the containers or flats immediately prior to planting and set to the same depths as they were grown in the nursery bed or container, to the correct spacing indicated on the plans. Roots shall be arranged in their natural position and Engineered Soil worked in among them, taking care to avoid bruising or damaging the roots. No later than one (1) hour after planting, all plants shall be thoroughly settled with water.

(C) Mycorrhizal Fungi Inoculant Shall be applied by means of a three ounce (3 oz.) premeasured dry formulation packet, such as Mycor Tree Saver Transplant®, as manufactured by Plant Health Care, Inc., Pittsburgh, Pa., Rhizanova TreeTransplant, as manufactured by Becker Underwood, Inc., or approved equal. Packets shall contain, as a minimum: one thousand (1000) live spores of Vesicular-Arbuscular fungi, including: *Entrophospora columbiana*, *Glomus clarum*, *Glomus etunicatum*, and *Glomus sp.*; seventeen million five hundred thousand (17,500,000) live spores of Ectomycorrhizal fungi (*Pisolithus tinctorius*); Biostimulant ingredients including *Yucca schidigera* extract; soluble sea kelp extract derived from *Ascophylum nodosum*; humic acids; and acrylamide copolymer gel as a water absorbent medium. Mycorrhizal fungi inoculant shall be added to the top six to eight inches (6-8") of backfill soil in each planting pit and thoroughly mixed to distribute the inoculant. The material shall be applied according to the following chart:

<u>Size of rootball or container</u>	<u>Ounces per plant</u>
1 gallon	1
2 gal.	2
#3 can.	3
5 gal.	3
7 gal.	3
10 gal.	3
15 gal.	3
20" B&B	6
24" B&B	9
30" B&B	9
36" B&B	12
12" B&B	12

(D) Fertilizer Tablets: Shall be Healthy Start Macro Tablets®, as manufactured by Plant Health Care, Inc., Old Westbury, N.Y., or approved equal. The tablets shall have a nutrient analysis of 12-8-8 and contain a minimum twelve percent (12%) humic acid by weight, as well as biostimulants derived from sea kelp, amino acids, and a wetting agent derived from *Yucca schidigera*. Tablets shall contain a minimum 695,000 each of the following beneficial bacteria: nitrogen fixing, phosphorus solubilizing, and growth promoting. Twenty one gram (21 gm.) twenty four month (24 mo.) release tablets shall be added to the top four inches (4") of backfilled soil in the rates indicated on the following chart:

<u>Size of rootball or container</u>	<u>Tablets per plant</u>
1 gallon	1
2 gal.	2
#3 can.	2
5 gal.	3
7 gal.	3
10 gal.	4
15 gal.	5
20-24" B&B	5
30-36" B&B	6
42-48" B&B	7

(E) The Contractor shall cultivate and rake over finished planting areas and shall leave the site in an orderly condition. For final grading of the R.O.W.B. the Contractor shall refer to the Standards for Green Infrastructure or as directed by the Engineer.

Upon completion of planting, all debris and waste material resulting from the planting operation shall be removed from the project area, and the affected area raked and cleaned as necessary.

(F) Broken or badly bruised branches shall be removed with a clean cut. Do not cut leaders or use wound paint or dressing to treat cut areas. Crossed branches shall be pruned with a sharp tool in such a manner as to preserve and encourage the plant's natural growth form. The crowns of young trees should not be cut back to compensate for root loss.

Particular care shall be exercised in edging to establish good flowing curves as shown on the plan or as directed by the Engineer. Edging shall be maintained by the Contractor until final acceptance of the contract.

(G) At the time of planting, the entire planting bed shall be saturated to a depth of one (1) foot with twenty (20) gallons being distributed to each tree. Water shall be free from oil, have a pH not less than 6.0 nor greater than 8.0 and shall be free from impurities injurious to vegetation. Unless otherwise directed, water may be drawn from mains owned by or supplying water to the City of New York.

Watering shall also take place throughout the guarantee period, as per Section GI-5.09 at approximately two week intervals from May 1 to October 31. Not less than once a week if it has not rained during that period. The Engineer may order less watering based on weather conditions, resulting soil water content or other factors. If drought conditions warrant, the Engineer may order more frequent watering than

scheduled or during non-scheduled periods. A watering schedule shall be submitted to the Engineer each week.

Water shall not be applied in a manner which damages plants, plant saucers, stakes or adjacent areas. Each plant saucer shall be carefully filled with water in a manner which does not erode the soil or the plant saucer. Watering shall not cause uprooting or exposure of plant's roots to the air. Damages resulting from these operations shall be immediately repaired at the Contractor's expense.

Where water is supplied from City hydrants, the Contractor shall obtain a free hydrant permit from the Department of Environmental Protection. Permits are issued for a 30-day period, and the Contractor is responsible for keeping the permits current. The permits are available from each borough office. To obtain a permit, the Contractor should bring a copy of their contract, indicating exemption from the permit fee, with a general description of the hydrant location (s) they propose to access.

During dry conditions as defined by the Engineer, the Contractor will add to water a wetting agent product that is meant to aerate soil and allow for more water to penetrate such as Yuccah® Wetting Agent, or DIEHARD™ Soluble Yucca Extract as manufactured by Plant Health Care, or Horticultural Alliance, Inc., or an approved equal. An anti-desiccant to help prevent loss of water through transpiration shall also be used when directed by the Engineer. The anti-desiccant product, approved by the Engineer, must be mixed into water at appropriate ratios (Contractor must follow product instructions).

GI-2.11.10. LANDSCAPE GUARANTEE AND REPLACEMENT

(A) All landscaping work shall have upon planting a guarantee period as specified in the Schedule "A" of this project. Contractor shall request in writing an inspection of all landscaping work when completed to begin the maintenance and guarantee period.

(B) Plant material found to be unsatisfactory or in poor condition at the inspection shall be removed and replaced at the appropriate planting season for that type of plant material. No payment will be made for plant material found to be unacceptable during this inspection.

(C) The Contractor shall submit, in writing, any conditions or species which he feels may be questionable prior to ordering said plants. If he is agreeable, the Engineer will substitute recommended species or address the conditions deemed unsuitable. However, upon ordering a plant and installing it, the Contractor accepts the responsibility for guaranteeing the plant's survival. There shall be no exception.

(D) During the guarantee period (as specified in Schedule A), the Contractor shall replace, in accordance with the contract plans and specifications, any planted shrub, groundcover plant, perennial or grass that is dead or, in the opinion of the Engineer, is in an unhealthy or unsightly condition, and/or has lost its natural shape due to dead branches, excessive pruning, inadequate or improper maintenance, or other causes including vandalism, prior to final acceptance, in the next planting season. When instructed by the Engineer, the Contractor shall replace shrubs, groundcover plants, perennials or grasses that have died after final acceptance in the next appropriate planting season even when the next planting season falls outside the remaining period of the project. Shrubs, groundcover plants, perennials or grasses that die within the guarantee period shall be replaced as many times as necessary so that there is a live shrub, groundcover plant, perennial or grasses at each location at the end of the guarantee period (which is the remaining period of the project). The cost of replacement(s) shall be included in the unit price bid for the various furnished items of the contract.

Where vandalism or related causes are agreed upon by the Engineer as the cause for shrub, groundcover plant, perennial or grasses replacement, the Contractor shall be responsible for replacement for one time during the guarantee period after final acceptance. Where dead shrubs, groundcover plants, perennials or grasses have been identified, whether due to natural causes or vandalism, the Contractor shall remove the dead material, including stakes, and wire **within three (3) weeks of notification**. The Contractor shall add Engineered Soil, grass seed or appropriate paving material at the direction of the Engineer to the pit to eliminate potential tripping hazards at the time of removal.

Failure to replace shrubs, groundcover plants, perennials or grasses in the next appropriate planting season will result in the assessment of liquidated damages in the amount of eighty (80) dollars per shrub or per group of groundcover plants, perennials or grasses. The assessment of said liquidated damages shall not absolve the Contractor of its responsibility to replace the plant material.

(E) Unless a written waiver of this clause is issued, under the terms of the guarantee, replacement plants shall be chosen only by the Engineer.

GI-2.11.11. MEASUREMENT

The quantities of Woody or Herbaceous Plant Materials to be paid for under each item shall be the number of shrubs, groundcover plants, perennials, or grasses of each Class or size planted to the satisfaction of the Engineer.

GI-2.11.12. PRICES TO COVER

The price bid for each Woody or Herbaceous Plant Material planted shall be the number of shrubs, groundcover plants, perennials, or grasses of each Class or size furnished, planted and maintained, in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

Engineered Soil and mulch (jute mesh), where called for in the Contract Drawings or details, will be paid under their respective items.

The cost of water, regardless of source, is deemed included in the unit prices bid. No extra payment will be made for water coming from the Contractor's own source.

Payment will be made under:

Item No.	Item	Pay Unit
GI-2.11PM-05	LARGE EVERGREEN SHRUBS – CLASS A	EACH
GI-2.11PM-06	LARGE EVERGREEN SHRUBS – CLASS B	EACH
GI-2.11PM-07	LARGE DECIDUOUS SHRUBS	EACH
GI-2.11PM-08	MEDIUM EVERGREEN SHRUBS – CLASS A	EACH
GI-2.11PM-09	MEDIUM EVERGREEN SHRUBS – CLASS B	EACH
GI-2.11PM-10	MEDIUM EVERGREEN SHRUBS – CLASS C	EACH
GI-2.11PM-11	MEDIUM DECIDUOUS SHRUBS – CLASS A	EACH
GI-2.11PM-12	MEDIUM DECIDUOUS SHRUBS – CLASS B	EACH
GI-2.11PM-13	SMALL EVERGREEN SHRUBS	EACH
GI-2.11PM-13	SMALL EVERGREEN SHRUBS	EACH
GI-2.11PM-14	SMALL DECIDUOUS SHRUBS	EACH
GI-2.11PM-15	ROSES (#2 / #3 can)	EACH
GI-2.11PM-16	PERENNIALS #1 can	EACH
GI-2.11PM-17	PERENNIALS #2 can	EACH
GI-2.11PM-18	PERENNIALS 1 QT	EACH
GI-2.11PM-19	PERENNIALS 2 QT	EACH
GI-2.11PM-20	GRASSES #1 can	EACH
GI-2.11PM-21	GRASSES #2 can	EACH
GI-2.11PM-22	GRASSES #3 can	EACH
GI-2.11PM-23	GROUND COVERS - QUARTS	EACH
GI-2.11PM-24	GROUND COVERS #1 can	EACH

**SECTION GI-2.12
PLANTING BULBS**

GI-2.12.1. INTENT

This section describes planting bulbs. The Contractor shall furnish, plant, and maintain all Bulbs specified in the plant schedule in accordance with the plans and specifications or as directed by the Engineer. The Contractor shall be liable for any damages to property caused by his planting operations and all areas and construction disturbed shall be restored to their original condition to the satisfaction of the Engineer.

GI-2.12.2. KIND

Planting bulbs shall conform to the American Standards for Nursery Stock, 1998 edition.

GI-2.12.3. NAMES AND CLASSES

(A) Plant names shall agree with the nomenclature of "Standardized Plant Names" as adopted by the American Joint Committee on Horticultural Nomenclature 1942 Edition; size and grading standards shall conform to those of the American Association of Nurserymen, Tuberoses unless otherwise specified.

(B) Bulb Classes shall consist of:

1. BULBS CLASS A: Narcissus spp., Muscari, spp, Crocus spp.
2. BULBS CLASS B: Allium spp., Crocus autumnale, Hyacinthus spp., Hyacinthoides hispanica, Iris reticulate, Mertensia virginica, Tulipa spp.
3. BULBS CLASS C: Colchicum spp., Crocosmia x Crocosmiflora Sections of piling shall be of the shapes and sizes shown, specified or required.

GI-2.12.4. QUALITY

(A) All bulbs shall be typical of their species of variety; they shall be sound, healthy and vigorous, free from defects, diseases, insect eggs, bores and all forms of infestations. All bulbs shall be nursery-grown unless otherwise stated. Those held in storage will be rejected if they show signs of growth during storage.

(B) Bulbs shall be large for their type, and shall follow guidelines set forth in the American Standards for Nursery Stock, 1998 edition, published by the American Association of Nurserymen. Specific sizes are as follows:

Large Bedding	15 cm	6" and up.
Double Nose	DN II	Large Size.
Top Size	19 cm	4" and up.

GI-2.12.5. MATERIALS

Bulbs shall follow guidelines set forth in the American Standards for Nursery Stock, 1998 edition, published by the American Association of Nurserymen.

GI-2.12.6. CONSTRUCTION METHODS

(A) Bulbs shall be packed, transported and handled with utmost care to insure adequate protection against injury. Each shipment shall be certified by State and Federal authorities as required by law. And to this effect, certificates shall accompany each shipment invoice or order of stock and, on arrival, the certificate shall be filed with the Engineer in charge.

(B) Planting: Perform planting only if approved by the Engineer, and in the presence of the Engineer. Remove only those bulbs tuberoses from storage which are to be immediately installed. Do not leave any material unplanted at the construction site. Perform planting only during periods of dry weather and when the ambient soil temperature at six inches depth is above 0 degrees C. (32 degrees F.)

After individual holes are excavated to the specified depth, evenly apply Superphosphate 0-20-0 at the rate of five (5#) lbs. per hundred (100) square feet and scratch into the bottom of the bed. Backfill with Engineered Soil, replace sod plug, and water thoroughly.

(C) Unless otherwise directed by the Engineer, bulbs shall be planted from September 15 to November 15. In case the planting season is missed for any reason, the Contractor shall cover the soil with mulch (jute mesh). Mulch (jute mesh) shall comply with the requirements of Section GI-2.14, herein this Addendum.

(D) Bulb Fertilizer shall be "Scheepers-Bulb Food" as manufactured by John Scheepers, Inc., Bantam, CT.; Jobe's Organic Bulb Food Granular Fertilizer; Scott's Bulb Food; or approved equivalent and shall have the following composition by weight: Nitrogen five percent (5%), Phosphoric Acid ten percent (10%) and Potash five percent (5%). Fertilizer shall be composed of natural material.

The Contractor shall, at the direction and discretion of the Engineer, furnish a certified report of an approved analytical chemist, showing the analysis of representative samples by the Engineer.

Bulb Fertilizer shall be delivered in standard size bags of the manufacturer, showing weight, analysis, and name of manufacturer. It shall be stored as directed by the Engineer in such a manner that its effectiveness will not be impaired.

(E) No material shall be planted by the Contractor until inspected by the Engineer at the site of the work. All rejected material shall be immediately removed from the site, and replaced with acceptable material at no additional cost. Final inspection shall be made upon completion of the Contract.

(F) Protect all delivered bulbs from overheating by keeping in a cool dry place. All material shall be shipped from the Vendor in enclosed vans and packed in ventilated packages, bearing the name of the grower or importer and the variety name. Any package and contents showing damage at time of delivery shall be rejected.

GI-2.12.7. LANDSCAPE GUARANTEE AND REPLACEMENT

(A) All landscaping work shall have upon planting a guarantee period as specified in Schedule "A" for this project. Contractor shall request in writing an inspection of all landscaping work when completed to begin the maintenance and guarantee period.

(B) Plant material found to be unsatisfactory or in poor condition at the inspection shall be removed and replaced at the appropriate planting season for that type of plant material. No payment will be made for plant material found to be unacceptable during this inspection.

(C) The Contractor shall submit, in writing, any conditions or species which he feels may be questionable prior to ordering said plants. If the Contractor is agreeable, the Engineer will substitute recommended species or address the conditions deemed unsuitable. However, upon ordering a plant and installing it, the Contractor accepts the responsibility for guaranteeing the plant's survival. There shall be no exception.

(D) During the guarantee period, any plant material that is dead or not showing satisfactory growth, as determined by the Engineer, shall be promptly removed and replaced by the Contractor during the appropriate planting season for that type of plant material as determined by these specifications. The replacement shall be of the same variety, size and character as specified for the original planting and continue to be under the same maintenance and guarantee. That is, they shall be subject to replacement again up to the end of the guarantee period (as specified in the Schedule "A") of this project from date of planting or transplanting of each plant. The Engineer or representative shall be the sole judge as to the condition of the plants. The guarantee and maintenance applies to all planted areas.

(E) Unless a written waiver of this clause is issued, under the terms of the guarantee, replacement plants shall be chosen only by the Engineer.

GI-2.12.8. MEASUREMENT AND PAYMENT: The quantities to be paid for under these items shall be the number of BULBS in each Class actually planted at the site to the satisfaction of the Engineer.

The unit price bid for each class of BULBS planted as specified in the Planting Schedule shall include the cost of all labor, material, equipment, insurance, and incidentals necessary to furnish and plant bulbs of each class including, but not limited to, digging, furnishing, fertilizer, inspection, planting, watering, replacing and maintaining all plant material; all in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

Engineered Soil and mulch (jute mesh), where called for in the Contract Drawings, will be paid under their respective items.

The cost of water, regardless of source, is deemed included in the unit prices bid. No extra payment will be made for water coming from the Contractor's own source.

Payment will be made under:

Item No.	Item	Pay Unit
GI-2.12A	PLANTING BULBS CLASS A	EACH
GI-2.12B	PLANTING BULBS CLASS B	EACH
GI-2.12C	PLANTING BULBS CLASS C	EACH

**SECTION GI-2.13
ENGINEERED SOIL****GI-2.13.1. INTENT**

This section describes an engineered soil to be used as the planting medium for Right-of-Way Bioswales (R.O.W.B.), Stormwater Greenstreets (SGS) and other green infrastructures. The Contractor shall furnish, amend (if required), place and prepare the Engineered Soil for seeding and/or plant material as shown on the Standards For Green Infrastructure and/or as directed by the Engineer.

GI- 2.13.2. KIND

Engineered soil shall conform to the following standards:

1. Recommended Soil Testing Procedures for The Northeastern United States, 3rd Edition, Northeast Regional Publication, Agricultural Experiment Station, University of Delaware. Bulletin #493, Revised October 2009 or latest.
2. USDA Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42 Version 4.0 November 2004.

GI-2.13.3. SUBMITTALS

(A) Prior to the procurement and delivery of the Engineered Soil to the site, the material shall be tested. A representative of the Department shall be present when sample are taken from the proposed engineered soil source - frequency of testing is one for every 50 C.Y. delivered. The Contractor shall submit to the Engineer for review and approval the following for each source:

1. Proposed material source and vendor.
2. A sample of the proposed material, taken with a representative of the Department, indicating the method of sampling and location of the sample.
3. The Contractor shall submit to the Engineer the name and location of the borrow (source) or stockpile site(s) and the estimated quantity of material available. The Contractor shall provide a notarized letter from the owner(s) of the proposed borrow site and/or stockpile site(s) indicating ownership of the proposed site(s) and a commitment to supply a specified minimum quantity of material for this project. Additionally, the supplier shall provide a certificate of clean fill and/or source materials for topsoil, signed by a NYS licensed PE/RLA or RA. To avoid delays in planting and seeding, the Contractor shall immediately begin to secure and test Engineered Soil at least one month in advance of the material actually being needed on site. This will allow sufficient time to blend the specified soil mix and make all the necessary adjustments in the mixing process.
4. Results of the organic content analyses conducted in accordance with the above referenced standard, *Recommended Soil Testing Procedures for The Northeastern United States, 3rd Edition, Northeast Regional Publication, Agricultural Experiment Station, University of Delaware. Bulletin #493, Revised October 2009 or latest.*
5. Results of the USDA soil texture gradation (sand, silt and clay) analyses and sand sieve analyses, with full reporting of all information in USDA sieve sizes, in accordance with the *USDA Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42 Version 4.0 November 2004.*
6. Results of the pH tests conducted in accordance with the above referenced standard, *USDA Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42 Version 4.0 November 2004.*
7. Results of the soluble salts test conducted in accordance with the above referenced standard, *Recommended Soil Testing Procedures for The Northeastern United States, 3rd Edition, Northeast Regional Publication, Agricultural Experiment Station, University of Delaware. Bulletin #493, Revised October 2009 or latest.*

8. Results of the Nutrient analyses test conducted in accordance with the above referenced standard, *Recommended Soil Testing Procedures for The Northeastern United States, 3rd Edition, Northeast Regional Publication, Agricultural Experiment Station, University of Delaware. Bulletin #493, Revised October 2009 or latest.*
9. Results of the Inorganic nitrogen and total Kjeldahl nitrogen tests conducted in accordance with the above referenced standard, *USDA Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42 Version 4.0 November 2004.*
10. Results of the acid-producing (iron sulfide) test conducted in accordance with the methodologies utilized by the *USDA Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42 Version 4.0 November 2004.*

NOTE: Due to the agricultural nature of some of the Quality Control testing the Contractor is notified that both Rutgers University and Cornell University can perform nearly all agricultural testing required, one exception may be the acid-producing test. Turn around times for results may vary from standard soils testing. However, all agricultural testing procedures must be performed in accordance with the above referenced standards and the *USDA Soil Survey Laboratory Methods Manual (No. 42, November 2004)* and the *Recommended Soil Testing Procedures for The Northeastern United States, 3rd Edition, Northeast Regional Publication, Agricultural Experiment Station, University of Delaware. Bulletin #493, Revised October 2009 or latest.* If another lab is proposed, the Contractor can submit written certification from the proposed lab certifying that the lab will utilize the same methodologies for soil testing as outlined in these specifications.

(B) As delivery of Engineered Soil to the site progresses, the following additional testing shall be conducted by the Contractor on the Engineered Soil brought to the site. Frequency of testing is one for every 50 CY delivered. Results of tests shall be submitted to Engineer for review and approval.

1. Organic Content Testing in accordance with the *Recommended Soil Testing Procedures for The Northeastern United States, 3rd Edition, Northeast Regional Publication, Agricultural Experiment Station, University of Delaware. Bulletin #493, Revised October 2009 or latest.*
2. pH testing in accordance with *the USDA Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42 Version 4.0, November 2004.*
3. Soluble Salts testing in accordance with the *Recommended Soil Testing Procedures for The Northeastern United States, 3rd Edition, Northeast Regional Publication, Agricultural Experiment Station, University of Delaware, Bulletin #493, Revised October 2009 or latest.*
4. Results of the Nutrient analyses test conducted in accordance with the *Recommended Soil Testing Procedures for The Northeastern United States, 3rd Edition, Northeast Regional Publication, Agricultural Experiment Station, University of Delaware, Bulletin #493, Revised October 2009 or latest.*
5. Results of the Inorganic nitrogen and total Kjeldahl nitrogen tests conducted in accordance with the *USDA Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42 Version 4.0, November 2004.*
6. Results of the USDA soil texture gradation (sand, silt and clay) analyses and sand sieve analyses, with full reporting of all information in USDA sieve sizes, in accordance with the with *the USDA Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42 Version 4.0, November 2004.*
7. Results of the acid-producing (iron sulfide) test conducted in accordance with the methodologies utilized by the *USDA Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42 Version 4.0; November 2004.*

(C) The Contractor shall submit to Engineer the materials and procedures for amending the engineered soil, if appropriate. Amendment of soil is only permitted to meet the nutrient and organic requirements of the specifications. Nutrient modifications are only permitted through the use of the approved contract specified organic fertilizer and the organic amendment permitted is leaf compost, no other organic amendment is permitted.

- (D) The Contractor shall submit quantity records on a weekly basis to Engineer.
- (E) Material failing the frequency testing shall not be incorporated into the work and shall be removed from the site at the Contractor's expense.

GI-2.13.4. CHEMICAL AND PHYSICAL REQUIREMENTS

(A) Engineered Soil is an integral part of the Green Infrastructure System; as such, certification of its material properties is subject to the testing protocols of the Contractor's Quality Control (QA) plan and quality assurance testing by DDC's Quality Assurance and Construction Safety (QACS) Bureau. The QC requirements relative to Engineered Soil are detailed below. **The Contractor shall strictly comply with all requirements of its QA plan.** Sufficient lead time is required to develop an appropriate plan for mixing methodologies and ratios that will provide reliable results to meet the parameters listed below.

(B) Engineered Soil shall be a loamy sand (70-85% sand) as classified by the U.S. Department of Agriculture (USDA). Based on test results, a determination will be made to ensure that the sand fraction analysis results are capable of supporting proposed vegetation. Engineered Soil shall be free of refuse, hard clods, woody vegetation, stiff clay, construction debris (of any kind), boulders, stones larger than 1-1/2 inches, chemicals, or other deleterious material toxic to any vegetation used on this project.

(C) Engineered Soil shall have a minimum organic content of 3.0 percent and a maximum of 6.0 percent. If the source soil requires amendment to meet the Engineered Soil organic content requirement, leaf compost will be the only approved admixture. No soil mixing shall be permitted during or after Engineered Soil placement. Engineered Soil shall be tested for compliance with Contract specifications and submitted for approval prior to delivery to the site.

(D) The organic content of soils shall be determined by a laboratory using the loss on ignition method as described in the *Recommended Soil Testing Procedures for The Northeastern United States, 3rd Edition, Northeast Regional Publication, Agricultural Experiment Station, University of Delaware. Bulletin #493, Revised October 2009 or latest.*

(E) The gradation of Engineered Soil shall be determined by a laboratory using the methods of the *USDA Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42 Version 4.0, November 2004.* The gradation of the Engineered Soil as determined by USDA classifications shall be within the following ranges:

Ranges:	0-08% gravel
	70-85% sand
	of which: 55-75% very coarse to medium sand
	10-25% fine to very fine sand
	10-15% silt
	5- 15% clay

Classification/sieve size:	<u>2" to 2.0 mm</u>	<u>gravel</u>
	<u>2.0 mm to 0.05 mm</u>	<u>sand</u>
	<u>0.05 mm to 0.002 mm</u>	<u>silt</u>
	<u><0.002 mm</u>	<u>clay</u>

In addition to the above gradation the Contractor shall provide the percentage of particle sizes corresponding to U.S.D.A. classifications:

- Very coarse sand (2.0 mm to 1.0 mm)
- Coarse sand (1.0 to 0.5 mm)
- Medium sand (0.5 mm to 0.25 mm)
- Fine sand (0.25 to 0.1 mm)
- Very fine sand (0.1 to 0.05 mm)
- Silt (0.05 to 0.002 mm) Clay (<0.002 mm)

(F) The pH value of Engineered Soil shall be (5 - 7.0) as determined by an approved laboratory using soil pH (Water (1:1. V:V)) procedures as described in the *USDA Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42 Version 4.0, November 2004*. Amendment of soil to lower pH to meet Contract requirements is not permitted.

(G) The soluble salt value of the Engineered Soil shall be (0-.4mmhos cm-1) as determined by an approved laboratory using the soluble salt (1:2(V:V)) procedures as described in the *Recommended Soil Testing Procedures for The Northeastern United States, 3rd Edition, Northeast Regional Publication, Agricultural Experiment Station, University of Delaware, Bulletin #493, Revised October 2009 or latest*.

(H) The value for Kjeldahl Nitrogen shall be as outlined below as determined by an approved laboratory using the *USDA Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42 Version 4, November 2004*.

Kjeldahl N Acceptable range is 0.06% to 0.25% (with nitrate (NO-3) form of nitrogen not to exceed 20 ppm)

(I) The value for Macro (P, K) and Micro Nutrients (Mg, Ca, Mn, Zn, Cu and B) shall be as outlined below as determined by an approved laboratory using the procedures as described in the *Recommended Soil Testing Procedures for The Northeastern United States, 3rd Edition, Northeast Regional Publication, Agricultural Experiment Station, University of Delaware, Bulletin #493, Revised October 2009 or latest*.

P	Acceptable range is 80 lbs/acre to 100 lbs/acre
K	Acceptable range is 100 lbs/acre to 300 lbs/acre
Ca	Acceptable range is 900 lbs/acre to 2,800 lbs/acre
Mg	Acceptable range is 300 lbs/acre to 600 lbs/acre
K+Ca+Mg	not greater than 3,700 lbs/acre*
Mn	Acceptable range is 2 ppm to 20 ppm
B	Acceptable range is 0.8 ppm to 3 ppm
Cu	Acceptable range is 0.1 ppm to 4.0 ppm
Z	Acceptable range is 1 ppm to 12 ppm
% Organic	3.0% to 6% (loss on ignition)

(J) An acid-producing soil test is required to determine the potential for decreases in soil pH after oxidation. The pH value of the solution shall be greater than 4.5 as determined by the *USDA Soil Survey Laboratory Methods Manual, Soil Survey Investigations Report No. 42 Version 4.0, November 2004*.

(K) Engineered Soil shall not contain any traces of hydrocarbons, petroleum products, chemically prohibited substances or any other elements considered to be toxic to any vegetation used on this Project. The Engineered Soil shall not smell of petroleum or give off other unnatural or toxic odors. Regardless of prior acceptance of sample material should the Engineered Soil delivered to the site seem suspicious in any way; the Resident Engineer shall reject the material. Should the Contractor strongly disagree with the Resident Engineers' Determination, the Contractor may appeal According to the following APPEAL PROCESS:

APPEAL PROCESS: The Engineer shall check for discoloration and evidence of unacceptable contents. If the Resident Engineer and/or Project Manager suspects that the fill possesses hazardous or contaminated characteristics, it will be rejected. Should the Contractor contest the Resident Engineer's or Project Manager's determination, then samplings of the rejected soil will be sent to a Laboratory which is certified by the NYSDOH Environmental Laboratory Accreditation Program (E.L.A.P.) for the selected analytical method.

Environmental Analysis shall include, but not be limited to, U.S.E.P.A. Standard Test Methods for determination of Contaminant Concentrations and the Toxicity Characteristic Leaching Procedure

(T.C.L.P.) for determination of Leachability of at least 39 Components. The extraction portion of the T.C.L.P. Test shall be performed according to E.P.A.-SW846 Method 1311. Analysis of the extract shall be performed by E.P.A. Methods SW846; 8021 for Volatiles, 8270 for Semi-Volatiles and 6010 for Priority Pollutant Metals (P.P.L.), including lead. Other characteristic tests may include those for ignitability, corrosivity, and reactivity, as deemed required by the Resident Engineer and/or Project Manager.

The Test Results shall be compared with Guidance Values developed by the NYSDEC Division of Spills Management, known as "Spill Technology And Remediation Series" (S.T.A.R.S.) dated 8/92 (Reprinted 7/93), which contains criteria for determining whether petroleum-contaminated soil meets beneficial reuse conditions.

For analyses which are not included in the S.T.A.R.S. guidance, the Test Results shall be compared with Guidance Values developed by the New York State Department of Environmental Conservation (NYSDEC), Bureau of Program Management, Technology Section, for the Division of Hazardous Waste Remediation.

These N.Y.S. D.E.C. Guidance Values are known as "Recommended Soil Cleanup Objectives" or "Appendix A" (Revised 1/24/94), and consist of Table 1 for V.O.C.'s, Table 2 for Semi-V.O.C.s, Table 3 for Organic Pesticides/Herbicides and P.C.B.'s, and Table 4 for Heavy Metal. Final values shall be determined by either a health-based level, or a concentration necessary to protect groundwater quality, whichever is lower. Contractor shall be responsible for:

- 1) Payment of fees for services of the N.Y. State certified lab;
- 2) Removal and legal disposal of Fill;
- 3) Replacement with acceptable fill; and,
- 4) All other expenses, as well as potential fines that may be incurred.

(L) SAND shall consist of sand, free of organic material, loam, debris, frozen soil or other deleterious material which may be compressible. The sand shall be of uniform quality, friable, free from hard clods, stiff clay, hard pan, partially disintegrated stone, stones, lime, cement, ashes, slag, concrete, tar residues, tarred paper, gasoline, motor oil, or other petroleum hydrocarbons, boards, brush, weeds, stalks, roots, sods, chips, sticks or any other undesirable material. Invasive, nonnative seed shall not be allowed in the clean sand material.

Clean sand should conform to the following gradation requirements:

U.S. Standard Sieve Size	Percent Passing by Weight
No. 8	100
No. 10	15-100
No. 40	0-70
No. 60	0-12

Uniformly graded sands, defined as having a uniformity coefficient ($C_u = D_{60}/D_{10}$) less than 6, are unacceptable.

Tests shall be required and shall serve as a representative analysis for every 200 cubic yards of material utilized.

Clean sand shall comply with the following requirements: No sand shall be delivered in a frozen or muddy condition.

1. Invasive, Nonnative Plant Species: Clean sand shall be free of invasive nonnative plant propagules or if present, sand shall be sterilized with documentation.

When clean sand otherwise complies with the requirements of the specifications but shows an organic matter deficiency of not more than one (1) percent, organic matter may be incorporated when and as permitted by the Engineer.

GI-2.13.5. CONSTRUCTION METHODS

- (A) Prior to procurement of Engineered Soil and starting delivery of soil, all approvals for those items required in Subsection GI-2.13.3, above, entitled "SUBMITTALS" must have been given in writing to and accepted by the Engineer.
- (B) Prior to the placement of Engineered Soil, both the open graded stone base, under Item GI-2.07, and sonotube type forms, under Item GI-2.10, must be in place to the satisfaction of the Engineer.
- (C) Engineered Soil shall be evenly placed to the thickness and configuration as directed by the Engineer or as shown on the plans. Engineered Soil shall not be placed when the subgrade or Engineered Soil is frozen, excessively wet, extremely dry, or in a condition otherwise detrimental to the proposed seeding, planting or soil structure.
- (D) The material delivered to the site shall be visually and continuously inspected by the Engineer during construction to ensure that it is consistently the same material previously approved and delivered to the site. If any foreign or off odors are detected, the Engineers reserves the right to refuse the material. If changes in material occur, soil delivery shall cease immediately, the Contractor shall not incorporate the new material into the work until the material meets these specifications. The Contractor shall test the new material as a new source and submit his results to the Engineer for his approval. If Engineer rejects the material, the Contractor shall immediately remove the material off the project site at no additional cost to the City. [See article "K" of Subsection GI-2.13.4., herein]
- (E) Engineered Soil shall be placed by gravity with no additional compaction. After Engineered Soil placement and final grading, no heavy equipment, pickup trucks, or other construction vehicles shall be permitted to travel on these completed areas. The Contractor shall, through mechanical raking and hand grading with rakes and shovels, grade all areas around fences, pipes and other structures in preparation for seeding or planting.
- (F) The Contractor shall, as part of the Engineered Soil spreading operation, mechanically rake and clean all undesirable materials from the Engineered Soil prior to planting operations.
- (G) The Contractor shall dispose of all undesirable materials raked from the Engineered Soil, in accordance with the Specific Provisions.
- (H) The Contractor shall pay all costs, fees, etc., to rectify any deficiencies in placement of the Engineered Soil layer to the acceptance of the Engineer.

GI-2.13.6. MEASUREMENT

The quantity of ENGINEERED SOIL to be measured for payment under this item shall be the number of cubic yards of Engineered Soil actually incorporated in the work, to the satisfaction of the Engineer, measured in trucks used for delivery at the proposed site(s).

GI-2.13.7. PRICE TO COVER

The price bid for ENGINEERED SOIL shall be a unit price per cubic yard and shall cover the cost of all labor, materials, plant, equipment, insurance, and incidentals required to furnish and incorporate the Engineered Soil in the work at the site(s) and shall include, but not be limited to, testing of materials and furnishing such samples for testing as may be required; all in accordance with the Contract Drawings, the specifications and directions of the Engineer.

Payment will be made under:

Item No.	Item	Pay Unit
GI-2.13	ENGINEERED SOIL	C.Y.

**SECTION GI- 2.14
BARK CHIP MULCH**

GI-2.14.1. INTENT

This section describes mulch. The Contractor shall furnish and place mulch in accordance with the Green Infrastructure Standards, specifications, and directions of the Engineer.

GI-2.14.2. SUBMITTALS

The Contractor shall furnish two (2) labeled samples of the Mulch (a.k.a. Jute Mesh) intended for use in the work for approval and the Engineer's use. The label shall include the manufacturer's product name and the type of material. The Engineer reserves the right to reject on or after delivery any materials which do not, in his opinion, meet these specifications.

GI-2.14.3. MATERIALS

Mulch shall be Jute Mesh, be of a uniform open plain weave of undyed and unbleached single jute yarn averaging 190 pounds per spindle of 14,400 yards. This yarn shall be of a loosely twisted construction having an average twist of not less than 1.6 turns per inch and shall not vary in thickness by more than one-half its normal diameter. The width of the jute mesh shall be approximately forty five (45) inches or as specified or approved. Jute mesh shall be woven as follows:

Approximately 60 warp ends per yard of width;

Approximately 40 weft ends per lineal yard.

Weight of Jute Mesh shall average 1.44 pounds per square yard (plus or minus 5%)

Wood Pegs: Shall be wedge shaped, approximately one inch by two inches by six inches (1" x 2" x 6").

Smolder Resistance: The Jute Mesh shall be treated so as to be smolder resistant, meeting the following conditions:

The cloth shall be made resistant to smoldering and/or after-glow by treatment with non-leaching and non-toxic chemicals. The chemicals must be non-toxic to vegetation and the germination of seed. The chemicals used for this purpose must resist leaching based on the equivalent of two inches of rain. The cloth itself shall bear some identification mark to differentiate it from untreated jute cloth.

"Test Method" – When a lighted cigarette is placed on the upper or treated surface of the cloth, neither flame nor after-glow will proceed in any direction more than twelve inches (12") from the original position of the cigarette after it has burned out completely.

GI-2.14.4. CONSTRUCTION METHODS

Jute Mesh shall be applied as a ground cover to the surface of all ROWB and SGS after the planting is completed. Jute Mesh shall be applied to a uniform depth and shall be so distributed as to create a smooth, level cover. Jute Mesh shall cut and placed within two (2) inches of tree and shrub stems. Plants shall not be covered.

Jute Mesh shall be placed on topsoil and seeded areas as shown on the plans or where directed by the Engineer within areas without stretching so that it lays loosely on the soil and in contact with the soil at all points. The upper end of each roll of jute mesh shall be turned and buried to a depth of six (6) inches, with the soil.

Jute Mesh shall be placed parallel to the slope and shall have a minimum lap of six (6) inches.

Jute mesh shall be held tightly to the soil by wood pegs driven firmly into the ground. Wood pegs shall be spaced not more than three (3) feet apart, along the sides of the jute mesh and not more than one (1) foot apart at roll ends or as determined by the Engineer.

MAINTENANCE: The Contractor shall maintain the areas of jute mesh installation until final acceptance of the contract. Maintenance shall consist of providing protection of jute mesh and the repair of areas damaged by equipment, erosion, fire, or other causes, to re-establish the grade and conditions of the area as specified.

GI-2.14.5. MEASUREMENT

The quality of MULCH (a.k.a. JUTE MESH) to be paid for shall be the number of SQUARE YARDS of surface area on which jute mesh has been installed, in accordance with the plans and specifications, to the satisfaction of the Project Manager.

GI-2.14.6. PRICE TO COVER

The price bid for MULCH (a.k.a. Jute Mesh) shall be a unit price per SQUARE YARD and shall include the cost of all labor, materials, equipment, insurance, and incidental expenses necessary to furnish, install, and maintain the Jute Mesh in accordance with the Contract Drawings, the specifications and directions of the Engineer.

Payment will be made under:

Item No.	Item	Pay Unit
GI-2.14	MULCH	S.Y.

**SECTION GI-2.16
HDPE PIPE**

GI-2.16.1. INTENT

This section describes High Density Polyethylene (HDPE) pipe both solid and perforated (slotted), fittings, flanges, unions, couplings, as specified in these Detailed Specifications, shown on the Contract drawings, or as required for a complete installation. Install all HDPE pipe and fittings in accordance with the specifications, the manufacturers' recommendations, and approved shop drawings.

GI-2.16.2. REFERENCES

(A) HDPE pipe shall conform to the latest standards of the American National Standards Institute (ANSI), the American Society for Testing and Materials (ASTM), the American Water Works Association (AWWA) and the National Sanitation Foundation (NSF).

(B) HDPE pipe and fittings shall conform to the following ASTM and AASHTO standards:

- | | |
|-----------------|--|
| 1. ASTM D3212 | Standard Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals |
| 2. ASTM D3350 | Standard Specification for Polyethylene Plastic Pipe and Fittings Materials |
| 3. AASHTO M 252 | Standard Specification for Corrugated Polyethylene Drainage Pipe |
| 4. ASTM D1248 | Standard Specification for Polyethylene Plastics Extrusion Materials for Wire and Cable |
| 5. ASTM D7001 | Standard Specification for Geocomposites for Pavement Edge Drains and other High-Flow Applications |
| 6. ASTM D2321 | Standard Practice for Underground Installations of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications |

GI-2.16.3. SUBMITTALS

(A) Submit catalog data for pipe, couplings, and other appurtenances.

GI-2.16.4. MATERIALS

(A) The pipe shall be as uniform as commercially practicable in color, capacity, density and other physical properties.

(B) The pipe shall be manufactured from high density polyethylene resin in accordance with ASTM D3350 and PPI TR4. The pipe shall conform to cell classification PE 424420C for PE42 under ASTM D-3350. The pipe material shall conform to the following cell classification requirements:

Property	Value	ASTM Test Procedure Designation
Density	0.955 gm/cm ³	D 1505
Melt Flow Index	1.0	D 1238
Flexural Modulus	80,000 psi	D 790
Tensile Strength @ Yield	3,200 psi	D 638
ESCR	Max Failure = 50%	D1693
Hydraulic Design Basis	Not Pressure Rated	D 2837
UV Stabilizer	C, Black with 2-3% carbon black	D 3350

- (C) The pipe shall contain no recycled materials or compounds.
- (D) HDPE pipe shall be marked either continuously or on intervals not to exceed five (5) feet by indirect printing with the following information:
 - (1) Name and/or trademark of the manufacturer.
 - (2) Nominal pipe size.
 - (3) Dimension Ratio (DR).
 - (4) The letters PE followed by the polyethylene grade per ASTM D-1248, followed by the Hydrostatic Design Basis.
 - (5) Manufacturing Standard Reference.
 - (6) Production Code from which time and date of manufacture can be determined.
- (E) Visible defects, such as cracks, creases, crazing, non-uniformly pigmented areas or undispersed raw materials shall not be acceptable and will result in rejection of the pipe by the Engineer.
- (F) HDPE fittings shall be manufactured to the requirements of ASTM D 3212 and this Specification. Fabricated fittings shall be pressure rated to match the system piping.
- (G) Geotextile fabric for wrapping the perforated HDPE Pipe as shown on the Contract Drawings shall comply with the material requirements of **Section GI-2.09**, Geotextile Fabric, herein this Addendum.

GI-2.16.5. MANUFACTURERS

- (A) Advanced Drainage Systems, Inc. (ADS)
4640 Trueman Blvd. Hilliard, OH 43026
1-800-821-6710
<http://www.ads-pipe.com>
- (B) Hancor, Inc.
12370 Jacksontown Rd. #172
Findlay, OH 45840
1-888-367-7473
<http://www.hancor.com>
- (C) Other manufacturers of equivalent products may be submitted for approval.

GI-2.16.6. CONSTRUCTION METHODS

- (A) Utilize care when lowering unit into the trench. Handle using nylon slings and two pick points.
- (B) When the unit consists of two sections, place the downstream section first. Properly lube the bell and spigot to connect and home the remaining section.
- (C) All connections to stormwater manholes, stormwater inlets, junctions, and/or inlets should be grouted and water/soil tight.
- (D) Only use couplings to join standard lengths of pipe and as required to complete a straight run of pipe. Do not use couplings to join random lengths of pipe and cuttings from standard lengths.
- (E) Use reducing fittings for all changes in pipe size. Do not use bushings.
- (F) Wrap perforated HDPE pipe with geotextile with an overlap of at least six (6") inches.
- (G) During construction, keep the lines free from foreign matter. The piping shall be left thoroughly clean to the satisfaction of the Engineer.

GI-2.16.7. MEASUREMENTS

The quantities to be measured for payment under these Items shall be the number of linear feet (installed length) of each type HDPE PIPE actually placed in their final position, to the satisfaction of the Engineer, measured horizontally or vertically along the centerline of pipe and fittings as installed.

GI-2.16.8. PRICES TO COVER

The price bid for each type of HDPE PIPE shall be a unit price per linear foot and shall cover the cost of all labor, materials, equipment, insurance, and incidentals necessary to complete the work of furnishing and installing HDPE Pipe, including, but not limited to, furnishing and installing fittings, flanges, unions, couplings, end caps, sand, and cleanouts, and connecting and joining pipe to other pipes or drainage structures; and furnishing and wrapping geotextile around perforated HDPE pipe; all in accordance with the Contract Drawings, the specifications and directions of the Engineer.

Payment for the cost of excavation and backfilling shall be deemed included in the price for this item.

Payment will be made under:

Item No.	Item	Pay Unit
GI-2.16S	SOLID HDPE PIPE (6" DIA.)	L.F.
GI-2.16P	PERFORATED HDPE PIPE (6" DIA.)	L.F.

**SECTION GI-2.17
STONE GABION**

GI-2.17.1. INTENT

This section describes stone gabions which shall be installed where required, as shown on the Standards for Green Infrastructure and in accordance with the specifications and directions of the Engineer.

GI-2.17.2. DESCRIPTION

A gabion is a PVC coated wire mesh container filled with stone at the project site to form a stable stone basket. The gabion shall have the shape and dimensions as shown on the Contract Drawings and as directed by the Engineer. Wire mesh openings shall be of the necessary size to contain the crushed stone.

GI-2.17.3. MATERIALS

(A) Gabions shall be produced from PVC coating double twisted wire, lacing wire, and stiffeners conforming to the requirements of ASTM A975, Style 3. Fasteners shall be of stainless steel wire.

(B) Fabrication: Gabions shall be supplied, as specified. The horizontal width shall not be less than three (3') feet. However, all gabions furnished by a manufacturer shall be of uniform width. Dimensions for height, lengths and widths are subject to a tolerance limit of $\pm 5\%$ of manufacturer's stated sizes.

The wire mesh shall be non-raveling mesh made of twisting continuous pairs of wires to form hexagonal shaped openings which are interconnected to adjacent wires. The wire mesh shall be of sufficient strength to hold the open graded stone in place and rigid enough to hold the shape as shown on the contract drawings. The wire shall be overcoated with PVC and shall be free from any cracks or breaks after the fabrication of the mesh. Fasteners used to assemble and interconnect the individual units shall be made of stainless steel.

Gabions shall be fabricated in such a manner that the front, back, sides, ends, lid and diaphragms can be assembled at the construction site into a rectangular basket of the specified sizes. Gabions shall be of single-unit construction. The base, lid, ends, front, and back shall be either woven into a single unit or one edge of these members connected to the base section of the gabion in such a manner that strength and flexibility at the point of connection is at least equal to that of the mesh. Where the length of the gabion exceeds its horizontal width, the gabion shall be equally divided by diaphragms of the same mesh and gage as the body of the gabion, forming cells such that the length does not exceed the horizontal width.

(C) Stones for the gabion shall be between three (3") and four (4") inches in diameter. The stones shall meet the specifications of Section GI-2.07, Open Graded Stone, herein this Addendum. The Contractor shall stockpile the material. Where the City elects to conduct tests, a material will be rejected if it fails to meet the following criteria:

- I. Freeze-Thaw Test. A maximum 10 percent loss, by weight, after 25 cycles of freezing and thawing.
- II. Magnesium Sulfate Soundness Test. A maximum 10 percent loss, by weight, after 10 cycles of the magnesium sulfate soundness test.

(D) Geotextile fabric for wrapping the gabion as shown on the Contract Drawings shall meet the material requirements of **Section GI-2.09**, Geotextile Fabric, herein this Addendum.

GI-2.17.4. CONSTRUCTION METHODS

Gabions shall be furnished with the necessary diaphragms secured in proper position on the base in such a manner that no additional tying at this juncture will be necessary. All perimeter edges of the mesh forming the gabion shall be securely selvaged so that the joints formed by tying the selvages have at least the same strength as the body of the mesh.

Gabions cages wrapped with geotextile fabric shall be set in place within the bioswale and filled on site with stones as per the Standards for Green Infrastructure drawings and as directed by the Engineer. The gabions are to be installed at all bioswales, except for those with Stone Columns.

GI-2.17.5. MEASUREMENT

The quantity to be measured for payment shall be the number of Stone Gabions actually installed at the site filled with stone, to the satisfaction of the Engineer.

GI-2.17.5 PRICE TO COVER

The contract price bid for STONE GABION shall be a unit price per each and shall cover the cost of all labor, materials, equipment, insurance, and incidentals necessary to complete the work including, but not limited to, furnishing and placing stones within the gabion cage, and tying the gabion lid in place; all in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

Payment for furnishing and wrapping **GEOTEXTILE FABRIC** around gabions will be made under Item No. GI-2.09.

Payment will be made under:

Item No.	Item	Pay Unit
GI-2.17	STONE GABION	EACH

**SECTION GI- 2.19
HDPE STORMWATER CHAMBER**

GI-2.19.1. INTENT

This section describes the HDPE STORMWATER CHAMBER. The purpose of the HDPE STORMWATER CHAMBER is to provide increased storm runoff detention capacity in a Right of Way Bioswale.

GI-2.19.2. KIND

The stormwater chamber shall be manufactured of high molecular weight high density polyethylene in an ISO-9001 certified manufacturing facility and meet ASTM D-3350 Cell Class 324420C. Chambers will be manufactured with an open bottom and perforated side walls. If approved by the manufacturer, the units may be trimmed to custom length. The stormwater chamber must meet the required dimensions as shown in the Contract Drawings and DEP Standard Details for Green Infrastructure with placement on bedding and backfill as shown.

GI-2.19.3. SUBMITTALS

The Contractor, prior to the start of work, shall submit to the Engineer for approval catalog samples and cut sheets of the proposed material including certification that materials meet specified requirements and proposed dimensions of the Contract Drawings and DEP Standard Details for Green Infrastructure.

GI-2.19.4. CONSTRUCTION METHODS

- (A) Delivery - Deliver materials to site in manufacturer's original, unopened packaging, with labels clearly identifying product name and manufacturer.
- (B) Storage - Store materials in clean, dry area in accordance with manufacturer's instructions.
- (C) Handling - Protect materials during handling and installation to prevent damage.
- (D) Prior to the installation of the stormwater chamber, the Contractor shall excavate the Bioswale area to the satisfaction of the Engineer.
- (E) Install stone base, stormwater chamber, and backfill as indicated on the Standards for Green Infrastructure.

GI-2.19.5. MANUFACTURERS

- (A) CULTEC Inc.
878 Federal Road
PO Box 280
Brookfield, CT 06804
<http://www.cultec.com/>
- (B) StormTech
70 Inwood Road, Suite 3
Rocky Hill, CT 06067
www.stormtech.com
- (C) Triton Stormwater Solutions
9864 E. Grand River, Suite 110 #176
Brighton, MI 48116
www.tritonsws.com
- (D) Or another approved manufacture.

GI-2.19.6. MEASUREMENT. The quantity to be measured for payment shall be the number of linear feet of HDPE STORMWATER CHAMBER installed to the satisfaction of the Engineer, measured along the centerline of the chamber from end to end.

GI-2.19.7. PRICE TO COVER. The contract price bid for HDPE STORMWATER CHAMBER shall be a unit price per linear foot and shall cover the cost of all labor, material, equipment, insurance, and incidentals necessary to furnish, handle, store, and install a stormwater chamber within a bioswale, including, but not limited to, end caps, cutting holes in the sheets for utilities; all in accordance with the Contract Drawings, the specifications, manufacturers installation instructions, and the directions of the Engineer.

Earth excavation, open graded stone base, and backfilling, where called for on the Contract Drawings, will be paid under their respective items.

Payment will be made under:

Item No.	Item	Pay Unit
GI-2.19	HDPE STORMWATER CHAMBER	L.F.

**SECTION GI-4.02
EARTH EXCAVATION**

GI-4.02.1. DEFINITION, EARTH EXCAVATION

(A) Earth Excavation shall include the removal and disposal of all materials of whatever nature encountered in the prosecution of the work, unless otherwise specified. All materials of whatever nature encountered shall be defined as including, but not limited to, the following:

- (1) soil;
- (2) stones;
- (3) soft weathered rock that can be excavated by mechanical means other than air hammer or drilling and blasting;
- (4) miscellaneous fill and refuse, trees under four (4") inches caliper, stumps up to 6" diameter, anything thrown away or rejected as worthless or useless (both organic and inorganic material) that can be excavated by mechanical means other than air hammer or burning and cutting;
- (5) sidewalk pavements (all types) within limits of trenches and excavations and cutbacks;

(B) Earth Excavation shall not include the following:

- (1) boulders in open cut as defined in **Subsection 4.03.1**;
- (2) contaminated or hazardous materials that materially affect the cost of removal and disposal to the Contractor; and,
- (3) existing man-made objects or structures that are not shown on the contract drawings or indicated in the specifications, that could not reasonably have been anticipated by the Contractor, were not anticipated by the City, and which materially affect the cost of removal and disposal to the Contractor, as determined by the Commissioner.

(C) If the City anticipates that any of the items in paragraph (B) above need to be excavated and disposed of, a separate contract item will be included in this contract.

If a separate contract item is not included in the contract and the City determines: (1) that the Contractor could not have reasonably anticipated that such materials would need to be excavated and disposed of; and, (2) that such excavation and disposal would materially affect the Contractor's costs; then such excavation and disposal shall be paid for as Extra Work under Article 26 of the Standard Construction Contract.

GI-4.02.2. RELATED SPECIFICATIONS

SECTION 6.02 – Unclassified Excavation of NYCDOT Standard Highway Specifications

GI-4.02.3. EXECUTION

(A) The Contractor shall excavate all materials to the established lines and grades for the construction of all facilities included in this Contract, or as shown and specified, in accordance with the requirements of the latest NYCDOT Standard Highway Specifications **Section 6.02**, except as otherwise specified herein. Excavation shall include removing boulders of size less than one-half cubic yard. The limits of excavation shown on the drawings indicate the extent of work to be performed by the Contractor. The Contractor shall furnish and install any temporary side slope supports, bracing, and sheet piling required to perform the excavation to the depths and limits indicated.

(B) Water in Excavations - Prior to starting the work, the Contractor shall submit to the Engineer for approval, a detailed description of the method he proposes to use to prevent the collection of water in excavation during construction, including a coordinated sequence of operation for the entire project. Such prevention shall include, but not be limited to, providing drainage and diversion of runoffs by means of sandbagging and/or removal by pumping. Approval by the Engineer will not relieve the Contractor of his responsibility for the safety of the work, existing structures and adjacent property.

(C) Protection of Underground Utilities - Determine location of underground utilities and perform work in a way that shall avoid possible damage. Hand excavate as required. The Contractor assumes responsibility for damage to underground utilities when excavating and is required to call "One Call" @ 800-272-4480 a service that marks underground facilities on the surface, prior to excavation. Maintain grade stakes set by others until removal is approved by Engineer. However, the Contractor is advised that the provisions of 16 NYCRR Part 753 ("One Call") do not apply to City owned utilities. It shall be the Contractor's responsibility to determine the location of the City owned underground distribution systems. The Contractor shall make his own field observations and research the City's records to determine the location of such facilities before the commencement of excavation.

(D) Trees, Shrubs, and Grassed Areas: Trees, shrubs and grassed areas which are to remain shall be protected by fences, barricades, wrapping or other methods as shown, specified or approved by the Engineer and shall be replaced at no added cost to the City in the event they are destroyed or damaged as a result of excavation and or dewatering by the Contractor. Trees shall not be removed without approval of the Engineer unless shown on the Contract Drawings or specified herein. Dewatering shall be done as per Section GI-5.02, herein this Addendum.

(E) Vehicles used to transport excavated materials to disposal sites shall, when traveling, be watertight and of such a construction as to prevent spillage. All method of transportation and disposal shall be subject to the approval of the Engineer.

(F) The Contractor shall provide a final Survey Data Report for each site which shall include, but not be limited to, the excavation area after all excavation work under this Section has been completed. This report shall include measurements of all final dimensions of the excavation area. The Contractor shall employ a tripod-supported auto-fire or auto-scan laser with built-in angle and distance measurements and software capabilities. No separate payment will be made for this work, the cost of which shall be deemed included under this Item GI-4.02.

GI-4.02.4. MEASUREMENT

The quantity of Earth Excavation to be measured for payment shall be the number of cubic yards of material of whatever nature encountered (except for ledge rock, unanticipated structures which cannot be removed using conventional excavating equipment, and hazardous materials) actually excavated from within the bioswale area and shall include, but not be limited to, sidewalk pavements.

The dismantling and removal of the existing street lights, traffic signals and fire alarms, etc., will be done by the various departments having jurisdiction, except as otherwise provided. The existing foundations for these facilities shall be removed by the Contractor to a plane two (2') feet below subgrade and such removal will be measured for payment under this item.

GI-4.02.5. PRICE TO COVER

The contract price bid for Earth Excavation shall cover the cost of all labor, materials, plant, equipment, insurance, and incidentals required for excavating and disposing of all materials of whatever nature encountered (except for ledge rock, unanticipated structures which cannot be removed using conventional excavating equipment, and hazardous materials) including, but not limited to, sidewalk pavements, foundations, curbs and sidewalks in areas to be widened; dewatering; protection of underground utilities; salvaging items designated for re-use in the work; grading; backfilling; compaction and preparation of subgrades; additional excavation, when ordered by the Engineer; all, together with necessary incidentals, in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

When there is no scheduled Item, to pay for fill or backfill as may be required, the cost of furnishing and placing fill or backfill shall be deemed included in the contract price for Earth Excavation.

The quantity of excavation to be measured for payment under Earth Excavation shall not include excavation required under other Sections whose contract prices include the cost of excavation.

Payment will be made under:

Item No.	Item	Pay Unit
GI-4.02	EARTH EXCAVATION	C.Y.

**SECTION GI-5.01
SITE CLEARING****GI-5.01.1. DESCRIPTION**

Clearing is limited to the removal from the ground surface and disposal, within the designated bioswale areas, of trees, brush, shrubs, down timber, decayed wood, other vegetation, rubbish, trash, scrap metal, debris and miscellaneous other structures not covered under other Sections as shown on the Contract Drawings, specified or otherwise required to permit construction of the new bioswale Work.

Streets, roads, adjacent property and other works and structures shall be protected throughout the entire project. Contractor shall return to original condition, satisfactory to the Engineer, facilities damaged by the Contractor's operations.

GI-5.01.2. PROTECTION

(A) Streets, roads, adjacent property and other works and structures shall be protected throughout the entire project. The Contractor shall return to original condition, satisfactory to the Engineer, damaged facilities caused by the Contractor's operations.

(B) Trees, shrubs and grassed areas which are to remain shall be protected by fences, barricades, wrapping or other methods as shown, specified or approved by the Engineer. Equipment, stockpiles, etc., shall not be permitted within tree branch spread. Trees shall not be removed without approval of the Engineer unless shown or specified.

(C) The Contractor shall guarantee that work performed under this Section will not permanently damage trees, shrubs, turf or plants designated to remain, or other adjacent work or facilities. If damage resulting from the Contractor's operations appears during the period up to 12 months after completion of the project he shall replace damaged items at no additional expense to the City.

GI-5.01.3. CLEARING AND GRUBBING

(A) Limits of clearing shall be all areas within the Contract limit lines except as otherwise shown. Damage outside these limits caused by the Contractor's operations shall be corrected at the Contractor's expense.

(B) The Contractor shall remove from the site and satisfactorily dispose of all trees under four (4") inches in diameter breast height, shrubs, stumps including and up to six (6") inches in diameter, roots, brush, masonry, rubbish, scrap, debris, pavement, curbs, fences and other miscellaneous structures not covered under other Sections as shown, specified or otherwise required to permit construction of the new work.

(C) No cleared or grubbed material may be used in backfills or structural embankments.

(D) Burning on site shall not be permitted.

(E) All burning off the site shall be in complete accordance with rules and regulations of local authorities having jurisdiction.

(F) Trees and shrubs shall be trimmed when doing so will avoid removal or damage. Trimmed or damaged trees shall be treated and repaired by persons with experience in this specialty who are approved by the Engineer. The Contractor shall replace trees and shrubs intended to remain, which are damaged beyond repair or removed.

GI-5.01.3. MEASUREMENT

Payment for Clearing and Grubbing will be made at the unit price bid per square yard for work satisfactorily completed.

GI-5.01.4. PRICE TO COVER

The contract price for Site Clearing shall cover the cost of all labor, materials, equipment, insurance, and incidentals required to complete the work, together with all other work in connection therewith and incidental thereto, in full compliance with the Contract Drawings, the specifications and the directions of the Engineer.

When there is no scheduled item provided therefor, the cost of the work required for Site Clearing shall be included in the prices bid for all the scheduled contract items.

No separate payment will be made for tree pruning required herein to provide a clearance of fourteen (14') feet above the proposed final surface, unless it is provided under other scheduled contract items.

Payment will be made under:

Item No.	Item	Pay Unit
GI-5.01	SITE CLEARING	S.Y.

**SECTION GI- 5.02
(NOT A PAY ITEM)
DEWATERING**

GI-5.01.1. DESCRIPTION

Construction dewatering shall consist of controlling surface water such that excavation required on the Contract Drawings can be performed to required depths in substantially dry and stable conditions.

GI-5.01.2. MATERIALS

(A) All pumps used in the dewatering operation shall be electric and shall be powered directly from a Con Edison drop, unless otherwise unavailable.

GI-5.01.3. CONSTRUCTION METHODS

(A) The Contractor shall at all times during the progress of the work keep the excavations free from water. The water from the excavations shall be disposed of in such a manner as will not cause injury to the public health, nor to public or private property, nor to the work completed or in progress, nor to the surface of the streets, nor cause any interference with the use of the same by the public. All sewers used for disposal of water from the excavation during construction shall be acceptably cleaned.

(B) Surface water on and around the site shall be collected into local sumps by means of trenches, pipes, or other means. The Contractor shall discharge the water into the City wastewater collection system. Direct surface water to minimize surface erosion, ponding and softening of slopes and berms, including haul roads and equipment working stations. Slope protection by means of polyethylene sheets, held in place by tires or otherwise, shall be provided locally as required. At the perimeter of the excavation, surface water is to be directed into the storm sewer system and not permitted to enter the excavation. Curbs shall be maintained and, where necessary, extended across intersections, curb cuts and defective curb sections.

(C) The Contractor shall, with the Contractor's own equipment, provide dewatering where required at no additional cost to the City. The cost for all labor, equipment, materials, etc. required to dispose of water from the excavation shall be deemed included in the prices bid for all items of the contract.

(D) All dewatering and discharge pipes and hoses which cross traveled roadways shall be placed in such a manner so as to eliminate any disruption of traffic flow.

GI-5.11.4. MEASUREMENT AND PAYMENT

Payment for this item shall be deemed to be included in the unit price bid for Item No. GI-4.02.

**SECTION GI-5.08
PLANTING TREES IN THE BIOSWALE**

GI-5.08.1. INTENT

This section describes planting of trees.

GI-5.08.2. DESCRIPTION

The Contractor shall provide all labor, materials, equipment, insurance and incidentals required to furnish and plant the scheduled trees in the bioswale, as shown on the Green Infrastructure Standards and in accordance with the specifications and the directions of the Engineer. The Contractor shall be liable for any damages to property caused by planting operations, and all areas and construction disturbed shall be restored to their original conditions, to the satisfaction of the Engineer, at no cost to the City.

GI-5.08.3. MATERIALS

(A) Plant names, size, and grading standards shall conform to those prepared by the American Association of Nurserymen Horticultural Standards, 1998 Edition, unless otherwise specified. No substitution shall be permitted, except with the written permission of the Engineer in consultation with the NYC Department of Parks and Recreation's Chief of Forestry & Horticulture.

(B) Burlap: Burlap shall be a natural fabric. No nylon burlap shall be permitted.

(C) Cord or Rope: Cord or rope shall be sisal twine. Nylon rope shall not be permitted.

GI-5.08.4. QUALITY CONTROL

Sources

(A) Primary Source. All trees obtained from nurseries must have been produced by plants with a provenance from within a 250-mile radius of the planting site. The Contractor shall submit written verification from the nurseries on their letterhead (submittals on contractor letterhead will be rejected), certifying the collection location of plant species seed sources and cuttings (when applicable) for all plant material used on this project. However, a reasonable effort shall be made to obtain sources of plants as close to the planting site as possible. All plants grown and/or originating from outside the 250-mile radius will be rejected. In addition, all plants must have been grown within the 6a to 7a, inclusive, USDA Plant Hardiness Zones as that of the planting site. No substitutions of specified plants will be accepted without the written permission of Engineer.

Ship landscape materials with certificates of inspection when required by governmental authorities. Comply with governing regulations applicable to landscape materials.

(1) Nurseries that collect plants from the wild will be rejected.

(2) If specified landscape material is not obtainable, submit proof of non-availability, with written proposal for use of equivalent material to Engineer.

(3) The Contractor shall provide trees of quantity, size, genus, species shown and scheduled for landscape work and complying with recommendations and requirements of ANSI Z60.1 "American Standard for Nursery Stock" as referenced above (e.g., container size, plant height, number of stems, etc.). The Contractor shall provide healthy, vigorous stock, grown by a professional nursery in accordance with good horticultural practices and free of diseases, insects, eggs, larvae and defects including, but not limited to, knots, sun-scald, injuries, abrasions, or disfigurement.

(4) All plants furnished under this Item shall be true to name. Plant names shall agree with the nomenclature of "Manual of Vascular Plants of the Northeast United States and Canada," Gleason and Cronquist, 1991. Size and grading shall conform to those of the American Association of Nurserymen.

Inspection of Plant Material at Nursery

- (A) The Engineer or his representative shall inspect all plant material used on this project at the place of growth before planting, for compliance with requirements for genus, species, variety, size and quality. The Contractor shall be responsible for all inspection costs beyond a 50-mile radius from the planting Site.
- (B) The Engineer or his representative retains the right to further inspect all plant material for size and condition of root system, insects, injuries and latent defects, and to reject unsatisfactory or defective material anytime during the progress of work. The Contractor shall remove rejected plant material from the project site immediately upon notification without compensation.
- (C) Only tagged samples of plant material shall be delivered to the site and planted in locations approved by the Engineer or representative.
- (D) The Contractor shall be responsible for all certificates of inspection of plant materials that may be required by Federal, State or other authorities to accompany each shipment of plants and on arrival, the certificates shall be filed with the Engineer.

GI-5.08.5. ORDERING PLANT MATERIALS

(A) The Contractor shall notify the Engineer of the unavailability of any tree species designated in the contract, as well as provide confirmation to the Engineer of all orders from all sources of supply. Any request for species substitution due to unavailability must be submitted in writing to the Engineer, within fifteen (15) days of the award of contract. The Contractor must include the names and addresses of at least ten (10) nurseries they have contacted in an effort to locate these species, and the list shall be submitted to the Engineer. All nurseries supplying material shall be required to have a registration certificate from the Department of Agriculture and Markets, Division of Plant Industry, New York, or any other state where plant material is obtained, certifying that plant material is apparently free of injurious insects and diseases.

GI-5.08.6. CHEMICAL AND PHYSICAL REQUIREMENTS

(A) Plant material

Plant material shall be as shown on the Tree Planting Schedule as shown on the Contract Drawings. Where applicable, the Contractor shall provide freshly dug plant material. Cold storage or previously dug plants will not be acceptable. The Contractor shall not prune prior to delivery unless otherwise directed and approved by the Engineer or representative. Plants that are pruned without authorization from the Engineer will be rejected. Plant material shall be delivered to the site in such a manner as to not damage the bark, break branches, or destroy the natural shape of the plant. To protect plant material from desiccation, the Contractor shall when deemed appropriate and only on appropriate plant material, apply an approved anti-desiccant 48 hours prior to transporting and fully cover plant material during transportation to the planting site. Plant material shall not be dropped or in any way be mishandled during unloading. Plants damaged during transportation to the site will be immediately rejected. Unacceptable conditions shall include, but not be limited to, the following: loose burlap or rope, soil spilling from B&B or containers, plants that move independently of root ball or container, soil missing from B&B or containers, and irregularly shaped root balls.

(B) ASIAN LONGHORNED BEETLE QUARANTINE ZONE REGULATIONS:

Due to current Federal, State and NYC DPR policy, the following host species may not be planted in the quarantine zone. Host species are as follows: Acer-Maple, Aesculus-Horsechestnut/Buckeye, Salix-Willow, Betula-Birch, Populus-Poplar, Ulmus-Elm, Albiza-Mimosa/Silk Tree, Celtis-Hackberry, Fraxinus-Ash, Platanus-London Planetree, Sycamore, Sorbus-Mountain Ash.

In addition, Nurseries located within the quarantine zone shall comply with State and Federal Law and all Contractors and/or Subcontractors shall be certified by the New York State Department of Agriculture and Markets to perform work within the Quarantine Zone. For additional information, including the extent of the quarantine zone, see the NYC Department of Transportation, Standard Highway Specifications, General Conditions, Subsection 1.06.23.(R), "PLANT PEST CONTROL REQUIREMENTS".

(C) Dimensions

A plant shall be dimensioned as it stands in its natural position. Trees up to and including four (4) inch caliper size shall be measured six (6) inches above ground level. Trees over four (4) inches in caliper size shall be measured twelve (12) inches above ground level. Stock furnished shall be a fair average of the minimum and maximum sizes specified. Larger plants cut back to sizes specified will not be accepted.

(D) Preparation of Plants

All precautions customary in good trade practice shall be taken in preparing plants for moving. Workmanship that fails to meet the highest standards will be rejected. All plants shall be dug immediately before moving unless otherwise specified. All plants shall be dug to retain as many fibrous roots as possible. Balled and burlapped and balled and platformed plants shall have a solid ball of earth of minimum specified size, securely held in place by burlap and stout rope or twine. Oversized or exceptionally heavy plants are acceptable if the size of the ball or spread of roots is proportionately increased, to the satisfaction of the Engineer. Loose, broken, or manufactured balls will be rejected. Bare root plants shall be puddled immediately after digging by immersing the roots in a hydrogel slurry, so as to completely coat the roots.

(E) Delivery

Plants shall be packed, transported, and handled with utmost care to insure adequate protection against injury. When transported in closed vehicles, plants shall receive adequate ventilation to prevent sweating. When transported in open vehicles, plants shall be protected by tarpaulins or other suitable cover material. All bare root plants shall be adequately protected from drying out and immediately after inspection shall be heeled in moist soil. Balled and burlapped plants shall be set on the ground and the ball covered with soil. Until planted, all material shall be properly maintained and kept adequately moist, to the satisfaction of the Engineer.

(F) Inspection

Inspection may be made before digging if the Engineer directs, but no plant material shall be planted by the Contractor until inspected by the Engineer at the site of the work. Plant material will be rejected if delivered with broken or damaged root balls, or if damaged on site by rough handling. All rejected material shall be immediately removed from the site and replaced with acceptable material at no additional cost to the City. Final inspection shall be made upon completion of the contract.

GI-5.08.7. PLANT SCHEDULE**(A) ABBREVIATIONS**

Cal.	Indicates the caliper of the trunk of the tree.
B & B	Indicates tree or shrub to be balled and burlapped.
B.R.	Indicates a tree or shrub to be delivered "bare root".
O.C.	Indicates "on center" or spacing between plants in all directions.
Ht.	Indicates overall height of tree.
Item No.	Indicates specific species of plant material, including a description.

(B) No planting shall be done except in the presence of the Engineer. While trees with exposed roots are being distributed in planting beds or are awaiting planting after distribution, the Contractor shall protect the roots from drying out; the means employed shall be satisfactory to the Engineer. All trees shall stand, after settlement, at the same level at which they have grown. Care shall be exercised in setting the plants plumb. All ropes, stones, etc., shall be removed from the pit before backfilling. Soil for backfilling shall be loose and friable.

Planting Schedule

Deciduous	March 1 to May 1 and	October 15 to December 1
Evergreen	April 1 to May 15 and	September 1 to October 15

(C) Approval of new plantings in each Bioswale will not occur until all landscaping work has been completed. The Contractor shall be responsible for maintaining all new planted trees, in accordance with the requirements of the Subsection GI-5.09.4.

Items PM-1 through PM-3 are listed by estimated size and/or shared similarities; they include—but shall not be limited to—the genus and species listed beneath each item.

1. ITEM# GI-5.08PM-1 PLANT MAJOR TREES – 2 to 2.5 INCH CALIPER

Acer campestre, Hedge Maple - 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from the ground. Should have single straight trunk with leader intact and symmetrical well branched tops.

Acer ginnala, Amur Maple: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from the ground. Should have single straight trunk with leader intact and symmetrical well branched tops.

Acer rubrum, Red Maple: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from the ground. Should have single straight trunk with leader intact and symmetrical well branched tops.

Carpinus betulus, European Hornbeam: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from the ground, spread of top 5' to 6'. Should have single straight leader.

Celtis laevigata, Sugar Hackberry: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from the ground, spread of top 5' to 6'. Should have single straight trunk with leader intact and symmetrical well branched tops.

Celtis occidentalis, Hackberry: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground. Should have straight trunk w/symmetrical well branched top, spread of 5' to 6'.

Cercidiphyllum japonicum, Katsura Tree: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground, spread of top 4' to 5', well branched. Should have straight trunk with leader intact.

Cladrastis kentukea (lutea), Yellow wood: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from the ground, spread of top 5' to 6'. Should have a single straight trunk. Specimen quality.

Corylus colurna, Turkish Filbert: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from the ground, spread of top 5'-6'. Should have single, straight leader.

Crataegus viridis 'Winter King', 'Winter King' Green Hawthorn: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from the ground, spread of top 6'. Should have a single straight trunk.

Eucommia ulmoides, Hardy Rubber Tree: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground. Should have straight trunk with symmetrical and somewhat pyramidal, well branched top.

Fraxinus pennsylvanica, Green Ash: 2" to 2-1/2" cal. B&B with 26" to 28" rootball branched 6' from ground. Should have single straight trunk with leader intact, symmetrical well branched tops.

Ginkgo biloba, Ginkgo: 2" to 2-1/2" cal. B&B with 26" to 28" rootball Branched 6' from ground. Single straight trunk with leader intact, symmetrical well branched tops. Trees with unbalanced tops not acceptable. Spread of top 3' to 4'. Staminate form only.

Gleditsia triacanthos var inermis, Honeylocust: 2" to 2-1/2" cal. B&B with 26" to 28" rootball branched 6' from ground. Spread of top 4' to 5'. Shall have straight trunks and picturesque, well branched tops.

Gymnocladus dioicus, Kentucky Coffeetree: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground. Single straight trunk with leader intact, symmetrical well branched tops.

Halesia caroliniana/Halesia tetraptera, Carolina Silverbell: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from the ground, spread of top 5' to 6'. Should have a single straight trunk. Specimen quality.

Koelreuteria paniculata, Goldenrain Tree: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground. Should have single straight trunks with leaders intact and symmetrical well branched tops.

Liquidambar styraciflua, Sweetgum: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground. Should have single straight trunks, leader intact, well branched tops.

Liriodendron tulipifera, Tuliptree: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground. Straight trunk w/symmetrical well branched top, spread of top 5' to 6'.

Metasequoia glyptostroboides, Dawn Redwood: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground. Single straight trunk, pyramidal form and leader intact.

Nyssa sylvatica, Black Gum: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground. Should have single straight trunks with leader intact. Well branched tops.

Platanus X acerifolia, London Plane Tree: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground. Shall have single straight trunks with leader intact, symmetrical well branched tops. No cut back trees.

Pyrus calleryana, Callery Pear: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground, spread of top 4' to 5'. All Pyrus must have been transplanted within the past two years.

Quercus acutissima, Sawtooth Oak: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground. Spread of top 4' to 5'.

Quercus bicolor, Swamp White Oak: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground. Spread of top 4' to 5'.

Quercus imbricaria, Shingle Oak: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground. Spread of top 4' to 5'.

Quercus macrocarpa, Bur Oak: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground. Spread of top 4' to 5'.

Quercus muehlenbergii, Chinkapin Oak: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground. Spread of top 4' to 5'.

Quercus palustris, Pin Oak: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground. Spread of top 4' to 5'.

Quercus phellos, Willow Oak: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground. Spread of top 4' to 5'.

Quercus robur, English Oak: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground. Spread of top 4' to 5'.

Quercus robur 'Fastigiata', Columnar English Oak: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, fully branched.

Quercus rubra, Red Oak: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' to 7' from ground. Spread of top 4' to 5'.

Sorbus alnifolia, Korean Mountain Ash: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground. Shall have a single straight trunk with symmetrical well branched tops.

Styphnolobium japonicum, Japanese Pagodatree: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground. Symmetrical well branched tops. Spread of top 4' to 5'.

Syringa reticulata, Japanese Tree Lilac: 2" to 2-1/2" cal. B&B with 26" to 28" rootball. Must be single stemmed. Spread of top 5'.

Taxodium distichum, Bald Cypress: 6' to 8'. B&B with 26" to 28" rootball. Should have single straight trunk, vigorous growth with pyramidal form and single, straight leader intact.

Taxodium distichum var. nutans, Pond Cypress: 6' to 8'. B&B with 26" to 28" rootball. Should have single straight trunk, vigorous growth with pyramidal form and single, straight leader intact.

Tilia americana 'Redmond', 'Redmond' American Linden: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground, spread of top 4' to 5'. Straight trunks with leaders intact, and well branched tops.

Tilia cordata 'Greenspire', 'Greenspire' Littleleaf Linden: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground, spread of top 4' to 5'. Straight trunks with leaders intact, well branched tops.

Tilia x euchlora, Crimean Linden: 2" to 2-1/2" cal. B&B with 26" to 28" rootball branched 6' from ground, spread of top 4' to 5'. Straight trunks with leaders intact, well branched tops. No limb cuts over 3/4" which have not completely calloused over.

Tilia tomentosa, Silver Linden: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground. Spread of top 4' to 5'. Straight trunks with leaders intact, well branched tops.

Ulmus hybrids ('Accolade', 'Frontier', 'Morton Glossy', 'New Horizon', 'Patriot', and 'Pioneer'): 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground. Straight trunk with leader intact, well branched tops.

Ulmus spp. ('Jefferson', 'New Harmony', 'Valley Forge', 'Princeton', 'Homestead', 'Pioneer', 'Delaware'), American Elm: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground. Straight trunk with leader intact, well branched tops.

Ulmus parvifolia, Lacebark Elm: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground, spread of top 5' to 6', straight trunk with symmetrical, well branched tops, must be free from bad crotches and other structural faults, shall be free from scale, Dutch Elm disease and all other infestation.

Zelkova serrata, Japanese Zelkova: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground, spread of top 4' to 5'.

2. ITEM # GI-5.08PM-2 PLANT MAJOR TREES – 3.5 to 4 INCH CALIPER

Same tree species as listed in Item #PM-1 with the caliper size of 3.5 inches to 4 inches

3. ITEM # GI-5.08PM-3 PLANT FLOWERING TREES

Amelanchier arborea, Downy Serviceberry: 8' to 10' H, B&B, 20" rootball, spread of top 5' to 6'.

Amelanchier canadensis, Shadblow: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from the ground, average height 8' to 10', spread of top 5' to 6'. Should have single, straight leader. Provide multi-stemmed specimens if requested. Multi-stemmed trees shall have a minimum of 4 main stems and be a minimum height of 4'.

Amelanchier x grandiflora 'Autumn Brilliance', 'Robin Hill', Apple Serviceberry: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from the ground, average height 8' to 10', spread of top 5' to 6'. Should have single, straight leader. Provide multi-stemmed specimens if requested. Multi-stemmed trees shall have a minimum of 4 main stems and be a minimum height of 4'.

Amelanchier laevis 'Snowcloud', Snowcloud Serviceberry: 8'-10' H., B&B, 20" rootball, spread of top 5-6'.

Cercis canadensis, Cercis canadensis 'Alba', Cercis canadensis 'Forest Pansy', Eastern Redbud: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' to 7' from ground, average height 12' to 14', spread of 4' to 5', well branched. Should have straight trunk with leader intact. No limb cuts over 3/4' which have not completely calloused over. Heavy fibrous root system essential. Supply multi-stemmed if specified. Multi-stemmed shall be a minimum of 6'.

Chionanthus retusus, Chinese Fringetree: 1-3/4" to 2" cal., B&B, 22" rootball, well branched, spread of top 5'.

Chionanthus virginicus, White Fringetree: 5'-6' H., B&B, 16"-18" rootball, well branched, spread of top 5'.

Cornus florida, Flowering Dogwood: 8'- 10' H., B&B, 20" rootball, well branched, spread of top 5'.

Cornus kousa, Korean Dogwood: 8'- 10' H., B&B, 20" rootball, well branched, spread of top 5'

Cornus mas & Cornus officinalis, Cornelian Dogwood: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, spread of top 5'-6'. Should have single, straight leader.

Crataegus crus-galli var, inermis, Cockspur Hawthorn: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, single straight trunk, spread of top 7', specimen quality.

Crataegus laevigata, English Hawthorn: 8'-10' H., B&B, 20" rootball, single straight trunk, spread of top 6', specimen quality.

Crataegus lavalleyi, Lavalley Hawthorn: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, single straight trunk, spread of top 7', specimen quality.

Crataegus phaenopyrum, Washington Hawthorn: 8'- 10' H., B&B, 20" rootball, single straight trunk, spread of top 6', specimen quality.

Crataegus viridis, Green Hawthorne: 8'-10' H., B&B, 20" rootball, single straight trunk, spread of top 6', specimen quality.

Halesia tetraptera, Carolina Silverbell: 1-3/4" to 2" cal, 8'- 10' H., B&B, 22" rootball, single straight trunk, spread of top 5', specimen quality.

Hamamelis x intermedia, Hamamelis Intermedia: 4' to 4.5' H., B&B, 14" rootball, spread of top 4', specimen quality.

Laburnum x wateri, Goldenchain Tree: 1-1/2" to 2" cal., B&B, 22" rootball, single straight trunk, spread of top 6', specimen quality.

Lagerstroemia indica, Crapemyrtle: 6' to 8' H. Multi-stemmed - minimum of 3 main stems, B&B, 18" rootball,

Maackia amurensis, Amur Maackia: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 5' from ground. Should have single straight trunks with leaders intact, and symmetrical well branched tops.

Magnolia x soulangeana, Saucer Magnolia: 8' to 10' H, B&B, 20" rootball, well branched, spread of top 5'. Provide multi-stemmed specimens if requested. Multi-stemmed trees shall have a minimum of 4 main stems and be a minimum height of 6'.

Magnolia stellata, Star Magnolia: 8' to 10' H, B&B, 20" rootball, well branched, spread of top 5'. Provide multi-stemmed specimens if requested. Multi-stemmed trees shall have a minimum of 4 main stems and be a minimum height of 6'.

Magnolia virginiana, Sweetbay Magnolia: 8' to 10' H, B&B, 20" rootball, well branched, spread of top 5'. Provide multi-stemmed specimens if requested. Multi-stemmed trees shall have a minimum of 4 main stems and be a minimum height of 6'.

Malus baccata, Siberian Crabapple: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground. Straight trunk with leader (single) intact, symmetrical well branched top.

Malus floribunda (sp), Japanese Flowering Crabapple: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground. Straight trunk with leader (single) intact, symmetrical well branched top.

Malus, multi-stemmed (spp), Crabapple: 6' to 10' high, minimum diameter of root ball 24", with minimum spread of branches 5' to 6'. No branches should be less than 4' from the ground, unless it is endemic to the variety.

Malus sargentii, Crabapple: 5' to 6' H, B&B, 18" rootball, heavy plant, well furnished to ground, spread equal to height.

Malus x zumi, Redbud Crabapple: 2" to 2-1/2" cal. B&B with 26" to 28" rootball, branched 6' from ground. Straight trunk with leader (single) intact, symmetrical well branched top.

Oxydendrum arboreum, Sourwood: 7' to 8' H, B&B, 20" rootball, single straight trunk, spread of top 5', specimen quality.

Prunus mume, Japanese Apricot: 5-6' H., B&B, 20" rootball, heavy plant, well furnished to ground, spread equal to height.

Prunus 'Okame', Okame Cherry: 2" to 2-1/2" cal. B&B with 26" to 28" rootball. Shall have a single straight trunk with symmetrical well branched top.

Prunus padus, European Bird Cherry: 2" to 2-1/2" cal. B&B with 26" to 28" rootball. Shall have a single straight trunk with symmetrical well branched top.

Prunus sargentii, Sargent Cherry: 2" to 2-1/2" cal. B&B with 26" to 28" rootball. Shall have a single straight trunk with symmetrical well branched top.

Prunus serrulata 'Kwanzan', Kwanzan Cherry: 2" to 2-1/2" cal. B&B with 26" to 28" rootball. Shall have a single straight trunk with symmetrical well branched top.

Prunus virginiana 'Schubert', Canada Red Chokecherry: 2" to 2-1/2" cal. B&B with 26" to 28" rootball. Shall have a single straight trunk with symmetrical well branched top.

Prunus x yedoensis, Yoshino Cherry: 2" to 2-1/2" cal. B&B with 26" to 28" rootball. Shall have a single straight trunk with symmetrical well branched top.

Stewartia koreana, Korean Stewartia: 5' to 6' H, B&B, 16" rootball, symmetrical, well branched tops, single trunk, spread of top 6'.

Stewartia pseudocamellia, Japanese Stewartia: 1-1/2" to 2" cal., B&B, 22" rootball, symmetrical, well branched tops, single trunk, spread of top 6'.

Styrax japonica, Japanese Snowbell: 6' to 8' H, B&B, 18" rootball, single straight trunk, spread of top 5', specimen quality.

GI-5.08.8. SUBMITTALS

(A) Before digging the pits, the Contractor shall submit, for approval, his method of soil preparation and planting to perform the work shown on the plans. Soil amendments shall be thoroughly mixed by approved methods. The soil around each plant shall be thoroughly saturated with water upon planting. Subsequent watering and weeding shall be provided under the requirements of **Section GI-5.09** at no additional cost.

(B) List of Materials/Suppliers: Submit a complete materials list (e.g., trees, mulch, cedar stakes, shrubs, etc.) of items to be provided under this section, for review by the Engineer or representative before the purchase or use of any such material.

(C) Method of Work: Submit a list of proposed methods of execution of work under this section for review by the Engineer when proposed methods are different from, or supplementary to, those specified herein.

(D) The Contractor must submit the following information to the Engineer immediately following the Notice to Proceed:

(1) Subcontractor(s): The name of a Landscaping Contractor, acceptable to the Engineer, who will be performing all landscaping work (seeding and woody plant material). The proposed subcontractor will be evaluated on the following criteria:

- a. Prior satisfactory experience in the installation of Green Infrastructure Systems.
- b. Demonstrated capacity to accomplish the work in the time allotted. Qualifications of the Contractor's arborist, certified by the International Society of Arboriculture (ISA), who shall be required to be present on site while landscaping work is in progress.
- c. Landscaping experience with other agencies, such as the Department of Environmental Protection (DEP) and the New York City Department of Parks and Recreation. Provide references and a specific contact person.
- d. Membership with appropriate ecological restoration organizations.
- e. Other references or experience deemed appropriate to obtaining approval.
- f. The following is required prior to the start of landscaping work:
 - 1) List of all materials and certificates specified within this item.
 - 2) Schedule/Methods of Operation/Maintenance Plan (which is up to the end of maintenance period as mentioned in the Schedule "A" of this project).
 - 3) List of all equipment to be used.

GI-5.08.9. CONSTRUCTION METHODS

(A) Plants shall be delivered only when preparations for planting have been completed and plants can immediately be installed. If planting is delayed for more than six hours after delivery, set plant material in shade, protect from mechanical damage and keep roots moist by covering with mulch (jute mesh), burlap or other acceptable means of retaining moisture, watering as necessary.

(B) All plants shall be subject to inspection and approval by the Engineer. Plants required for the work will be inspected and tagged at the place of growth before being dug. The Contractor shall be responsible for all costs related to inspection of plant material by the Engineer beyond a radius of 50 miles from New York City. Selection and/or tagging of material shall cover the type and quality of the plant

only, but shall not constitute final acceptance nor preclude the right of rejecting plants not fully meeting the requirements of the specifications. No plant material shall be accepted without prior nomenclature labeling at the nursery of origin. The nursery label must display the full botanical name of the plant.

(C) Cultivars or varieties are not acceptable and written verification from the nurseries certifying this requirement will be required on all plant material. The Contractor should only consider straight species when ordering plant material.

(D) Each shipment of plants must be declared and certified free of diseases of any kind with such necessary inspection certificates accompanying each shipment.

(E) All nursery stock furnished by the Contractor shall be subject to inspection within 48-hours after delivery of said stock. The plants shall also be subject to such inspection during the life of the Contract, and infestations occurring on the stock as a result of conditions existing prior to the receipt of the plants on the project shall be cause for rejection.

(F) The time of planting is subject to the type and size of the material, method of planting and approved planting schedule. The Contractor shall furnish a certification from the nursery regarding the date of digging for all applicable plant material.

(G) Unless otherwise directed by the Engineer in writing, evergreen plant material shall be planted from April 1 to May 15 and September 1 to October 15. Deciduous plant material shall be planted from March 1 to May 1 and from October 15 to December 1. Perform actual planting only when weather and soil conditions are suitable for optimal benefit to the plant. No plant material shall be planted when the ground is frozen or in excessively moist condition. Notify the Engineer at least three days (excluding weekends) in advance before proceeding with any planting operations.

(1) No shipment of plant materials shall be unloaded or planted by the Contractor until such materials have been inspected and accepted by the Engineer, and inspection certificates, if any, have been delivered.

(2) The Contractor shall proceed with and complete work expeditiously, working within the seasonal limitations for each kind of landscape work required.

(3) Determine location of underground utilities and perform work in a way that shall avoid possible damage. Hand excavate, as required. The Contractor assumes responsibility for damage to underground utilities when excavating and is required to call "One Call" @ 800-272-4480 a service that marks underground facilities on the surface, prior to excavation. Maintain grade stakes set by others until removal is approved by Engineer. However, the Contractor is advised that the provisions of 16 NYCRR Part 753 ("One Call") do not apply to City owned utilities. It shall be the Contractor's responsibility to determine the location of the City owned underground distribution systems. The Contractor shall make his own field observations and research the City's records to determine the location of such facilities before the commencement of excavation.

(4) When conditions detrimental to plant growth are encountered, such as rubble fill, adverse drainage conditions or obstructions, notify Engineer before planting.

(5) The Contractor shall furnish a certification from the nursery regarding the date of digging. All appropriate plant material shall be sprayed in the nursery within 48 hours prior to digging with an approved anti-desiccant.

(H) Sizes of planting pits shall be as proposed in the Contractors approved shop drawing submittals.

(I) All plant material shall be thoroughly watered immediately after installation. Planting will not be permitted unless a water truck is on site and made available whenever the Contractor is installing plant material. Refer to **Section GI-5.09** – Watering and Weeding During the Maintenance Period.

(J) Anti-desiccant spraying - Unless otherwise directed all trees shall be sprayed with an approved anti-desiccant (Wilt Pruf NFC or approved equivalent) using a power sprayer to apply adequate coverage, according to manufacturer's directions, over trunks, branches, twigs and foliage as directed by and in the presence of the Engineer. The Contractor is to read the product label carefully as some plant material can be injured from the application of an anti-transpirant. The material to be used shall be emulsions or other

materials that will provide a protective film over plant surfaces, yet permeable enough to permit transpiration. The time of spraying shall be as follows, unless otherwise directed by the Engineer:

Deciduous: Spring planting - Apply when leaves have reached seventy-five percent (75%) of mature size.

(K) Where deemed necessary by the Engineer, stakes for supporting trees shall be White or Red cedar, with a minimum diameter of three inches. Contractor shall use Camb Guards rubber supporting straps for trees model # 92-111, 92-112, or 92-113 by Keslick and Son Modern Arboriculture, 214 N Penn Street, West Chester PA, 19380 (610)-696-5353 or approved equal. Camb Guards around tree trunk and stake shall be fastened in such a manner as to allow slight movement of trunk.

Camb Guard ® Specifications

Tree Diameter	Model Number
2" or less	92-113
2" or larger	92-112 or 92-111

(L) In natural area plantings, Engineer will field determine if stakes are required. If it is determined that staking is required, a modified staking system shall be used. The modified stakes shall be shorter than conventional stakes. In either situation, stakes shall be maintained by the Contractor until the end of the maintenance period or as directed by the Engineer. The Contractor shall remove all stakes and camb guards at the end of the-maintenance period or as directed by the Engineer.

GI-5.08.10. LANDSCAPE GUARANTEE AND REPLACEMENT

(A) All landscaping work shall have upon planting a guarantee period as mentioned in the Schedule "A" of this project. Contractor shall request in writing an inspection of all landscaping work when completed to begin the maintenance and guarantee period.

(B) Plant material found to be unsatisfactory or in poor condition at the inspection shall be removed and replaced at the appropriate planting season for that type of plant material. No payment will be made for plant material found to be unacceptable during this inspection.

(C) The Contractor shall submit, in writing, any conditions or species which he feels may be questionable prior to ordering said plants. If he is agreeable, the Engineer will substitute recommended species or address the conditions deemed unsuitable. However, upon ordering a plant and installing it, the Contractor accepts the responsibility for guaranteeing the plant's survival. There shall be no exception.

(D) During the guarantee period, any plant material that is dead or not showing satisfactory growth, as determined by the Engineer, shall be promptly removed and replaced by the Contractor during the appropriate planting season for that type of plant material as determined by these specifications. The replacement shall be of the same variety, size and character as specified for the original planting and continue to be under the same maintenance and guarantee. That is, they shall be subject to replacement again up to the end of the guarantee period (as mentioned in the Schedule A of this project from date of planting or transplanting of each plant. The Engineer or representative shall be the sole judge as to the condition of the plants. The guarantee and maintenance applies to all planted areas.

(E) Unless a written waiver of this clause is issued, under the terms of the guarantee, replacement plants shall be chosen only by the Engineer.

GI-5.08.11. MAINTENANCE

(A) The Contractor for the remaining guarantee period shall thoroughly remove all weeds from planted areas, spray (with approved Fungicide, Insecticide and Herbicide) for diseases, insects and

weeds as directed, prune dead wood from all trees and shrubs as directed, and any other recognized beneficial horticultural practice, to the satisfaction of the Engineer and as is required to properly establish the newly planted material.

(B) Removal of competing weeds will be required as directed by the Engineer and will be strictly enforced. Removal of weeds may be done chemically (e.g. Round-Up, or Rodeo) only when applied by a New York State licensed applicator, at the most effective eradication time for the target weed species and when spraying will not injure contract specified vegetation. Adjacent areas could contain a high weed content and may also need to be sprayed or hand removed to prevent colonization of planted areas.

(C) The Contractor shall submit for review, a detailed written landscape maintenance schedule covering maintenance period remaining of this project, prior to the start of work. Planting shall not proceed until this schedule has been reviewed and approved by the Engineer.

GI-5.08.12. MEASUREMENT

The quantities of Trees to be paid for under each item shall be the number of Trees of each size or type planted to the satisfaction of the Engineer.

GI-5.08.13. PRICES TO COVER

The price bid for each size or type of Tree planted shall be the number of planted and maintained, in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

Engineered Soil and bark chip mulch, where called for in the Contract Drawings or details, will be paid under their respective items.

The cost of water, regardless of source, is deemed included in the unit prices bid. No extra payment will be made for water coming from the Contractor's own source.

Payment will be made under:

Item No.	Item	Pay Unit
GI-5.08PM-1	PLANT MAJOR TREES – 2 TO 2.5 INCH CALIPER	EACH
GI-5.08PM-2	PLANT MAJOR TREES – 3.5 TO 4 INCH CALIPER	EACH
GI-5.08PM-3	PLANT FLOWERING TREES	EACH

SECTION GI-5.09
(NOT A PAY ITEM)
WATERING AND WEEDING DURING MAINTENANCE PERIOD

GI-5.09.1. DESCRIPTION

The Contractor shall maintain and cultivate the healthy growth of all plantings in the planted area after installation, in accordance with the specifications and contract drawings during the maintenance period of the project. For the purposes of this item, the maintenance period shall begin after the completion of planting, and terminate at the completion of the maintenance period. No separate payment shall be made for the work of this specification.

GI-5.09.2 SUBMITTALS

(A) The Contractor's Landscape Subcontractor shall submit a watering and weeding plan and maintenance schedule prior to the installation of plant material, to be approved by the Engineer. The plan shall include proposed methods of watering and weeding, including but not limited to the use of tree gators (bags), sprinklers, drip hoses, irrigation, tanker vehicles and hand watering, etc., as well as manual weeding and weeding tools.

(B) The approved plan and schedule do not relieve the Contractor in any way from any aspect of the replacement of dead plant material. The Contractor's Landscape Subcontractor may alter the maintenance schedule based on weather and field conditions.

GI-5.09.3 CONSTRUCTION METHODS

(A) The Contractor responsibilities under this section consists of watering and weeding after installation as required to maintain installed plant material in a healthy and vigorous condition in the specified Engineered Soil, in accordance with the specifications and Contract Drawings.

(B) Watering shall take place at one-week intervals from May 1 through October 31, for a total of twenty-seven (27) waterings per year or a total of fifty-four (54) waterings for the 2-year guarantee period. Each week, the individual plants shall receive the following volume of water:

<u>PLANT SIZE</u>	<u>VOLUME OF WATER (gallons)</u>
# 1 container	2
# 2 container	2.5
# 3 container	3
# 7 container	6
1" - 2" caliper	18
2" - 3" caliper	30

This is the maximum amount of water to be applied each week. The Engineer may order less watering based on weather and soil conditions.

Watering shall not be done for any given week if soil is saturated from recent rains or snowmelt. During extended dry periods, the Engineer may order more frequent watering than scheduled or during non-scheduled periods. However, the total number of 54 watering cycles will not be exceeded.

Watering shall be applied in such a manner as to not damage plants or remove wood chip mulch and stakes. Watering shall not cause the uprooting or the exposure of plant roots. Damage resulting from improper watering shall be immediately repaired at the Contractor's expense.

GI-5.09.4. MAINTENANCE

(A) Horticultural Maintenance shall consist of the weeding, removal of litter and general maintenance and replacement of plant material.

(B) Green Infrastructural Maintenance shall consist of cleaning out and disposing of sediment from inlet and outlet structures and weep holes (if any) as necessary to allow water to move freely in and out of the site. Layers of mulch (jute mesh) (if any) and stone in or around the inlet, storm water flow path and ponding areas may require removal and replacement as deemed necessary by the Engineer, just prior to

the end of the contract guarantee period. This work should be performed during a time when the soil is dry, using a flat-bottomed shovel.

(C) Maintenance should occur at a minimum of once per month and as needed following significant rainfall events. Visually inspect the site for erosion, including inlet and outlet structures, embankments, side slopes, and check dams. Symptoms of erosion can include erosive gullies or areas of bare soil. Remove any litter directly covering and immediately upstream or downstream of inlets and outlets so that the drainage path is clear. The top of the mulch (if any) should be at least two inches below the lowest point of the inlet/outlet to minimize blockage.

GI-5.11.5. MEASUREMENT AND PAYMENT

Payment for this item shall be deemed to be included in the unit price bid for item under **Sections GI-2.11, GI-2.12 and GI-5.08.**

SECTION GI-5.11
(NOT A PAY ITEM)
WELDING

GI-5.11.1. DESCRIPTION

All welding shall be performed in accordance with ANSI/AWS D1.1 and ANSI/AWS D1.4. No welding shall be performed when the base metal temperature is lower than 32 degrees Fahrenheit.

GI-5.11.2. MATERIALS

(A) All welding equipment, electrodes, welding wire and fluxes shall be capable of producing satisfactory welds when used by a qualified welder or welding operator performing qualified welding procedures.

(B) All welding equipment and materials shall comply with the applicable requirements of ANSI/AWS D1.1 and ANSI/AWS D1.4.

GI-5.11.3. CONSTRUCTION METHODS

(A) Each welder, welding operator and tacker assigned to work on this Contract shall be certified in conformance with ANSI/AWS D1.1, Section 4. Welders shall also be New York City certified, and all welding shall be done in conformity with the NYBC and BS&A.

(B) Contract Drawings will include the following information:

(1) Size, length, type and location of welds.

(2) Location of welds for which non-destructive testing is required. When location of non-destructive testing is not shown, it will be indicated by the Engineer in the field.

(C) Workmanship and techniques for welded construction shall conform to the requirements of ANSI/AWS D1.1 and AISC-04. When ANSI/AWS D1.1 and AISC-04 are in conflict, the requirements of ANSI/AWS D1.1 shall govern.

(D) Welding of reinforcing shall conform to the requirements of ANSI/AWS D1.4 and the Detailed Specifications. Welds shall develop a minimum of 85,000 psi tensile strength. Bars to be welded shall be cut by means of an oxyacetylene torch or by sawing. Ends shall be free of dirt, oxide scale, oil, grease, or other foreign matter. Sheared ends of bars shall be trimmed back at least 1/2-inch by sawing or flame cutting. Preheat and interpass temperature shall conform with ANSI/AWS D1.4. Bars having a carbon equivalent content in excess of 0.50 percent shall not be welded.

(E) Where dissimilar steel are welded together, the procedure used shall be the same as the one used for the lower strength steel.

(F) All groove welds shall be 100 percent complete penetration welds as defined in ANSI/AWS D1.1 or shown in ANSI/AWS D1.4 for reinforcing steel, regardless of whether a backup plate is shown or whether the supplementary backing weld or melt through symbol is included, in each groove-weld symbol shown unless partial penetration is included in the weld symbol.

(G) Gun welded studs shall conform with the requirements of ANSI/AWS D1.1, Section 7.

(H) Upon completion of welding, all weld splatter, flux, slag and burrs left by attachments shall be removed. Welds shall be repaired to produce a workmanlike appearance with uniform weld contours and dimensions. All sharp corners of material which is to be painted or coated shall be ground to a minimum of 1/32-inch on the flat.

(I) Dimensional tolerances for welded construction, details of welds, and quality of welds shall be in accordance with the applicable requirements of ANSI/AWS D1.1, ANSI/AWS D1.4 and the Contract Drawings.

(J) The welding shall be subject to inspection and tests in the shop and project site. Inspection and tests in the shop will not relieve the Contractor of the responsibility to furnish weldments of satisfactory quality.

(K) All welding exhibiting any cracks, either in the weld metal or the parent metal, will be rejected.

(L) Defective or unsound welds or base metal shall be corrected either by removing and replacing the entire welds.

GI-5.11.4. MEASUREMENT AND PAYMENT

Payment for this item shall be deemed to be included in the unit price bid for Item No. GI-2.10.

**SECTION GI-5.14
(NOT A PAY ITEM)
TEMPORARY FENCING**

GI-5.14.1. DESCRIPTION

The Contractor shall completely enclose by temporary fences all excavations, steep embankments, open shops and storage areas and all other potentially hazardous locations as soon as such condition exists and as ordered by the Engineer. The fencing is in addition to any provisions that the Contractor would normally follow to safeguard the Contractor's work operations and in no way reduces the Contractor's obligations as provided in the contract.

GI-5.14.2. MATERIALS

Fencing shall be five (5) foot high above the existing surface and shall be constructed in ten (10) linear foot removable sections to facilitate construction. Each section shall consist of three (3) horizontal rails of 2" x 8" lumber nailed at each end to 2" x 8" vertical posts. The lower rail shall be located not more than six (6) inches above ground or street surface. The posts shall be of sufficient height to be firmly anchored in a manner approved by the Engineer. The spaces between rails shall be covered with 1/12-inch (0.083") diameter, (No. 14 B.W.G.) iron wire (both directions) of an electrically welded rectangular mesh, with openings no greater than two (2) inches wide by four (4) inches high.

GI-5.14.3. CONSTRUCTION METHODS

(A) The Contractor shall be solely responsible for the furnishing, erecting, relocating, maintenance and removal and replacement of all temporary fencing required under this contract.

The Contractor shall maintain all fencing in a satisfactory and safe condition. The Contractor shall replace, at no additional cost to the City, any and all fencing that the Engineer deems cannot be maintained and/or fails to meet the requirements of this section.

(B) The Contractor shall be permitted to remove such portions of the fencing as are required for the purpose of performing the Contractor's construction operations during working hours, providing that the public is continuously safeguarded by other satisfactory means during these construction operations. In all such cases the sections of fencing removed shall be restored to their original locations at the end of each workday.

GI-5.14.4. MEASUREMENT AND PAYMENT

Payment for this item shall be deemed to be included in the unit price bid for all scheduled items.

**SECTION GI-5.35
SLEEVE FOR UTILITY CROSSINGS**

GI-5.35.1. DESCRIPTION

The Contractor shall furnish and install HDPE (High-Density Polyethylene) split sleeve pipes to protect utilities in concrete ducts crossing bioswales. Each split sleeve pipe shall have a wire (not wire mesh) reinforced concrete collars on each side of the bioswale, as shown on the Standards for Green Infrastructure drawings.

GI-5.35.2. MATERIALS

(A) HDPE SPLIT SLEEVE PIPE shall be of the diameter and length required as shown on the Contract Drawings or as directed by the Engineer. HDPE SPLIT SLEEVE PIPE shall comply with the requirements of **Section GI-2.16**, herein this Addendum.

(B) SEALING GASKET shall be as recommended by the manufacturer of the sleeve.

(C) CONCRETE shall be Type B-32 comply with the requirements of **Sections 3.05** and **4.06** in the NYCDOT Standard Highway Specifications.

(D) WIRE REINFORCEMENT shall comply with the requirements of **Sections 4.14** in NYCDOT Standard Highway Specifications. Size and spacing shall vary in accordance with the cross sectional area of the utility and as directed by the Engineer.

(E) MORTAR, if required for end capping, shall comply with the requirements of **Section 3.07** in the NYCDOT Standard Highway Specifications, Type 1, Mortar, except that the proportions shall be one (1) part of cement to one and one-half (1-1/2) parts of sand and that the ingredients may be mixed by hand.

(F) SAND fill bedding the utilities in the split sleeve pipe shall be meet the requirements of **Section 2.21** in the NYCDOT Standard Highway Specifications.

GI-5.35.3. METHODS

(A) Duct spacers shall be used to hold utilities in position to maintain a two (2") separation between the concrete utility duct and the HDPE sleeves when encasing utilities within the split sleeve pipe.

(B) The space between the utility and the sleeve shall be filled with sand as directed by the Engineer.

(C) Immediately after the Engineer has inspected and approved the encasement, the HDPE Split Sleeve pipe shall be backfilled as per the appropriate items.

(D) Concreting shall comply with the requirements of Section 4.06 of NYCDOT Standard Highway Specifications.

6.36 CSUC.4. DAMAGE TO THE UTILITY CROSSINGS.

Any damage cause to the utility crossings during the construction or any cause whatsoever, whether in or out of the trench, shall be made good at the sole expense of the Contractor.

GI-5.35.5. MEASUREMENTS.

The quantities to be measured for payment under these Items shall be the number of linear feet (laying length) of **SLEEVE FOR UTILITY CROSSINGS** actually laid in their final position, to the satisfaction of the Engineer, measured horizontally along the centerline of the HDPE Split Sleeve pipe.

GI-5.35.6. PRICE TO COVER

The price bid for each type of **SLEEVE FOR UTILITY CROSSINGS** shall be a unit price per linear foot and shall cover the cost of all labor, materials, equipment, insurance, and incidentals necessary to complete the work of furnishing and installing HDPE Sleeve of whatever diameter is required and shall include, but not be limited to, furnishing and installing sealing gasket, fittings, end caps, sand, mortar, formwork, supports, and connecting and joining pipe to other pipes or drainage structures; furnishing and placing concrete collars at each side of the bioswale; all in accordance with the Contract Drawings, the specifications and directions of the Engineer.

No additional payment will be made for excavation and backfilling.

Payment will be made under:

Item No.	Item	Pay Unit
GI-5.35	SLEEVE FOR UTILITY CROSSINGS	L.F.

SECTION T-60000B

Cable spec. for 120 volt power supply

Cable Name

This cable shall be called 2c-10 B (breakdown 2c-10 B= 2 number 10awg conductors with a third wire for grounding.)

Intended use

This cable is to be used for 120 volt power systems in NYC.

The cable shall be rated for 600 Volts and have a polyethylene –insulated, jacketed cable for use in underground conduit or for aerial use(must have strain relief’s built in for aerial use without a messenger cable). The outer jacket shall be a black in color and be UV resistant and made to endure extreme outdoor usage unprotected without deterioration of insulation or outer jacket fading. This cable shall be rated for direct burial without conduit covering or other protection.

Construction

The conductors shall be round annealed copper conforming to ASTM designation b-3.

This cable shall be a 3 conductor type with two number ten AWG wire size conductors one white solid wire and one black solid wire with the third conductor number 8 AWG bare stranded wire.

Insulation

The insulation shall be a heat-stabilized polyethylene conforming to the requirements of ASTM designation D 1248 for type 1 category 5 grade E4 materials .this insulation shall be concentrically applied about the conductor .This installation shall meet the following requirements when tested in accordance with the procedures of ASTM designation D 2633 and D 1351.

This cable shall meet all other requirements as listed in the NYC DOT traffic specifications 3/95

Payment will be made under:

Item No.	Item	Pay Unit
T-60000B	FURNISH 2 c #10B (BREAKDOWN=2#10 WITH 3 RD WIRE FOR GROUNDING)	L.F.

4. SPECIAL PROVISIONS

The following shall become a part of and apply to the Contract:

A. LINES AND GRADES. The Contractor shall furnish lines and grades in accordance with Section 1.06.27 of the Standard Specifications, except that survey controls established for this project may no longer exist and the Contractor shall be required to re-establish the survey control information using official Borough Survey Control Monuments and Bench Marks, where they exist. The Contractor shall check with Topographic Section of the Borough President's Office as to the reliability and accuracy of the data to be used for lines and grades.

B. SPECIFIC TRAFFIC STIPULATIONS. Under this contract, the Contractor shall perform the work in strict accordance with the requirements of Section 6.70 in the Standard Highway Specifications, specific traffic stipulations as called for on the plans, OCMC Traffic Stipulations attached to the end of these Special Provisions, and the directions of the Engineer. In case of a conflict, the Engineer's decision shall be final.

In addition, the cost of compliance with requirements of the OCMC Traffic Stipulations, unless otherwise provided for, shall be deemed included in the prices bid for all scheduled items.

C. HOLIDAY CONSTRUCTION EMBARGO. A special Holiday Construction Embargo shall be in effect on the Friday of the week preceding Thanksgiving Day week from 6:00 AM to 11:59 PM and again from the Monday of Thanksgiving Day week from 6:00 AM through January 2, at 11:59 PM. Roadway and sidewalk construction activities will be restricted during the embargo period on the streets listed below*.

Any permits issued prior to the date of this notice, for work during this embargo period on the streets listed below which do not already have the permit stipulation "410" are hereby suspended for the period noted above. All permittees must comply with this embargo unless a special waiver is granted by OCMC. Waiver requests must be filed at least thirteen days before Thanksgiving Day, in the Permit Office by filing a "Request for Roadway/Sidewalk Permits During Embargo Periods" and submitting supporting documentation. Waiver requests should only be submitted for critical reasons for a specific project. If a waiver is granted, the applicant will be notified so they can apply for the approved permits. Waivers are not required for ongoing Building Construction Activity Permits which already include the "410" permit stipulation. Waiver request forms may be obtained at any Permit Office or on the Department of Transportation's website at: <http://www.nyc.gov/html/dot/downloads/pdf/holidayembapp.pdf>

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- * Please note that this embargo only applies to NYCDOT construction permits.
 - * List of street and maps of the affected locations are available by borough on the Department of Transportation's website at: <http://www.nyc.gov/html/dot/html/motorist/trafalrt.shtml>

Prior to this embargo period all necessary measures must be taken so that all roadways and sidewalks are in proper condition to allow for the expeditious and safe movement of vehicular, bicycle and pedestrian traffic. Tool carts, cable reels, containers, and material stored on roadways must be removed during the embargo period.

The opening of utility access covers is prohibited on any of the streets noted below between the hours of 6:00 AM and midnight unless the utility or Contractor files for an Emergency Authorization Number as required by section 2-07 of the Department of Transportation's Highway Rules. The planned opening of utility access covers may occur during the hours of 12:01 AM and 5:59 AM where no authorization number is required.

Temporary restoration of the streets and sidewalks and removal thereof, if required for the Holiday Embargo period, will be paid for under the appropriate scheduled items.

No extension of time due to the shutdown period will be granted to the Contractor for completion of the work.

D. DISPOSAL OF EXCESS EXCAVATED MATERIAL. All excess excavated material, with the exception of contaminated material, shall become the property of the Contractor and shall be properly disposed of away from the site, at the Contractor's expense. Contaminated material shall be disposed of separately in accordance with contract requirements.

E. SCHEDULING PRESENTATION. The Contractor shall submit construction schedule in the form of a bar chart using "Microsoft Project 2010", or in an approved equivalent program which shall be directly and fully translatable into Microsoft Project 2010 format, within seven days of the initial Pre-Construction Meeting. Each bar in the chart shall show dates the Contractor plans to start and complete each construction activity after the initial Pre-Construction Meeting. Bar chart shall show the order and interdependence of all activities necessary to complete the work and the sequence in which activity is to be accomplished as planned by the Contractor and in accordance with all subcontractors or suppliers whose work shall be shown on the bar chart. The Contractor shall submit the bar chart for the Engineer's review and revise it, if required, until approved by the Engineer.

The Contractor shall submit weekly progress status update reports or as otherwise directed by the Engineer. The Contractor shall submit updated bar chart every month. The revised bar chart shall be made in the same form and detail as the original submittal and shall be accompanied by an explanation of the reasons for the revisions all of which shall be subject to approval by the Engineer.

F. ACCELERATED PROJECT SCHEDULE AND COMBINATION OF STAGES. Contractor shall plan and/or stage his/her work schedule using all hours/days available. Contractor is advised that all applicable unit prices shall include, for the purpose of this contract, all overtime

costs, premium time costs, shift differentials required to complete construction within the specified "Time(s) of Completion" stipulated in this contract.

Contractor shall be permitted to accelerate this project, to combine stages and/or work sequences. Any such changes shall be shown in the construction schedule, to be furnished in accordance with the General Provisions of the Standard Specifications and the above "SCHEDULING PRESENTATION" Article, and shall be submitted for approval of the Engineer.

G. VEHICLES. The Contractor shall be required to furnish two (2) vehicles to be used by Department of Design and Construction (DDC) personnel as assigned by the Deputy Commissioner of the Department, during the life of the Contract. No direct payment will be made for the vehicles, or associated costs. All costs shall be deemed to be included in all scheduled items

The Contracted vehicles shall be a new small SUV hybrid vehicle as approved by DDC's Director of Fleet Administration; and shall be equipped with a standard equipment package, and meet the following minimum specification:

1. Engine: Manufacturer's Standard 4 cylinder.
2. Transmission: Automatic.
3. Drive: Manufacturer's Standard 4 wheel drive.
4. Steering: Power.
5. Air Conditioning.
6. Body: 4 Doors.
7. Color: Manufacturer's Standard White.
8. Mirror: Left and Right.
9. Radio: AM/FM.
10. Electric Rear Defogger.
11. Brakes: Anti-Lock.
12. Air Bag: Dual
13. Anti-theft device (optional).
14. Power Windows and Locks.
15. Two sets of keys.
16. GPS navigation.
17. Hands-free telecommunication technology.
18. Fire Extinguisher.
19. First Aid Kit.
20. Any additional equipment will not be accepted by DDC.

The Contractor shall provide fuel, oil, proper maintenance, tires and replacement parts, to keep the vehicles in a safe operating condition, and shall undertake all repairs, including repairs arising from vandalism, accidents, or other damages. A Gas Company Card shall be furnished with each vehicle for fueling purposes. In the event that any vehicle requires maintenance or repairs which cannot be completed the same day, a comparable replacement vehicle shall be provided while the vehicle is out of service. If the vehicle is lost or stolen, the Contractor shall replace the vehicle within 5 business

days with a comparable vehicle.

The vehicles shall be provided for the entire duration of this Contract, and shall be returned to the Contractor within thirty days after final acceptance of work or twelve months after substantial completion, whichever comes first. Contractor owned/leased vehicles provided pursuant to this Contract shall remain the property of the Contractor/ Leaser throughout the Contract period; shall be registered in the City's name. If leased vehicles are provided, the Contractor shall obtain from the leasing company the necessary documents allowing the vehicle to be registered as an official City of New York vehicle. The Contractor shall provide insurance for vehicle as set forth in Schedule A.

Within five (5) business days of receipt of notice to provide specified vehicles, the Contractor shall make the vehicles available for inspection by Fleet Administration. Upon determination by Fleet Administration that the vehicles satisfy requirements, the Contractor shall make arrangements through DDC's Fleet Administration for delivery to the DDC. The Contractor shall submit to Fleet Administration a signed MV-82 Part 10 authorizing registration in the City's name together with, in the case of a previously unregistered vehicle, the manufacturer's certification of origin or, in the case of a currently registered vehicle, a copy of the title.

All required transmittals to Fleet Administration shall be made as follows:

Agency Fleet Administrator
 NYC Department of Design and Construction
 30 - 30 Thomson Avenue, 4th Floor
 Long Island City, New York 11101
 Telephone No.: (718) 391-1852

When vehicles are no longer required under this contract, as described above, they shall be de-registered by the City and promptly returned to the Contractor.

H. N.Y.C. TRANSIT INSURANCE. The Contractor (Permittee) shall indemnify and save harmless the City of New York and the New York City Transit (Permitter) 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 or cause to be carried and shall maintain at all times during the period of performance under this Agreement policies of insurance as herein below set forth below:

(A) Workers' Compensation Insurance (including Employer's Liability Insurance) with limits as specified in Schedule "A", which

limit may be met by a combination of primary and excess insurance meeting the statutory limits of New York State. The policy shall be endorsed to include Longshoreman's and Harbor Workers' Compensation Act/Maritime Coverage Endorsement and/or Jones Act Endorsement when applicable.

- (B) Commercial General Liability Insurance (I.S.O. 2001 Form or equivalent) approved by Permitter in the Permittee's name with limits of liability as specified in Schedule "A" for each occurrence on a combined single limit basis for injuries to persons (including death) and damages to property. The limits may be provided in the form of a primary policy or combination of primary and umbrella/excess policy. When the minimum contract amounts can only be met when applying the umbrella/excess policy; the Umbrella/Excess Policy must follow form of the underlying policy and be extended to "drop down" to become primary in the event primary limits are reduced or aggregate limits are exhausted. Such insurance shall be primary and non-contributory to any other valid and collectable insurance and must be exhausted before implicating any Permitter/MTA policy available.

Such policy should be written on an occurrence form; and shall include:

- Contractual coverage for liability assumed by the Permittee under this agreement;
- Personal and Advertising Injury Coverage;
- Products-Completed. Operations;
- Independent Contractors Coverage;
- "XCU" coverage (Explosion, Collapse, and Underground Hazards) where necessary;
- Contractual Liability Exclusion, applicable to construction or demolition operations to be performed within 50 feet of railroad tracks, must be voided, where necessary; and,
- Additional Insured Endorsement (I.S.O. Form CG 20 26 07/04 version or equivalent) approved the Permitter naming:

New York City Transit Authority (NYCTA), the Manhattan and Bronx Surface Transit Operating Authority (MaBSTOA), the Staten Island Rapid Transit Operating Authority (SlRTOA), MTA Capital Construction Co., the Metropolitan Transportation Authority (MTA) including its subsidiaries and affiliates, and the City of New York (as Owner).

- (C) Business Automobile Liability Insurance Policy - (I.S.O. Form CA 00 01 10 01 or equivalent) approved by the Permittor is required if Permittee's vehicle enters Permittor property. The insurance must be in the name of the Permittee or its contractor entering the Permittor property with limits of liability in the amount specified in Scheule "A" for claims for bodily injuries (including death) to persons and for damage to property arising out of the ownership, maintenance or use of any owned, hired or non-owned motor vehicle.
- (D) Railroad Protective Liability Insurance policy shall be required as specified in Schedule "A".
- (E) Environmental/Pollution Exposures

In the event environmental or pollution exposures exist, the Permittee shall require the environmental contractor or sub-contractor to provide the applicable insurance covering such exposure. The limits and type of insurance provided shall be satisfactory to the Permittor and will be confirmed to the parties prior to the start of the work.

2. General Requirements Applicable to Insurance Policies

- a) All of the insurance required by this Article shall be with Companies licensed or authorized to do business in the State of New York with an A.M. Best Company rating of not less than A-/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 reasonably acceptable to Permittor containing provisions other than those contained in ISO forms but otherwise conforming in substance to the requirements of this Article.
- c) The Permittee or its Contractor performing the work shall furnish evidence of all policies before any work is started to the permittor:

For NYCT Contract Inspection
C/O Mr. John Malvasio
Director, MOW Engineering
130 Livingston Street, Room 8044F
Brooklyn, NY 11201
Telephone: (718) 694-1358

These policies must: (i) be written in accordance with the requirements of the paragraphs above, as applicable; (ii) be endorsed in form acceptable to include a provision that the

policy will not be canceled, materially changed, or not renewed, unless otherwise indicated herein, at least thirty (30) days prior written notice to the Permitter 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 Permitter/MTA, and also that the contractor's policies, primary and excess, must be exhausted before implicating any Permitter/MTA policy available. (iv) In addition, contractor's policies shall state or be endorsed to provide that, if a subcontractor's policy contains any provision that may adversely affect whether contractor's policies are primary and must be exhausted before implicating any Permitter/MTA policy available, contractor's and subcontractor's policies shall nevertheless be primary and must be exhausted before implicating any Permitter/MTA policy available. Except for Professional Liability, policies written on claims made basis are not acceptable. At least two (2) weeks prior to the expiration of the policies, contractor shall endeavor to provide evidence of renewal or replacement policies of insurance, with terms and limits no less favorable than the expiring policies. Except as otherwise indicated in the detailed coverage paragraphs below, self insured retentions and policy deductibles shall not exceed \$100,000, unless such increased deductible or retention is approved by Permitter/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 Insurance Policy. However, if requested by the Permitter, the Permittee shall deliver to the Authority, within forty-five (45) days of be request, a copy of such policies, certified by the insurance carrier as being true and complete. The Railroad Protective Liability Insurance Policy must be provided in the form of the Original Policy. A detailed Insurance Binder may be provided, ACORD or Manuscript Form, pending issuance of the Original Policy. The Original Policy must be submitted to MTA RIM within 30 days of the Binder Approval.
- e) If a Certificate of Insurance is submitted, it must: (1) be provided on the Permitter Certificate of Insurance Form or MTA Certificate of Insurance Form for Joint Agency Agreements; (2) be signed by an authorized representative of the insurance carrier or producer and notarized; (3) disclose any deductible, self-insured retention, sub-limit, aggregate limit or any exclusions to the policy that materially change the

coverage; (4) indicate the Additional Insureds and Named Insureds as required herein, along with a physical copy of the Additional Insured Endorsement (I.S.O. Form CG 20 26 07/04 version or equivalent), as applicable and the endorsement(s) must include policy number(s); (5) reference the Contract by number on the face of the certificate; and (6) expressly reference the inclusion of all required endorsements.

- f) The minimum amounts of insurance required in the detail description of policies (A), (B), (C), and (D) above shall not be construed to limit the extent of the Permittee's liability under this Agreement.
- g) If, at any time during the period of this Agreement, insurance as required is not in effect, or proof thereof is not provided to the Permitter, the Permitter 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.

I. NO EXTENSION OF TIME FOR WINTER SHUT-DOWN. Where the Contractor's approved work schedule for installing sidewalk, curb, roadway base and/or pavement falls within the winter period of December 1st through April 1st, the Contractor will NOT be granted an extension of time for completion of this contract due to the winter shut-down period, unless otherwise provided in Schedule A.

J. PRIVATE UTILITY HARDWARE ADJUSTMENTS will be performed by the owning utility company or its agent, at its expense. The Contractor shall notify the utility company 72 hours prior to start of work at each location where its hardware requires adjustment.

K. SURVEY MONUMENTS. When working in the vicinity of survey monument the Contractor shall hand excavate per Item 8.02 A and 8.02 B at City Survey Monuments, for a distance of five (5) feet around each monument, as directed by the Engineer.

L. RESTORATION OF ADJACENT AREAS. The Contractor shall be required to remove all form work. In planting strip areas, the Contractor shall be required to restore areas damaged as a result of his operations, to the satisfaction of the Engineer, with sod. The Contractor shall also, as directed by the Engineer, make safe adjacent areas to his work, such as: restoring missing or damaged pavement markings that were removed or damaged as a result of the Contractor's operations (as per requirements of Section 6.44 in the Standard Specifications); resetting granite blocks in tree pits; and, applying asphaltic concrete mixture (Item 4.02 CB) where badly broken sidewalk or curb may create a dangerous condition just outside his area of operation, where and when directed by the Engineer.

All restoration work shall be done to the satisfaction of the Engineer.

M. THE CONTRACTOR IS NOTIFIED that for use of City water under this project the Contractor shall be required to obtain all necessary permits from the Department of Environmental Protection, at no cost to the Contractor in accordance with the NYC Department of Environmental Protection, Standard Water Main Specifications, dated August 1, 2009, Section 1.08.4 "TEMPORARY USE OF CITY WATER ON CONSTRUCTION PROJECTS" and/or the STANDARD SEWER Specifications, dated August 1, 2009, Section 1.08.4 "TEMPORARY USE OF CITY WATER ON CONSTRUCTION PROJECTS."

N. THE CONTRACTOR IS NOTIFIED that wherever the Item No. "6.52" and words "flagger" and "flagperson" are used in the Contract Documents and Drawings it shall mean the Item No. "6.52 CG" and the word "Crossing Guard".

O. START OF CONTRACT WORK. The Contractor is notified that it is the intent of this Agency to commence work promptly after registration of the contract and to order the Contractor to commence work within two (2) months after registration.

P. PRICES TO INCLUDE. No direct payment will be made for costs incurred in complying with the foregoing Special Provisions, unless otherwise provided. Said costs will be deemed to have been included in the prices bid for all the scheduled contract items.

CITY OF NEW YORK
DEPARTMENT OF TRANSPORTATION
OFFICE OF CONSTRUCTION MITIGATION AND COORDINATION-STREETS
40 WORTH STREET, 9TH FLOOR
NEW YORK, NEW YORK 10013

OCMC FILE NO: QEC 09-081

LOCATION: VARIOUS LOCATIONS

CONTRACT: HWQ-411B

COMMUNITY BOARDS: TWELVE (12)

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 and its local adjacent streets for the purpose of carrying out the above noted project, subject to the stipulations, as noted below:

- I. NYCTA BUS SERVICE:** *The contractor shall coordinate with NYC Transit and MTA Bus Company for the purpose of relocating bus routes away from work zone. The contractor must notify NYC Transit and MTA Bus Company a minimum of 30 days prior to the relocation of the bus routes and bus stops. The contractor shall maintain the temporary bus stops until the permanent bus stops have been restored to the public.*

**RECONSTRUCTION OF ALBERT ROAD INCLUDING
SEWER, WATERMAIN, STREETLIGHTING AND TRAFFIC SIGNAL**

135th Drive from Centerville Street to Dead End East of Centerville Street
135th Road from 97th Street to Hawtree Street
149th Ave from Cross Bay Blvd to Centerville Street
150th Road from 95th Street to Centerville Street
94th Street from Albert Road to Linden Blvd
95th Street from Albert Road to Linden Blvd
96th Street from Albert Road to Linden Blvd
95th Street from 150th Rd to Albert Road
96th Place from Linden Blvd to Dead End South of 149th Avenue
97th Street from 149th Avenue to Linden Blvd
99th Place from Albert Road to Hawtree Street
Bristol Avenue from Centerville Street to Dead End East of Centerville Street
Cohancy Street from North Conduit Avenue to Hawtree Street
Eckford Avenue from Centerville Street to Hawtree Street
Hawtree Street from Cohancy Street to 99th Place
Hawtree Street from Pitkin Avenue to Linden Blvd
Albert Road from Cross Bay Blvd to North Conduit Avenue
Huron Street from Albert Road to Eckford Avenue
Raleigh Street from Albert Road to Eckford Avenue
Tahoe Street from Albert Road to Eckford Avenue
North Conduit Avenue from Raleigh Street to Tahoe Street
Raleigh Street from North Conduit Avenue to Dead End North of North Conduit Avenue
Tahoe Street from North Conduit Avenue to Albert Road

- Working hours shall be as follows: 7:00 AM to 6:00 PM, Monday thru Friday.
- The contractor shall maintain one 12 foot lane for local and emergency traffic at all times.
- The contractor shall restore the full width of the roadway after working hours.
- The contractor shall maintain 5-foot clear sidewalk for pedestrians at all times.

**Centerville Street from Pitkin Avenue to North Conduit Ave
Pitkin Avenue from Cross Bay Blvd to end of Row**

- Working hours shall be as follows: 9:00 AM to 4:00 PM, Monday thru Friday.
- The contractor shall maintain 1-10 foot lane on one-way streets and 2-10 foot lanes on two-way streets.
- The contractor shall restore the full width of the roadway after working hours.
- The contractor shall maintain 5-foot clear sidewalk for pedestrians at all times.


Linden Blvd from Cross Bay Blvd to Hawtree Street

- Working hours shall be as follows: 7:00 AM to 6:00 PM, Monday thru Friday.
- The contractor shall maintain 1-10 foot lane on one-way streets and 2-10 foot lanes on two-way streets.
- The contractor shall restore the full width of the roadway after working hours.
- The contractor shall maintain 5-foot clear sidewalk for pedestrians at all times.

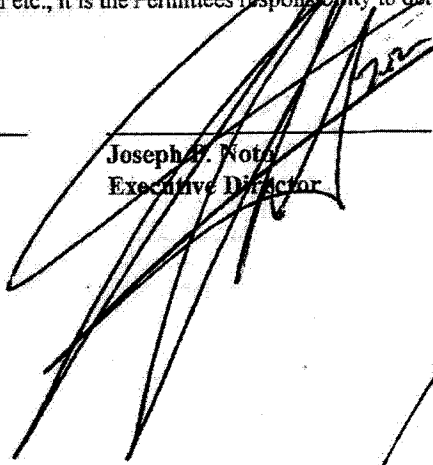
General Notes:

1. This is not a permit. This stipulation sheet must be present at the work site along with all active construction permits when the approved work is being performed.
2. All relocation work by the utilities such as; Con Edison, Telephone, and cable companies shall precede the contractors' start of work on all affected roadways in the impacted contract area.
3. 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.
4. No deviation or departure from these stipulations will be permitted without prior written approval from 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.
5. For any sidewalk connections (hydrants, house connections, etc.), the contractor shall maintain a 5 foot clear sidewalk for pedestrian access. For any work proceeding through an intersection, the contractor may close one (1) crosswalk at a time while diverting pedestrians to other available crosswalks using signage and flaggers. After working hours, all crosswalks shall be reopened to pedestrian traffic.
6. The contractor must at least two working days before the start of construction notify the NYC Fire Department, NYC Police Department, NYCEMS, Community Boards, Borough President's Office-Chief Engineer, NYC DOT OCMC's Office, plus all abutting property owners.
7. 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 Engineer-In-Charge and OCMC-Streets.
8. Prior to any work permits being issued a pre-construction meeting will be held twenty (20) days in advance by the OCMC-Streets and the Engineer-In-Charge. Arrangements for the meeting will be coordinated by the OCMC-Streets.
9. 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.
10. 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.

11. 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.
12. Prior to working in areas fronting SCHOOLS (Both Sidewalks and Full Roadway), the contractor must coordinate their work activity with the Principal of the school. In addition, after working hours, the contractor must restore full width of the roadway and the sidewalks in front of the schools. The work shall only occur during times when school is not in session.
13. These stipulations do not apply to work occurring within the New York City Highway System. For work to be performed on Highways, written request for approved traffic stipulations must be sent to Mr. Thomas Whitehouse, Executive Director NYCDOT OCMC-Highways, 40 Worth Street, 9th Floor, New York, NY 10013, prior to work. The work occurring on Highway Service Roads shall be coordinated through NYCDOT OCMC- Streets.
14. A special HOLIDAY CONSTRUCTION EMBARGO will apply to those above locations, which fall within the Holiday Embargo Areas As Published by the Bureau of Permit Management and Construction Control.
15. This project requires a CONSTRUCTION PROJECT INFORMATION SIGN as required in DOT HIGHWAY RULE SECTION 2-02, 4 and 5. The Criteria and prototype may be found on NYCDOT web site <http://www.nyc.gov/html/dot/html/permits/constructionsigns.html>
16. The contractor shall not **REMOVE or RELOCATE PARKING METERS** without first obtaining approval from NYCDOT PARKING METER DIVISION at 718-894-8651
17. For the expected **ROADWAY CLOSURES OF A TOTAL OF 180 DAYS OR MORE**, the contractor shall prepare Community Reassessment, Impact and Amelioration (CRIA) Statement in compliance with the provisions of **Local Law 24 Street Closure Law of May 2005**.
18. 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 New York City Department of Transportation or City of New York 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 Permittees responsibility to determine the property owner and obtain the written approval.



Xiomara Aguilera
Project Manager



Joseph A. Noto
Executive Director

7/8/2013

Date



Department of Transportation

JANETTE SADIK-KHAN, Commissioner

OCMC TRAFFIC STIPULATIONS - AMENDMENT #1

September 19, 2013

OCMC FILE NO: QEC 09-081
 CONTRACT NO: HWQ-411B
 PROJECT: RECONSTRUCTION OF ALBERT ROAD INCLUDING SEWER, WATER MAIN, STREET LIGHTING AND TRAFFIC SIGNAL

LOCATION(S): VARIOUS LOCATIONS

STIPULATIONS ORIGINALLY DATED **July 15, 2013** GRANTING PERMISSION TO THE **NEW YORK CITY DEPARTMENT OF DESIGNS AND CONSTRUCTION** AND ITS DULY AUTHORIZED AGENT, TO ENTER UPON AND RESTRICT THE FLOW OF TRAFFIC AT THE ABOVE LOCATION AND ITS LOCAL ADJACENT STREETS FOR THE PURPOSE OF CARRYING OUT THE ABOVE NOTED PROJECT, IS HEREBY AMENDED AS FOLLOWS:

AMENDED TO INCLUDE CHANGE OF ROADWAY OCCUPANCY**A. SPECIAL STIPULATIONS**

1. **EMBARGOES** – A CONSTRUCTION EMBARGO WILL APPLY TO THOSE LOCATIONS BELOW WHICH FALL WITHIN THE **HOLIDAY EMBARGO** OR ANY OTHER SPECIAL EVENT EMBARGOES SUCH AS PUBLISHED BY THE BUREAU OF PERMIT MANAGEMENT AND CONSTRUCTION CONTROL.
2. **BIKE LANES** – IF WORK IS IN OR AFFECTING A BIKE LANE, THE CONTRACTOR MUST POST ADVANCE WARNING SIGNS 350 FEET AND 200 FEET PRIOR TO THE WORK ZONE STATING "**CONSTRUCTION IN BIKE LANE AHEAD PROCEED WITH CAUTION**", AND ALSO POST A SIGN AT THE WORK ZONE STATING "**CONSTRUCTION IN BIKE LANE PROCEED WITH CAUTION**". SUCH SIGNS SHALL BE ORANGE, 3' X 3', DIAMOND-SHAPED WITH 4" BLACK LETTERING. SIGNS SHALL BE POSTED IN ACCORDANCE WITH THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
3. **BUS STOPS** – THE CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO NYC DOT OCMC AND NEW YORK CITY TRANSIT (NYCT) A MINIMUM OF FIVE (5) WEEKS IN ADVANCE FOR LANE/STREET CLOSURES THAT AFFECT BUS ROUTES/BUS STOPS.
4. **METERS** – THE CONTRACTOR MAY NOT REMOVE OR RELOCATE PARKING METERS WITHOUT FIRST OBTAINING APPROVAL FROM NYCDOT PARKING METER DIVISION AT 718-894-8651.
5. **ACCESS TO ABUTTING PROPERTIES** – THE CONTRACTOR SHALL COORDINATE ALL ACTIVITIES WITH ABUTTING PROPERTY OWNERS TO ENSURE ACCESS IS PROVIDED TO/FROM ENTRANCES/DRIVEWAYS AT ALL TIMES.
6. **AUTHORIZED PARKING** – PRIOR TO PERFORMING WORK WHICH IMPACTS AUTHORIZED PARKING, THE CONTRACTOR 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.
7. **NOTIFICATION** – THE CONTRACTOR 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.
8. **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.

NYC Department of Transportation
 Bureau of Permit Management and Construction Control
 55 Water Street - 7th Floor, New York, NY 10041
 T: 212.839.9621 F: 212.839.8970
 www.nyc.gov/dot

OCMC FILE NO: QEC 09-081
 CONTRACT NO: HWQ-411B
 PROJECT: RECONSTRUCTION OF ALBERT ROAD INCLUDING SEWER, WATER MAIN, STREET LIGHTING AND TRAFFIC SIGNAL

B. MAINTENANCE AND PROTECTION OF TRAFFIC

135th Drive from Centerville Street to Dead End East of Centerville Street
 135th Road from 97th Street to Hawtree Street
 149th Ave from Cross Bay Blvd to Centerville Street
 150th Road from 95th Street to Centerville Street
 94th Street from Albert Road to Linden Blvd
 95th Street from Albert Road to Linden Blvd
 96th Street from Albert Road to Linden Blvd
 95th Street from 150th Rd to Albert Road
 96th Place from Linden Blvd to Dead End South of 149th Avenue
 97th Street from 149th Avenue to Linden Blvd
 99th Place from Albert Road to Hawtree Street
 Bristol Avenue from Centerville Street to Dead End East of Centerville Street
 Cohancy Street from North Conduit Avenue to Hawtree Street
 Eckford Avenue from Centerville Street to Hawtree Street
 Hawtree Street from Cohancy Street to 99th Place
 Hawtree Street from Pitkin Avenue to Linden Blvd
 Albert Road from Cross Bay Blvd to North Conduit Avenue
 Huron Street from Albert Road to Eckford Avenue
 Raleigh Street from Albert Road to Eckford Avenue
 Tahoe Street from Albert Road to Eckford Avenue
 North Conduit Avenue from Raleigh Street to Tahoe Street
 Raleigh Street from North Conduit Avenue to Dead End North of North Conduit Avenue
 Tahoe Street from North Conduit Avenue to Albert Road

- Working hours shall be as follows: 7:00 AM to 6:00 PM, Monday thru Friday.
- The contractor shall maintain one 12 foot lane for local and emergency traffic during and after working hours.
- The contractor shall maintain 5-foot clear sidewalk for pedestrians at all times.

Centerville Street from Pitkin Avenue to North Conduit Ave

- Working hours shall be as follows: 9:00 AM to 4:00 PM, Monday thru Friday.
- During sewer construction only, should MTA be willing to approve the detour of the buses, the contractor may only maintain one lane for traffic during working hours.
- During all other work the contractor shall maintain 2-10 foot lanes, one lane in each direction during and after working hours.
- The contractor shall maintain 5-foot clear sidewalk for pedestrians at all times.

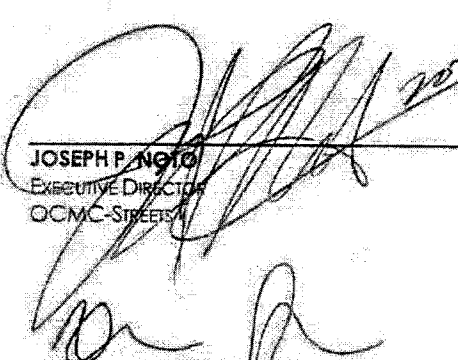
C. GENERAL NOTES

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. **All other stipulations under original NYCDOT stipulation sheet QEC13-281 dated July 15, 2013 and its amendments which have not been changed by this amendment remain in effect.**
3. 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.
4. 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.
5. THE PERMITEE IS NOT AUTHORIZED TO ENTER, OCCUPY OR USE ANY PUBLICLY-OWNED OR PRIVATELY OWNED, NON-PAVED, LANDSCAPE OR NON-LANDSCAPED LOCATION WITHOUT SPECIFIC WRITTEN PERMISSION. WHEN THE LOCATION IS WITHIN THE RIGHT-OF-WAY OF A LIMITED-ACCESS ARTERIAL HIGHWAY, WRITTEN APPROVAL FROM THE NYCDOT OCMC-HIGHWAYS IS REQUIRED. WHEN THE LOCATION IS WITHIN THE RIGHT-OF-WAY OF A PUBLIC STREET OR PUBLIC PARK, WRITTEN APPROVAL FROM THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION OR NEW YORK CITY DEPARTMENT OF PARKS AND RECREATION IS REQUIRED. WHEN THE LOCATION IS WITHIN THE RIGHT-OF-WAY OF ANY OTHER JURISDICTION SUCH AS

OCMC FILE NO: QEC 09-081
CONTRACT NO: HWQ-411B
PROJECT: RECONSTRUCTION OF ALBERT ROAD INCLUDING SEWER, WATER MAIN, STREET LIGHTING AND TRAFFIC SIGNAL

PRIVATE PROPERTY, STATE, FEDERAL ETC., IT IS THE PERMITTEE'S RESPONSIBILITY TO DETERMINE THE PROPERTY OWNER AND OBTAIN THE WRITTEN APPROVAL.

6. 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.
7. 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.
8. FOR THIS PROJECT THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN ALL NECESSARY ADVANCE WARNING AND DETOUR SIGNS, TEMPORARY CONTROL DEVICES, BARRICADES, LIGHTS AND FLASHING ARROW BOARDS IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," THE TYPICAL SCHEMES INCLUDED IN THIS SPECIFICATION; AND AS ORDERED BY THE ENGINEER-IN-CHARGE AND THE OCMC-STREETS.
9. 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.
10. 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.
11. THE CONTRACTOR MUST COMPLY WITH ALL CONSTRUCTION EMBARGOS ISSUED BY THE NYCDOT INCLUDING THE HOLIDAY EMBARGO.



JOSEPH P. NOTO
EXECUTIVE DIRECTOR
OCMC-STREETS



XIOMARA AGUILERA
PROJECT MANAGER
OCMC-STREETS



THE CITY OF NEW YORK Department of Sanitation

S. ELIZABETH SEARLE
Assistant Commissioner
for Legal Affairs

Bureau of Legal Affairs
44 Beaver Street
New York, NY 10004
Telephone (212) 837-8110
FAX (212) 837-8243

Department of Sanitation Rules and Regulations Governing Non-Putrescible Solid Waste Transfer Stations

INTERPRETIVE MEMORANDUM # 2 February 14, 1995

*Subject: Temporary Storage and Processing of Construction and Demolition Debris
by New York City Agency Contractors*

Contractors performing construction work for New York City agencies may be required to excavate dirt, concrete, rock, gravel and similar materials ("construction materials") from a contract site or to remove from a contract site construction materials resulting from construction, demolition, alteration, repair or renovation of structures, streets or buildings. On street construction projects, construction materials required to be excavated or removed may also include asphalt. The purpose of this Interpretive Memorandum is to (a) define the circumstances under which the Department of Sanitation (the "Department") will not deem its Rules and Regulations Governing Non-Putrescible Solid Waste Transfer Stations (the "Rules") to apply to the temporary storage, processing and/or stockpiling (collectively, "stockpiling") of such construction materials and (b) the procedure for ensuring such exemption. It is the responsibility of the contracting agency to oversee its contractors' compliance with the Rules and with this Interpretive Memorandum.

1. When No Transfer Station Permit is Required

Where a City contractor has:

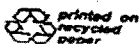
- (a) set aside an area of a contract site for stockpiling construction materials excavated from and/or intended for that site; or
- (b) received written approval from the contracting agency for an off-site stockpiling location,

the Department will not deem such stockpiling location a transfer station and will not require the contractor to obtain a transfer station permit so long as: -

- (c) no construction materials or debris from off the contract site are received at the designated location for subsequent transfer to another location (other than the contract site); and
- (d) the temporary stockpiling location is clearly described as such in the contract or clearly approved by the construction agency and designated as such in writing to the Department by the agency; and
- (e) the construction agency represents in writing to the Department that such agency will monitor the temporary stockpiling location and ensure its clean-up and restoration pursuant to the procedures set out in this memorandum.



Help Reduce
New York's Waste.



Example: Street Construction Projects

As part of a contract for street construction, the contractor may be working at one end of a street and using an area at the other end of the street for the temporary stockpiling of construction materials. Both ends of the street are part of the construction contract site. In addition, the contractor may have leased an off-site location for temporary stockpiling of materials, which, following processing, will be reincorporated into the contract site, with some portion of the remainder designated for delivery to a Department disposal facility. Neither location will be regulated by the Department as a transfer station so long as the procedures set out in this memorandum are followed.

2. Procedure for Exception.

Upon a City construction agency's approval of any location to be designated as a temporary processing, storage or stockpiling area, that agency must determine that (a) its contract with the contractor provides for clean-up and restoration of such area by, for example, the contractor's posting of a restoration bond and/or by contractual set-off and (b) the agency has adequate procedures for monitoring the designated area to ensure that it does not violate the provisions set forth in this memorandum and that such location is cleaned up and restored at the completion of the contract work.

The City construction agency must submit an official letter to the Department acknowledging compliance with both (a) and (b) immediately above and representing that the agency will ensure the contractor's compliance. The letter to be submitted must be in substantially the following form, addressed to the Director, Bureau of Waste Disposal, Department of Sanitation, 125 Worth Street, Room 726, New York, NY 10013:

"The New York City Department of _____ (the "Agency")
has awarded a construction contract to _____ (Contractor)
_____ (the "Contractor") for work to be performed at _____ (Contract
Site) _____.

a. This Agency has approved the following locations to be used by the Contractor for the temporary storage, processing and/or stockpiling of construction materials (the "Stockpiling Locations") excavated from the construction site or intended for the construction site:

b. The terms of the contract require the Contractor to clean up and restore the Stockpiling Locations, whether on or off the contract site, at or before the completion of the contract work.

c. This Agency assumes responsibility for the monitoring of Stockpiling Locations to ensure that only materials received from and/or intended for the construction site are stockpiled at such locations and we will enforce clean-up and restoration of such Locations at the end of their use for temporary stockpiling or at the termination of the contract, whichever occurs earlier, through restoration

bonding requirements and/or contractual set-off provisions such that the costs of clean-up and restoration will not become a charge to the Department or the City. "

3. When a Transfer Station Permit is Required

A transfer station permit will be required under any circumstances other than those outlined above. Except in the specifically defined circumstances set forth in this memorandum, any operator of a location or facility which receives, processes, stores or stockpiles construction and demolition debris or fill material for purposes of transfer to another location, including to a New York City Department of Sanitation facility, and whether or not under contract to the Department for the delivery of such materials, will be fully subject to the Department's transfer station rules and liable for enforcement for violations.

(NO TEXT ON THIS PAGE)

ATTACH TO CONTRACT DOCUMENTS

**THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
INFRASTRUCTURE DIVISION
BUREAU OF DESIGN**

PROJECT ID: HWQ411B

**RECONSTRUCTION OF ALBERT ROAD AREA
INCLUDING SEWER, WATER MAIN, STREET LIGHTING AND TRAFFIC SIGNAL WORK**

Together With All Work Incidental Thereto

BOROUGH OF QUEENS

ADDENDUM NO. 2

DATED: December 4, 2013

This Addendum is issued for the purpose of amending the requirements of the contract documents and is hereby made part of said contract documents to the same extent as if it was originally included therein.

The Standard Sewer Specifications of the Department of Environmental Protection (dated August 1, 2009), Sewer Design Standards of the Department of Environmental Protection (dated (September 2007) Revised January 2009), Standard Water Main Specifications of the Department of Environmental Protection (dated August 1, 2009), Water Main Standard Drawings of the Department of Environmental Protection (latest revisions), and the Standard Highway Specifications (Volumes I and II) of the Department of Transportation (dated November 1, 2010) of The City of New York, shall be included as part of the contract documents. These said specifications and standard drawings are hereby revised under the following section headings:

- A. NOTICE TO BIDDERS
- B. AMENDMENTS TO THE STANDARD HIGHWAY SPECIFICATIONS
- C. AMENDMENTS TO THE STANDARD SEWER SPECIFICATIONS
- D. AMENDMENTS TO THE STANDARD WATER MAIN SPECIFICATIONS

A. NOTICE TO BIDDERS

- (1) (A) The Contractor is advised that copies of the Standard Sewer Specifications (dated August 1, 2009), Sewer Design Standards (dated (September 2007) Revised January 2009), Standard Water Main Specifications (dated August 1, 2009), Specifications For Trunk Main Work (dated March 2012) and Water Main Standard Drawings (latest revisions) are available to all prospective bidders at no cost upon presentation of receipt of purchase of Bid Package at the following location:

Department of Design and Construction
Division of Infrastructure
Design Services, Specifications, 3rd Floor
30-30 Thomson Avenue
Long Island City, NY 11101

(B) The Contractor is advised that copies of the Standard Highway Specifications (Volume I and II) (dated November 1, 2010), Standard Highway Details of Construction (latest revisions), Division of Street Lighting Specifications (latest revisions), Division of Street Lighting Standard Drawings (latest revisions), Standard Specifications for Traffic Signals (latest revisions), and Standard Drawings for Traffic Signals (latest revisions) are available to all prospective bidders for a fee at the following location:

Department of Transportation
55 Water Street, Ground Floor
New York City, NY 10041

- (2) The Contractor is notified that it is the intent of this Agency to commence work promptly after registration of the contract and to order the Contractor to commence work within two (2) months after registration.
- (3) The Contractor shall furnish, install, maintain and subsequently remove temporary Protective Tree Barriers. Protective Tree Barriers shall be Type B, unless otherwise directed by the Engineer, and shall be constructed and installed as shown on the Protective Tree Barrier sketch in Department Of Transportation, Standard Highway Details Of Construction, Drawing No. H-1046A, as directed by the Engineer, and in accordance with Department of Parks and Recreation requirements.
- (4) All utility locations and invert elevations are not guaranteed, nor is there any guarantee that all existing utilities, whether functional or abandoned within the project area are shown.
- (5) All existing house connections shall be maintained and supported during construction. The Contractor shall replace any existing house connection damaged as a result of the Contractor's construction operations as ordered by the Engineer at no cost to the City.
- (6) The Contractor is advised that any City owned light poles, traffic signals, traffic signs and encumbrances including, but not limited, to underground conduit displaced as the result of the installation of the new sewers, water mains, catch basins, catch basin connections and appurtenances shall be replaced in kind and as directed by the Engineer. The cost of such work shall be deemed included in the prices bid for all items of work under this contract.
- (7) The Contractor is notified that Victaulic Style 77 Coupling is no longer acceptable for use in any steel water main work. All reference to Victaulic Style 77 Coupling within the Standard Water Main Specifications of the Department of Environmental Protection (dated August 1, 2009), the Water Main Standard Drawings of the Department of Environmental Protection (latest revisions), the Specifications For Trunk Main Work (dated March 2012), and the contract drawings, shall be replaced with Bolted Split-Sleeve Restrained Coupling.

- (8) The Contractor is responsible for any damage to the existing street and traffic signal equipment, including underground conduits and the safety of both pedestrian and vehicular traffic for the duration of the contract.

Should any conduits, cables or foundations need repair due to the Contractor's negligent operations during construction, all work shall be performed according to NYCDOT Bureau of Traffic's Standard Drawings and Specifications at the sole expense of the Contractor.

It is the Contractor's responsibility to secure an approved electrical contractor to perform all traffic signal work (if any). For list of approved electrical contractors, contact Mr. Michael R. LeFosse of New York City Department of Transportation at (718) 786-2236.

- (9) 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.
- (10) The Contractor shall exercise extreme caution and take all necessary precautions in placing sheeting and excavating to prevent any damage to the existing NYC TRANSIT'S subway structures and its appurtenances during construction work throughout the project area. The Contractor shall take full responsibility to protect the said NYC TRANSIT'S subway structures and its appurtenances and any damage caused by the Contractor's operations shall be made good by the Contractor to the satisfaction of the Engineer at no additional cost to the City.
- (11) The Contractor shall submit shop drawings to NYC Transit Authority showing all the details and methods of construction, such as, sheeting and bracing, including the Contractor's procedure and sequence of construction, supporting and/or protection of the existing TA's structures and its appurtenances, with necessary design calculations for approval prior to starting of the construction. The design shall be made by a New York State Licensed Professional Engineer skilled in this type of construction and as further evidenced by the imprint of Professional Engineer's seal and signature on all drawings. The cost of this work shall be deemed included in the price bid for all items of work under this contract.

B. AMENDMENTS TO THE STANDARD HIGHWAY SPECIFICATIONS

(NO TEXT)

C. AMENDMENTS TO THE STANDARD SEWER SPECIFICATIONS

(1) **Refer** to Subsection 1.06.3 - Hours Of Work, Page I-4:

Add the following to Subsection 1.06.3:

- (A) **HOLIDAY CONSTRUCTION EMBARGO** - A special Holiday Construction Embargo shall be in effect on the Friday of the week preceding Thanksgiving Day week from 6:00 AM to 11:59 PM and again from the Monday of Thanksgiving Day week from 6:00 AM through January 2, at 11:59 PM. Roadway and sidewalk construction activities will be restricted during the embargo period on the streets listed below*.

Any permits issued prior to the date of this notice, for work during this embargo period on the streets listed below which do not already have the permit stipulation "410" are hereby suspended for the period noted above. All permittees must comply with this embargo unless a special waiver is granted by OCMC. Waiver requests must be filed at least thirteen (13) days before Thanksgiving Day, in the Permit Office by filing a "Request for Roadway/Sidewalk Permits During Embargo Periods" and submitting supporting documentation. Waiver requests should only be submitted for critical reasons for a specific project. If a waiver is granted, the applicant will be notified so they can apply for the approved permits. Waivers **are not** required for ongoing Building Construction Activity Permits which already include the "410" permit stipulation. Waiver request forms may be obtained at any Permit Office or on the Department of Transportation's website at:

<http://www.nyc.gov/html/dot/downloads/pdf/holidayembapp.pdf>

Prior to this embargo period all necessary measures must be taken so that all roadways and sidewalks are in proper condition to allow for the expeditious and safe movement of vehicular, bicycle and pedestrian traffic. Tool carts, cable reels, containers, and material stored on roadways must be removed during the embargo period.

The opening of utility access covers is prohibited on any of the streets noted below between the hours of 6:00 AM and midnight unless the utility or contractor files for an Emergency Authorization Number as required by section 2-07 of the Department of Transportation's Highway Rules. The planned opening of utility access covers may occur during the hours of 12:01 AM and 5:59 AM where no authorization number is required.

Temporary restoration of the streets and sidewalks and removal thereof, if required for the Holiday Embargo period, will be paid for under the appropriate scheduled items.

No extension of time due to the shutdown period will be granted to the Contractor for completion of the work.

* Please note that this embargo only applies to NYCDOT construction permits. List of street and maps of the affected locations are available by borough on the Department of Transportation's website at: <http://www.nyc.gov/html/dot/html/motorist/trafalrt.shtml>

(2) **Refer** to Subsection 1.06.14 - Notice To Utility Companies, Etc., To Remove Structures Occupying Place Of Sewers, Water Mains Or Appurtenances, Page I-10:

Add the following to Subsection 1.06.14:

- (1) CONSOLIDATED EDISON COMPANY OF NEW YORK (CON EDISON)

There are CON EDISON facilities in the area of construction. The Contractor shall notify CON EDISON at least seventy-two (72) hours prior to the start of construction by contacting Mrs. Theresa Kong at (212) 460-4834.

- (2) NATIONAL GRID

There are NATIONAL GRID facilities in the areas of reconstruction. The Contractor shall notify NATIONAL GRID within the initial response time specified at time of notification of the task order at each ordered location by contacting Mr. Neville Jacobs Jr. at (718) 963-5612.

(3) VERIZON

There are VERIZON facilities in the area of construction. The Contractor shall notify VERIZON at least seventy-two (72) hours prior to the start of construction by contacting Mr. Aubrey Makhanlall at (718) 977-8165

(4) TIME WARNER CABLE OF NEW YORK CITY

There are TIME WARNER CABLE facilities in the area of construction. The Contractor shall notify TIME WARNER CABLE at least seventy-two (72) hours prior to the start of construction by contacting Mr. John Piazza at (718) 888-4261.

(3) **Refer to Subsection 1.06.20 - Contractor To Notify City Departments, Page I-12:**
Add the following to **Subsection 1.06.20:**

(1) N.Y.C. D.E.P., BUREAU OF WATER AND SEWERS OPERATIONS

The Contractor shall notify Mr. James Garin, P.E., Assistant Commissioner, Engineering 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.

(3) N.Y.C. DEPARTMENT OF TRANSPORTATION

The Contractor shall notify Mr. Steve Galgano, P.E. Chief of Signal/Street Lighting Operations, 34-02 Queens Blvd., Long Island City, N.Y. 11101 at (718) 786-3550, at least seventy-two (72) hours prior to the start of construction.

(4) N.Y.C. DEPARTMENT OF PARKS AND RECREATION

The Contractor shall notify the Parks Department at least seventy-two (72) hours prior to the start of construction by contacting Mr. Ian Jack at (718) 393-7373 or at ian.jack@parks.nyc.gov or Mrs. Amanda Bailey, Green Infrastructure Unit at (718) 760-6830 or at amanda.bailey@parks.nyc.gov.

(5) N.Y.C. TRANSIT AUTHORITY

- (a) The Contractor shall notify Outside Projects at least seven (7) days prior to the start of construction.

The Contractor shall contact:

Mr. Mohamed Adam, P.E.
Project Engineer-Outside Projects
New York City Transit
2 Broadway, 7th Floor
New York, N.Y. 10004
Attention Ms. Alina Avadanei
Telephone No. (646) 252-3641

- (b) The Contractor is advised that bus routes as well as bus stops, within the scope of this project may be affected during construction operations. The Contractor shall notify the Transit Authority at least two (2) weeks prior to the start of construction, in order to make the necessary arrangements as required under the NYC TRANSIT GENERAL NOTES included in **Section 1.06.24A** and **Section 1.06.24B** of this addendum.

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 1.06.24A** and **Section 1.06.24B** of this addendum.

- (4) **Refer to Subsection 1.06.24 - Contractor To Carry Out Agreement Between City And Railroad Company Or Property Owner(s), Page I-14:**
Add the following to **Subsection 1.06.24:**

1.06.24A NYC TRANSIT GENERAL NOTES AND REQUIREMENTS

(A) GENERAL NOTES:

See Contract Drawings.

(B) INSURANCE REQUIREMENTS

See Addendum No. 1.

1.06.24B - 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 A Train**
- (2) The Contractor can obtain NYC Transit Structural Drawings by contacting Mr. Vasanth K. Battu at (646) 252-4473.

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-616 - Duct Assignment - Vicinity Of Rockaway Boulevard and 98th Street - Rockaway - IND - Queens
- Drawing No. P-617 - Duct Assignment - Vicinity of 97th Street and Linden Boulevard - Rockaway - Rockaway Line - IND - Queens
- Drawing No. P-618 - Duct Assignment - Vicinity of Albert Road and Tahoe St - Rockaway Line - IND - Queens
- Drawing No. P-619 - Duct Assignment - Vicinity of 155th - Rockaway Line - IND - Queens

- Drawing No. P-620 - Duct Assignment - Vicinity of Howard Beach Station - Rockaway Line - IND - Queens

- (3) The project might have an impact at the following stations:
 (a) Aqueduct-North Conduit Station for the IND A Train - Rockaway Line

Should it become necessary to close any of the entrances for the above station, see Note No. 25 from the General Notes that are made part of the contract drawings.

- (4) (a) 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:

Aqueduct-North Conduit Station – Rockaway Line

Contract	Project Title	Design Manager/ Telephone No.	Construction Manager/ Telephone No.	Resident Engineer/ Telephone No.
W-32694	PACIS-Install Cables	N.Ng/ (646) 252-6773	D.Stracquatano/ (646) 252-4065	N/A
C-33200	Line Structure Overcoating	D. Patel/ (646) 252-4591	R.Wong (646) 252-3918	N/A
W-32695	PACIS – Finish and Install Cabinets	N.Ng/ (646) 252-6773	D.Stracquatano/ (646) 252-4065	N/A
W-32691	Public Address System	N.Ng/ (646) 252-6773	D.Stracquatano/ (646) 252-4065	N/A
S-32350	Automatic Train Supervision	S.Kwa/ (646) 252-3189	E. Saint Louis (646) 252-3132	N/A
W-32657	Automatic Train Supervision	R.Ruffo/ (646) 252-3050	A. Krikelas	N/A
W-32669	Public Address System (Wrap-Up)	R. Ruffo (646) 252-3060	M. Bienstock (212) 883-7768	N/A

- (5) **Refer to Subsection 1.06.27 - Salvageable Materials, Page I-14:**

Delete the paragraph starting with the words, "No salvageable material...", and ending with the words, "...from the site.", in its entirety:

Substitute the following:

Except as specified below, no salvageable material shall be returned to the New York City Department of Environmental Protection regardless of condition. It shall become the property of the Contractor for removal and disposal, by the Contractor, away from the site.

The Contractor shall salvage and deliver to a designated NYCDEP yard all Metropolitan Valves (6" thru 20") removed during construction of the contract.

- (6) **Refer to Subsection 1.06.29 - Contractor To Provide For Traffic, Page I-15:**

Add the following to **Subsection 1.06.29:**

- (1) Traffic Stipulations:

The Contractor shall refer to Traffic Stipulations identified in the maintenance of traffic requirements under Highway Contract No. HWQ411B

- (7) **Refer to Section 1.08 - Miscellaneous Provisions, Page I-19:**

Delete Subsection 1.08.2 - Vendors in its entirety:

Substitute the following new **Subsection 1.08.2:**

1.08.2 VENDORS

Prior to starting work, the Contractor shall submit in writing to the Engineer the names of all vendors and manufacturers the Contractor intends to use. Unless otherwise specified in the contract documents or a written exception is granted by NYCDDC, the Contractor shall submit only one (1) vendor or manufacturer for each product that is to be incorporated in the contract. The use of multiple vendors or manufacturers to supply the same product will be prohibited, unless otherwise specified in the contract documents or a written exception is granted by NYCDDC. If the vendor or manufacturer is not approved, the Contractor will be notified to either submit another vendor or manufacturer, or have their proposed vendor or manufacturer submit a request for approval from NYCDDC. The Contractor will be prohibited from using the vendor or manufacturer until approval of the vendor or manufacturer has been acquired from NYCDDC.

(8) **Refer** to **Section 1.08 - Miscellaneous Provisions**, Page I-20:

Add the following new **Subsection 1.08.7:**

1.08.7 SUBMITTAL OF SCHEDULE LOG

The Contractor's attention is directed to **Article 9 - Progress Schedule** of the Contract. The Contractor shall submit along with the proposed progress schedule the following: A schedule log in Excel Format (tied to the proposed progress schedule) indicating a description of and the schedule submission dates for all required submittals, shop drawings, approval requests, design mixes, reports, samples, etc., as required by the specifications and the terms of the contract.

(9) **Refer** to **Section 2.05 - Precast Reinforced Concrete Pipe**, **Subsection 2.05.4 - Materials, Workmanship And Finish**, Page II-10:

Delete from **Subsection 2.05.4**, paragraph (A) CONCRETE in its entirety:

Substitute the following:

(A) CONCRETE - The Concrete shall comply with the requirements of **General Specification 11 - Concrete, as modified in Section 2.15**, and be a homogeneous mixture of such proportions and quality that the pipe will conform to the design and test requirements of these specifications.

(10) **Refer** to **Section 2.15 - Concrete, Subsection 2.15.3 - Modifications**, Page II-23:

Delete from **Subsection 2.15.3, Reference Number D 3.2.1** together with its paragraphs in their entirety:

Substitute the following:

D 3.2.1 **DELETE** 3.2.1 to 3.2.9 of GS11 and **SUBSTITUTE** the following:

All concrete mix designs shall be subject to approval by DDC's Quality Assurance and Construction Safety (QACS) Bureau and in accordance with their "MIX DESIGN, LABORATORY AND PLANT APPROVAL PROTOCOL". Copies of this protocol may be obtained at the preconstruction meeting or from the Engineer. Before the Contractor begins to manufacture concrete, the Contractor shall secure DDC's QACS approval of the mix design the Contractor proposes to use.

The Contractor shall submit for this purpose a statement, in writing, of the sources of all ingredient materials, the type and brand of the cement and the number of pounds of each of the materials in a saturated surface-dry condition making up one (1) cubic yard of concrete. The range of water-cement ratios within which the concrete will be manufactured and the method of mixing to be employed shall also be stated. The mix design submittal shall include gradation of aggregates, specific gravities of ingredients,

unit weight, mix proportion for each batch (a minimum of four (4) batches except in case of precast plants where one specific mix may be proposed), compressive strength test results for each mix at 7-days, 28-days (high-early strength mixes may require 6-hours, 24-hours, 3-days and shrinkage test as per the requirements), and graphical representation of strength vs. W/C projected in hours/days.

The Contractor may submit for approval concrete mixes that (within one (1) year of the contract) have been previously approved and used on other jobs with any Bureau of the Department of Environmental Protection or the Department of Design and Construction. Such submittals shall contain evidence that the concrete mix was approved within one (1) year of this contract and shall show that the concrete will be produced at the same mix plant, that the cement and admixtures are the same type (though not necessarily the same brand), that the water/cement ratio is the same and that adjustments have been made in the mix for air content, specific gravity and gradation of the aggregates.

If the Contractor elects to submit a concrete mix that was not previously approved, the Contractor shall submit the new concrete mix in accordance with Chapters 2 and 3 of General Specification 11 as modified herein.

(11) Refer to Section 2.15 - Concrete, Subsection 2.15.3 - Modifications, Page II-26:

Add to Subsection 2.15.3, before Reference Number D 8.2 the following:

D 7.3.3 **ADD** the following to Subsection 7.3.3 of GS11:

Each Portland cement concrete batching plant shall be subject to approval by DDC's Quality Assurance and Construction Safety (QACS) Bureau and in accordance with their "MIX DESIGN, LABORATORY AND PLANT APPROVAL PROTOCOL". Copies of this protocol may be obtained at the preconstruction meeting or from the Engineer. The minimum requirement for approval is that the proposed Portland cement concrete batching plant must be on the New York State Department of Transportation (NYSDOT) approved list for the current construction season.

The minimum requirement for approval of a precast concrete plant is that the proposed plant must be on the NYSDOT approved list. A waiver for this requirement may be granted by the DDC's Quality Assurance and Construction Safety (QACS) Director for special products that no NYSDOT approved plant is capable of producing.

Each Portland cement concrete batching plant shall also be subject to auditing and approval of the DDC's Director of Quality Assurance and Construction Safety (QACS). The Director of QACS may at any time discontinue the use of any previously approved equipment if nonconformance with the specifications results during the progress of the work. When the Director of QACS discontinues the use of the plant, production will not be acceptable for Department work until corrective measures satisfactory to the Director are carried out.

(12) Refer to Section 2.15 - Concrete, Subsection 2.15.3 - Modifications, Page II-26:

Delete from Subsection 2.15.3, Reference Number D 16.3 together with its paragraphs in their entirety:

Substitute the following:

D 16.3 Testing Service - **ADD** the following:

The Contractor shall retain the services of an independent testing laboratory to provide for the services outlined in 16.3.1.4 to 16.3.1.11 of GS11, with the exception of those tests specified herein to be performed by the Engineer and the City Retained Laboratory.

All laboratories shall be subject to approval by DDC's Quality Assurance and Construction Safety (QACS) Bureau and in accordance with their "MIX DESIGN, LABORATORY AND PLANT APPROVAL PROTOCOL". Copies of this protocol may be obtained at the pre-construction meeting or from the Engineer. The minimum requirement for approval is that the laboratory must have the current AMRL/AASHTO R-18 accreditation in the category of service proposed and must be currently licensed by the NYC Department of Buildings (DOB).

(13) **Refer** to Section 2.15 - Concrete, Subsection 2.15.3 - Modifications, Page II-26:

Delete from Subsection 2.15.3, Reference Number D 16.8 together with its paragraphs in their entirety:

Substitute the following:

D 16.8 Responsibilities and Duties of Contractor - **ADD** the following:

The Contractor may, if the Contractor so desires, take cylinders corresponding to those taken by the Engineer for the City Retained Laboratory. However, determination of payment will be based solely on the cylinders taken by the Engineer for the City Retained Laboratory.

CONCRETE TEST CYLINDERS

The Contractor will be responsible for safe delivery of concrete cylinders to the Department of Design and Construction Laboratory, within two (2) days after molding, where they will be properly stored and cured until the date of test, and tested by others, upon removal from the curing room. The Department of Design and Construction testing laboratory will provide the services for the curing and breaking of the test cylinders.

The Contractor shall provide empty cylinder molds and facilities for the proper care of these cylinders while on the site, and shall safeguard them against injury and protect them from the elements.

The Engineer will be responsible for the preparation, documentation and labeling of the cylinders and for notifying the Contractor, at least twenty-four (24) hours in advance, when a shipment of cylinders is ready for delivery, so that cylinders can be tested for the standard twenty-eight (28) day and seven (7) day tests. Cylinders are to be delivered by the Contractor to a designated area near 30-30 Thomson Avenue, Long Island City, New York, or where otherwise directed within the City of New York.

The Contractor shall make arrangements to protect all cylinders from damage during loading, transport to, and unloading at a Department of Design and Construction designated testing laboratory, and shall obtain a receipt for delivered cylinders, which shall be submitted to the Engineer.

(14) **Refer** to Section 4.06 - Backfilling, Subsection 4.06.3 - Method Of Depositing All Backfill, Page IV-18:

(A) **Add** the following paragraph to beginning of Subsection 4.06.3:

At the preconstruction meeting, the Contractor shall submit for approval a full description of the Contractor's proposed methods to be used for all backfilling operations including, but not limited to, equipment, backfill material, depth of compaction layers, and trench locations where each is to be employed. In the field, the Contractor shall be required to demonstrate that the Contractor's methods of backfilling and compaction shall obtain a minimum of ninety-five (95) percent of Standard Proctor Maximum Dry Density.

(B) Delete from **Subsection 4.06.3**, the fourth paragraph in its entirety:
Substitute the following:

Unless otherwise approved in writing by the Engineer, backfilling of the remainder of the trenches and excavations from a point not less than two (2) feet above the top of the sewer conduit (i.e. sewer pipes on cradles or encasements, reinforced concrete sewers, basin and house connections, culverts, etc.) to the underside of the pavement shall be progressively deposited in uniform and successive horizontal layers not exceeding twelve (12) inches in depth for the entire width of the trench or excavation and each successive layer shall be solidly compacted by mechanical tamping or other approved means so as to achieve the required density. In deep trenches defined as those requiring sheeting, the Contractor may submit to the Engineer, for approval, an alternate backfill method (i.e. jetting, deeper deposited layers not exceeding twenty-four (24) inches, etc.) for depositing and compacting the backfill from two (2) feet above the top of the sewer conduit to a plane five (5) feet below final surface elevation. However, approval of any alternate backfill method shall not relieve the Contractor from obtaining a minimum of ninety-five (95) percent of Standard Proctor Maximum Dry Density. Should the Engineer determine that the specified density is not being obtained, the area must be re-excavated and backfilled at the Contractor's own cost until the required compaction density is achieved.

(C) Delete from **Subsection 4.06.3**, the seventh paragraph in its entirety:
Substitute the following:

Backfill shall proceed simultaneously with the withdrawal of sheeting but at no time shall the withdrawal of sheeting exceed a height of six (6) inches above the deposited backfill. Withdrawal of sheeting below levels previously backfilled and compacted is prohibited.

(15) Refer to **Section 5.01 - Reinforced Concrete Sewers, Subsection 5.01.4 - Precast Reinforced Concrete Sewer**, Paragraph (C) - Details, second paragraph, first line, Page V-4:
Change the words "C789 or C850 (as required)", to "C1433":

(16) Refer to **Section 5.05C - Reconstruction Of Existing Sewers Using D.E.P. Approved Cured-In-Place-Pipe (CIPP) Lining Method, Subsection 5.05C.6 - Separate Payment**, third paragraph, second line, Page V-49
Change the word, "nine", to "eleven":

(17) Refer to **Section 5.11 - Outfall Structures, Subsection 5.11.2 - Materials**, Page V-95:
Delete from **Subsection 5.11.2**, paragraph (A) in its entirety:
Substitute the following:

(A) Concrete used for outfall structure (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 2.15**; 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. Calcium nitrite, which acts as an accelerator, may be used in conjunction with compatible retarding admixtures to control setting time and workability of the concrete, consult the manufacturer of the product. 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".

(18) **Refer** to **Section 5.18A - Sewer Cleaning, Subsection 5.18A.3 - Disposal**, Page V-124:

Delete from **Subsection 5.18A.3**, the first paragraph in its entirety:

Substitute the following:

All material removed from the sewers and sewer portions through the manholes under this contract shall become the property of the Contractor and shall be properly disposed of away from the site, at the Contractor's expense.

(19) **Refer** to **Section 5.23 - Decking, Subsection 5.23.1 - Description**, Page V-161:

Delete from **Subsection 5.23.1**, the third paragraph in its entirety:

Substitute the following:

Steel plates that are resting on pavement, that are not part of a decking system, and are used to temporarily span trenches and excavations for vehicular traffic and for pedestrian crossings and walkways shall not be included for payment under this decking section. The cost of all labor, materials, equipment, insurance and incidentals necessary to furnish, place, anchor and ramp these temporary steel plates, when and where directed, in order to comply with the requirements of the NYCDOT Office of Construction Mitigation and Coordination (OCMC) traffic stipulations, the directions of the Engineer, and the Contractor's construction operations shall be deemed included in the prices bid for all contract items of work.

(20) **Refer** to **Section 5.23 - Decking, Subsection 5.23.4 - Design Criteria**, Page V-162:

Add the following to **Subsection 5.23.4**:

(C) The Contractor may substitute skid resistant steel plates (Non-Skid Textured Plates) for timber mats, subject to approval in accordance with **Subsection 4.05.5**. These steel plates shall be placed flush with the existing roadway and shall be installed in compliance with the requirements of **Subsection 4.05.6(G)**.

(21) **Refer** to **Subsection 5.32.4 - Specific Pavement Restoration Provisions**, Page V-185:

Add the following to **Subsection 5.32.4**:

(E) Specific Pavement Restoration Provisions:

- (1) Within the limits of the highway rehabilitation the restoration shall be accomplished and paid for in accordance with Highway Construction Plans, Details and Specifications for Highway Project ID. HWQ411B

(22) **Refer** to **Section 5.36 - Additional Earth Excavation Including Test Pits, Subsection 5.36.4 - Price To Cover**, Paragraph (3), fifth line, Page V-195:

Change 16", to 16'.

D. AMENDMENTS TO THE STANDARD WATER MAIN SPECIFICATIONS

(1) **Refer to Subsection 1.06.3 - Hours Of Work**, Page I-4:

Add the following to **Subsection 1.06.3**:

- (A) **HOLIDAY CONSTRUCTION EMBARGO** - A special Holiday Construction Embargo shall be in effect on the Friday of the week preceding Thanksgiving Day week from 6:00 AM to 11:59 PM and again from the Monday of Thanksgiving Day week from 6:00 AM through January 2, at 11:59 PM. Roadway and sidewalk construction activities will be restricted during the embargo period on the streets listed below*.

Any permits issued prior to the date of this notice, for work during this embargo period on the streets listed below which do not already have the permit stipulation "410" are hereby suspended for the period noted above. All permittees must comply with this embargo unless a special waiver is granted by OCMC. Waiver requests must be filed at least thirteen (13) days before Thanksgiving Day, in the Permit Office by filing a "Request for Roadway/Sidewalk Permits During Embargo Periods" and submitting supporting documentation. Waiver requests should only be submitted for critical reasons for a specific project. If a waiver is granted, the applicant will be notified so they can apply for the approved permits. Waivers **are not** required for ongoing Building Construction Activity Permits which already include the "410" permit stipulation. Waiver request forms may be obtained at any Permit Office or on the Department of Transportation's website at:

<http://www.nyc.gov/html/dot/downloads/pdf/holidayembapp.pdf>

Prior to this embargo period all necessary measures must be taken so that all roadways and sidewalks are in proper condition to allow for the expeditious and safe movement of vehicular, bicycle and pedestrian traffic. Tool carts, cable reels, containers, and material stored on roadways must be removed during the embargo period.

The opening of utility access covers is prohibited on any of the streets noted below between the hours of 6:00 AM and midnight unless the utility or contractor files for an Emergency Authorization Number as required by section 2-07 of the Department of Transportation's Highway Rules. The planned opening of utility access covers may occur during the hours of 12:01 AM and 5:59 AM where no authorization number is required.

Temporary restoration of the streets and sidewalks and removal thereof, if required for the Holiday Embargo period, will be paid for under the appropriate scheduled items.

No extension of time due to the shutdown period will be granted to the Contractor for completion of the work.

* **Please note that this embargo only applies to NYCDOT construction permits. List of street and maps of the affected locations are available by borough on the Department of Transportation's website at: <http://www.nyc.gov/html/dot/html/motorist/trafalrt.shtml>**

(2) **Refer to Subsection 1.06.27 - Salvageable Materials**, Page I-14:

Delete the paragraph starting with the words, "No salvageable material...", and ending with the words, "...from the site.", in its entirety:

Substitute the following:

Except as specified below, no salvageable material shall be returned to the New York City Department of Environmental Protection regardless of condition. It shall become the property of the Contractor for removal and disposal, by the Contractor, away from the site.

The Contractor shall salvage and deliver to a designated NYCDEP yard all Metropolitan Valves (6" thru 20") removed during construction of the contract.

- (3) **Refer** to Standard Water Main Specifications (August 1, 2009), **Subsection 1.06.29 - Contractor To Provide For Traffic**, Page I-15:
Add the following to **Subsection 1.06.29**:

See amended Standard Sewer Specifications (August 1, 2009) **Subsection 1.06.29 - Contractor To Provide For Traffic** of this addendum.

- (4) **Refer** to **Section 1.08 - Miscellaneous Provisions**, Page I-19:
Delete Subsection 1.08.2 - Vendors in its entirety:
Substitute the following new **Subsection 1.08.2**:

1.08.2 VENDORS

Prior to starting work, the Contractor shall submit in writing to the Engineer the names of all vendors and manufacturers the Contractor intends to use. Unless otherwise specified in the contract documents or a written exception is granted by NYCDDC, the Contractor shall submit only one (1) vendor or manufacturer for each product that is to be incorporated in the contract. The use of multiple vendors or manufacturers to supply the same product will be prohibited, unless otherwise specified in the contract documents or a written exception is granted by NYCDDC. If the vendor or manufacturer is not approved, the Contractor will be notified to either submit another vendor or manufacturer, or have their proposed vendor or manufacturer submit a request for approval from NYCDDC. The Contractor will be prohibited from using the vendor or manufacturer until approval of the vendor or manufacturer has been acquired from NYCDDC.

- (5) **Refer** to **Section 1.08 - Miscellaneous Provisions**, Page I-20:
Add the following new **Subsection 1.08.7**:

1.08.7 SUBMITTAL OF SCHEDULE LOG

The Contractor's attention is directed to **Article 9 - Progress Schedule** of the Contract. The Contractor shall submit along with the proposed progress schedule the following: A schedule log in Excel Format (tied to the proposed progress schedule) indicating a description of and the schedule submission dates for all required submittals, shop drawings, approval requests, design mixes, reports, samples, etc., as required by the specifications and the terms of the contract.

- (6) **Refer** to **Section 2.15 - Concrete, Subsection 2.15.3 - Modifications**, Page II-11:
Delete from **Subsection 2.15.3, Reference Number D 3.2.1** together with its paragraphs in their entirety:
Substitute the following:

D 3.2.1 **DELETE** 3.2.1 to 3.2.9 of GS11 and **SUBSTITUTE** the following:

All concrete mix designs shall be subject to approval by DDC's Quality Assurance and Construction Safety (QACS) Bureau and in accordance with their "MIX DESIGN, LABORATORY AND PLANT APPROVAL PROTOCOL". Copies of this protocol may be obtained at the preconstruction meeting or from the Engineer. Before the Contractor begins to manufacture concrete, the Contractor shall secure DDC's QACS approval of the mix design the Contractor proposes to use.

The Contractor shall submit for this purpose a statement, in writing, of the sources of all ingredient materials, the type and brand of the cement and the number of pounds of each of the materials in a saturated surface-dry condition making up one (1) cubic yard of concrete. The range of water-cement ratios within which the concrete will be

manufactured and the method of mixing to be employed shall also be stated. The mix design submittal shall include gradation of aggregates, specific gravities of ingredients, unit weight, mix proportion for each batch (a minimum of four (4) batches except in case of precast plants where one specific mix may be proposed), compressive strength test results for each mix at 7-days, 28-days (high-early strength mixes may require 6-hours, 24-hours, 3-days and shrinkage test as per the requirements), and graphical representation of strength vs. W/C projected in hours/days.

The Contractor may submit for approval concrete mixes that (within one (1) year of the contract) have been previously approved and used on other jobs with any Bureau of the Department of Environmental Protection or the Department of Design and Construction. Such submittals shall contain evidence that the concrete mix was approved within one (1) year of this contract and shall show that the concrete will be produced at the same mix plant, that the cement and admixtures are the same type (though not necessarily the same brand), that the water/cement ratio is the same and that adjustments have been made in the mix for air content, specific gravity and gradation of the aggregates.

If the Contractor elects to submit a concrete mix that was not previously approved, the Contractor shall submit the new concrete mix in accordance with Chapters 2 and 3 of General Specification 11 as modified herein.

- (7) **Refer to Section 2.15 - Concrete, Subsection 2.15.3 - Modifications, Page II-13:**
Add to Subsection 2.15.3, before Reference Number D 8.2 the following:

D 7.3.3 **ADD** the following to Subsection 7.3.3 of GS11:

Each Portland cement concrete batching plant shall be subject to approval by DDC's Quality Assurance and Construction Safety (QACS) Bureau and in accordance with their "MIX DESIGN, LABORATORY AND PLANT APPROVAL PROTOCOL". Copies of this protocol may be obtained at the preconstruction meeting or from the Engineer. The minimum requirement for approval is that the proposed Portland cement concrete batching plant must be on the New York State Department of Transportation (NYSDOT) approved list for the current construction season.

The minimum requirement for approval of a precast concrete plant is that the proposed plant must be on the NYSDOT approved list. A waiver for this requirement may be granted by the DDC's Quality Assurance and Construction Safety (QACS) Director for special products that no NYSDOT approved plant is capable of producing.

Each Portland cement concrete batching plant shall also be subject to auditing and approval of the DDC's Director of Quality Assurance and Construction Safety (QACS). The Director of QACS may at any time discontinue the use of any previously approved equipment if nonconformance with the specifications results during the progress of the work. When the Director of QACS discontinues the use of the plant, production will not be acceptable for Department work until corrective measures satisfactory to the Director are carried out.

- (8) **Refer to Section 2.15 - Concrete, Subsection 2.15.3 - Modifications, Page II-14:**
Delete from Subsection 2.15.3, Reference Number D 16.3 together with its paragraphs in their entirety:
Substitute the following:

D 16.3 Testing Service - **ADD** the following:

The Contractor shall retain the services of an independent testing laboratory to provide for the services outlined in 16.3.1.4 to 16.3.1.11 of GS11, with the exception of those tests specified herein to be performed by the Engineer and the City Retained Laboratory.

All laboratories shall be subject to approval by DDC's Quality Assurance and Construction Safety (QACS) Bureau and in accordance with their "MIX DESIGN, LABORATORY AND PLANT APPROVAL PROTOCOL". Copies of this protocol may be obtained at the pre-construction meeting or from the Engineer. The minimum requirement for approval is that the laboratory must have the current AMRL/AASHTO R-18 accreditation in the category of service proposed and must be currently licensed by the NYC Department of Buildings (DOB).

(9) **Refer to Section 2.15 - Concrete, Subsection 2.15.3 - Modifications, Page II-14:**

Delete from **Subsection 2.15.3, Reference Number D 16.8** together with its paragraphs in their entirety:

Substitute the following:

D 16.8 Responsibilities and Duties of Contractor - **ADD** the following:

The Contractor may, if the Contractor so desires, take cylinders corresponding to those taken by the Engineer for the City Retained Laboratory. However, determination of payment will be based solely on the cylinders taken by the Engineer for the City Retained Laboratory.

CONCRETE TEST CYLINDERS

The Contractor will be responsible for safe delivery of concrete cylinders to the Department of Design and Construction Laboratory, within two (2) days after molding, where they will be properly stored and cured until the date of test, and tested by others, upon removal from the curing room. The Department of Design and Construction testing laboratory will provide the services for the curing and breaking of the test cylinders.

The Contractor shall provide empty cylinder molds and facilities for the proper care of these cylinders while on the site, and shall safeguard them against injury and protect them from the elements.

The Engineer will be responsible for the preparation, documentation and labeling of the cylinders and for notifying the Contractor, at least twenty-four (24) hours in advance, when a shipment of cylinders is ready for delivery, so that cylinders can be tested for the standard twenty-eight (28) day and seven (7) day tests. Cylinders are to be delivered by the Contractor to a designated area near 30-30 Thomson Avenue, Long Island City, New York, or where otherwise directed within the City of New York.

The Contractor shall make arrangements to protect all cylinders from damage during loading, transport to, and unloading at a Department of Design and Construction designated testing laboratory, and shall obtain a receipt for delivered cylinders, which shall be submitted to the Engineer.

(10) **Refer to Section 4.06 - Backfilling, Subsection 4.06.3 - Method Of Depositing All Backfill, Page IV-18:**

(A) **Add** the following paragraph to beginning of **Subsection 4.06.3:**

At the preconstruction meeting, the Contractor shall submit for approval a full description of the Contractor's proposed methods to be used for all backfilling operations including, but not limited to, equipment, backfill material, depth of compaction layers, and trench locations where each is to be

employed. In the field, the Contractor shall be required to demonstrate that the Contractor's methods of backfilling and compaction shall obtain a minimum of ninety-five (95) percent of Standard Proctor Maximum Dry Density.

(B) Delete from **Subsection 4.06.3**, the fourth paragraph in its entirety:
Substitute the following:

Unless otherwise approved in writing by the Engineer, backfilling of the remainder of the trenches and excavations from a point not less than twelve (12) inches above the top of the barrel of the water main pipe to the underside of the pavement shall be progressively deposited in uniform and successive horizontal layers not exceeding twelve (12) inches in depth for the entire width of the trench or excavation and each successive layer shall be solidly compacted by mechanical tamping or other approved means so as to achieve the required density. In deep trenches defined as those requiring sheeting, the Contractor may submit to the Engineer, for approval, an alternate backfill method (i.e. jetting, deeper deposited layers not exceeding twenty-four (24) inches, etc.) for depositing and compacting the backfill from twelve (12) inches above the top of the barrel of the water main pipe to a plane five (5) feet below final surface elevation. However, approval of any alternate backfill method shall not relieve the Contractor from obtaining a minimum of ninety-five (95) percent of Standard Proctor Maximum Dry Density. Should the Engineer determine that the specified density is not being obtained, the area must be re-excavated and backfilled at the Contractor's own cost until the required compaction density is achieved.

(C) Delete from **Subsection 4.06.3**, the seventh paragraph in its entirety:
Substitute the following:

Backfill shall proceed simultaneously with the withdrawal of sheeting but at no time shall the withdrawal of sheeting exceed a height of six (6) inches above the deposited backfill. Withdrawal of sheeting below levels previously backfilled and compacted is prohibited.

(11) Refer to **Section 5.02 - Laying Ductile Iron Pipe And Fittings, Subsection 5.02.3(F) - Bedding And Foundation Of Pipes**, Page V-8:

Delete from **Subsection 5.02.3(F)**, Paragraph (5) - Pier And Plate, in its entirety:

Substitute the following new Paragraph (5):

(5) Shallow Cover: Where mains 24-inches and smaller are laid with covers of 2'-0" or less, the Contractor shall provide protection in accordance with **Standard Drawing No. 42063-Y** or as directed by the Engineer.

Where mains 24-inches and smaller are laid with covers between 2'-6" and 2'-0", the Contractor shall provide steel plates only over the main with dimensions as shown on **Standard Drawing No. 46464-Z** or as directed by the Engineer.

Where mains 30-inches and larger are laid with covers of 2'-6" or less, the Contractor shall provide protection in accordance with **Standard Drawing No. 46464-Z** or as directed by the Engineer.

Covers over the new mains shall not be less than 1'-6".

(12) Refer to **Section 5.02 - Laying Ductile Iron Pipe And Fittings, Subsection 5.02.3 - Construction Methods, Paragraph (M) - Laying Temporary Connections**, Page V-12:

Delete Paragraph (M), in its entirety:

Substitute the following:

(M) LAYING TEMPORARY CONNECTIONS AND INSTALLING TEMPORARY CAP ASSEMBLIES AND/OR BULKHEADS

- (1) When new water mains are laid and it becomes necessary to provide a temporary connection between the existing main and new mains laid under this contract (regardless of whether the new and existing water mains are in the same trench or are offset in two different trenches), the Contractor shall, if ordered, provide all labor, equipment and facilities for laying, maintaining and removing when directed, temporary connections and appurtenances. If City forces do laying of temporary connections, the Contractor shall make all required equipment and facilities available to them. No payment will be made for providing temporary house services which may be required when making a temporary connection between the existing and new main.
 - (2)
 - (a) Temporary cap assemblies on distribution water mains (20" and less in diameter) shall consist of a 2-foot long spigot/spigot ductile iron pipe with a mechanical joint cap restrained to the pipe with a "wedge-type" retainer gland and a minimum 2-inch tap on the pipe section.
 - (b) Temporary cap assemblies on distribution water mains (20" and less in diameter) shall be restrained and braced in a manner sufficient to support system working pressures, and thrust forces.
 - (c) The 2-inch tap required as part of the temporary cap assembly is to be utilized to allow air to escape while filling the main in addition to allow for proper flushing of the main.
 - (d) Restraint and bracing as well as temporary cap assemblies/bulkheads for water mains greater than 20" in diameter shall be submitted for approval by the Engineer prior to being utilized.
- (13) **Refer to Section 5.02 - Laying Ductile Iron Pipe And Fittings, Subsection 5.02.5 - Price To Cover, Paragraph (10), Page V-16:**
Delete Paragraph (10), in its entirety:
Substitute the following:
- (10)(a) No separate or additional payment will be made to the Contractor for furnishing, delivering, installing, restraining, bracing and removing temporary cap assemblies/bulkheads for water mains as ordered by the Engineer. The costs thereof shall be deemed included in the unit prices bid for all items of the contract.
 - (b) Payment for temporary valves (i.e. construction valves) and its associated fittings ordered by the Engineer during the course of the work to be installed will be paid for at the same rates as for valves and fittings permanently installed.
 - (c) If ordered by the Engineer, removal of valves (i.e. construction valves) and its associated fittings, including their transfer and disposal shall be deemed included in the prices bid for all items of the contract. No separate or additional payment will be made for this work.
 - (d) Payment For Temporary Connections: When new mains are laid and it becomes necessary to provide a temporary connection between the existing and new mains the following method of payment shall apply: The Contractor shall be paid once for furnishing and delivering pipes and fittings used in temporary connections. The Contractor shall also be paid for laying the temporary pipe connection and fitting using the appropriate pipe laying item for each time that the Contractor is directed to use them throughout the project as directed by the Engineer.

- (14) **Refer to Subsection 5.04.4 - Furnishing, Delivering And Installing Steel Tee, Paragraph (5), Item Numbers list, Page V-23:**
Delete Item No. "60.23ST20T48", together with Description "FURNISHING, DELIVERING AND INSTALLING 48-INCH X 20-INCH STEEL TEE", and Pay Unit "EACH":

- (15) **Refer to Section 5.05 - Furnishing And Delivering Gate Valves, Page V-35:**

(A) **Delete** from **Subsection 5.05.1 - Description**, the first paragraph in its entirety:
Substitute the following:

This specification describes furnishing and delivering of double disc 3-inch to 20-inch gate valves, resilient seated 3-inch to 20-inch gate valves and resilient seated 3-inch to 12-inch tapping valves.

Unless otherwise specified in the contract documents or ordered in writing by the Engineer, only resilient seated gate valves and tapping valves shall be furnished and delivered by the Contractor on the contract.

(B) **Delete** from **Subsection 5.05.2 - Materials**, second paragraph, first line, the words, "6-inch hydrant":
Substitute the following words, "3-inch to 20-inch":

(16) **Refer** to **Section 5.06 - Setting Gate Valves**, Page V-38:

(A) **Delete** from **Subsection 5.06.1 - Description**, the first paragraph in its entirety:
Substitute the following:

This specification describes the installation of double disc 3-inch to 20-inch gate valves, resilient seated 3-inch to 20-inch gate valves and resilient seated 3-inch to 12-inch tapping valves. It also describes the installing of manhole frames (skirts and heads) and covers.

Unless otherwise specified in the contract documents or ordered in writing by the Engineer, only resilient seated gate valves and tapping valves shall be installed by the Contractor on the contract.

(B) **Delete** from **Subsection 5.06.2 - Materials**, second paragraph, first line, the words, "6-inch hydrant":
Substitute the following words, "3-inch to 20-inch":

(17) **Refer** to **Section 5.23 - Decking, Subsection 5.23.1 - Description**, Page V-73:

Delete from **Subsection 5.23.1**, the third paragraph in its entirety:
Substitute the following:

Steel plates that are resting on pavement, that are not part of a decking system, and are used to temporarily span trenches and excavations for vehicular traffic and for pedestrian crossings and walkways shall not be included for payment under this decking section. The cost of all labor, materials, equipment, insurance and incidentals necessary to furnish, place, anchor and ramp these temporary steel plates, when and where directed, in order to comply with the requirements of the NYCDOT Office of Construction Mitigation and Coordination (OCMC) traffic stipulations, the directions of the Engineer, and the Contractor's construction operations shall be deemed included in the prices bid for all contract items of work.

(18) **Refer** to **Section 5.23 - Decking, Subsection 5.23.4 - Design Criteria**, Page V-74:

Add the following to **Subsection 5.23.4**:

(C) The Contractor may substitute skid resistant steel plates (Non-Skid Textured Plates) for timber mats, subject to approval in accordance with **Subsection 4.05.5**. These steel plates shall be placed flush with the existing roadway and shall be installed in compliance with the requirements of **Subsection 4.05.6(G)**.

(19) **Refer** to Standard Water Main Specifications (August 1, 2009), **Section 5.32 - Final Restoration Of Pavements**, Page V-99:

Add the following to **Subsection 5.32.4 - Specific Pavement Restoration Provisions**:

See amended Standard Sewer Specifications (August 1, 2009) **Subsection 5.32.4 - Specific Pavement Restoration Provisions** of this addendum.

(20) Refer to **Section 5.36 - Additional Earth Excavation Including Test Pits, Subsection 5.36.4 - Price To Cover**, Paragraph (3), fifth line, Page V-114:
Change 16", to 16'.

END OF ADDENDUM NO. 2

This Addendum consists of twenty-one (21) pages.

NO TEXT ON THIS PAGE

ATTACH TO CONTRACT DOCUMENTS

**THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
INFRASTRUCTURE DIVISION
BUREAU OF DESIGN**

PROJECT ID: HWQ411B

RECONSTRUCTION OF ALBERT ROAD AREA

**INCLUDING SEWER, WATERMAIN, STREET LIGHTING,
AND TRAFFIC SIGNAL WORK**

Together With All Work Incidental Thereto

**BOROUGH OF QUEENS
CITY OF NEW YORK**

ADDENDUM NO. 3

DATED: March 23, 2009

This Addendum is issued for the purpose of amending the requirements of the Contract Documents and is hereby made part of said Contract Documents to the same extent as if it was originally included therein.

GAS COST SHARING (EP-7) STANDARD SPECIFICATIONS

EP-7 GAS COST SHARING STANDARD SPECIFICATIONS

TABLE OF CONTENT

I - NOTICE TO ALL BIDDERS; GAS COST SHARING WORK

II - GENERAL PROVISIONS; GAS COST SHARING WORK

1. General
2. Gas Interferences And Accommodations
 - 2a. Water Main Accommodations
 - 2b. Sewer Accommodations
3. Quantity Overruns, EP-7 Funded Bid Items
4. Changes And Extra Work
5. Excavation
6. Backfilling And Street Restoration
7. Non-Responsive Bids
8. Minimum Clearances
9. Work By Facility Operator
10. Materials Furnished By Facility Operator
11. Liability And Insurance
12. Width And Depth Of Excavation
13. Depth And Crossing Angles Of Gas Facilities
14. Maintenance Of Traffic For Gas Work
15. Relocated Gas And Temporary Systems Installation
16. Role Of Company Inspector
17. Coordination With Gas Company

III - TECHNICAL SECTION

- SECTION 6.01 - Trench Crossings; Support And Protection Of Gas Facilities And Services.
- SECTION 6.02 - Extra Excavation For The Installation Of Catch Basin Sewer Drain Pipes With Gas Interferences.
- SECTION 6.02.1 - Extra Excavation For The Installation Of Catch Basin Sewer Drain Pipes With Upstream Inverts Greater Than Six (6) Feet.
- SECTION 6.03 - Removal Of Abandoned Gas Facilities. All Sizes.
- SECTION 6.03.1 - Removal Of Abandoned Gas Facilities With Possible Coal Tar Wrap. All Sizes. (For National Grid Work Only)
- SECTION 6.03.1a - Removal Of Abandoned Gas Facilities With Possible Coal Tar Wrap. All Sizes. (For Con Edison Work Only)
- SECTION 6.04 - Adjust Hardware To Grade Using Spacer Rings/Adaptors. (Street Repaving.)
- SECTION 6.05 - Adjust Hardware To Grade By Resetting. (Road Reconstruction.)
- SECTION 6.06 - Special Care Excavation And Backfilling.
- SECTION 6.07 - Test Pits For Gas Facilities.

IV - STANDARD SKETCHES; GAS COST SHARING WORK

- NO. 1 - Support Requirements For Gas Mains And Services Crossing Excavation Greater Than 4'-0" Wide At Any Angle
- NO. 1A - Support Requirements For Gas Mains Over 16" Diameter Up To And Including 48" Diameter Crossing Excavation At Any Angle
- NO. 2 - Typical Methods Of Measurement For Gas Crossings
- NO. 3 - Utility Crossings During Catch Basin Chute Connection Pipe Installation
- NO. 4 - Utility Crossings During Catch Basin Chute Connection Pipe Installation (Extra Depth)
- NO. 5 - Gas Main Encroachment On And/Or Parallel To Excavation Of Unsheeted Trench

V - PRELIMINARY GAS WORK TO BE PERFORMED BY FACILITY OPERATOR

VI - LISTING OF APPROXIMATE LOCATIONS OF EP-7 BID ITEMS QUANTITIES

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 include bid items, specifications and estimated quantities designed to fully compensate him/her for the incremental costs of supporting, protecting, provide accommodations and, avoid 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 "UTL-GCS-2WS - GAS INTERFERENCES AND ACCOMMODATIONS". When EP-7 bid item "UTL-GCS-2WS - GAS INTERFERENCES AND ACCOMMODATIONS" 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 (no-cost 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:

This item 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 "UTL-GCS-2WS - GAS INTERFERENCES AND ACCOMMODATIONS" 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 Repaving.)

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. 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. 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 excavation 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 defined above 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 direction of 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.

GAS COST SHARING STANDARD SPECIFICATIONS
SCHEDULE GCS-A

Average rate charged by utility companies to Disconnect and Reconnect Gas Services:

1. National Grid - \$586.90 per Service/and Visit
2. Con Edison - \$524.00 per Service/and Visit

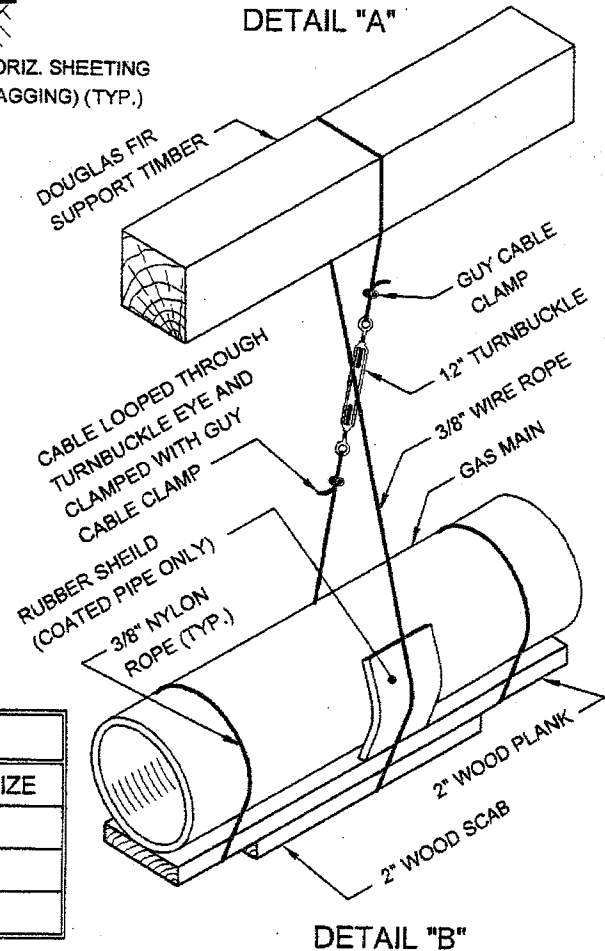
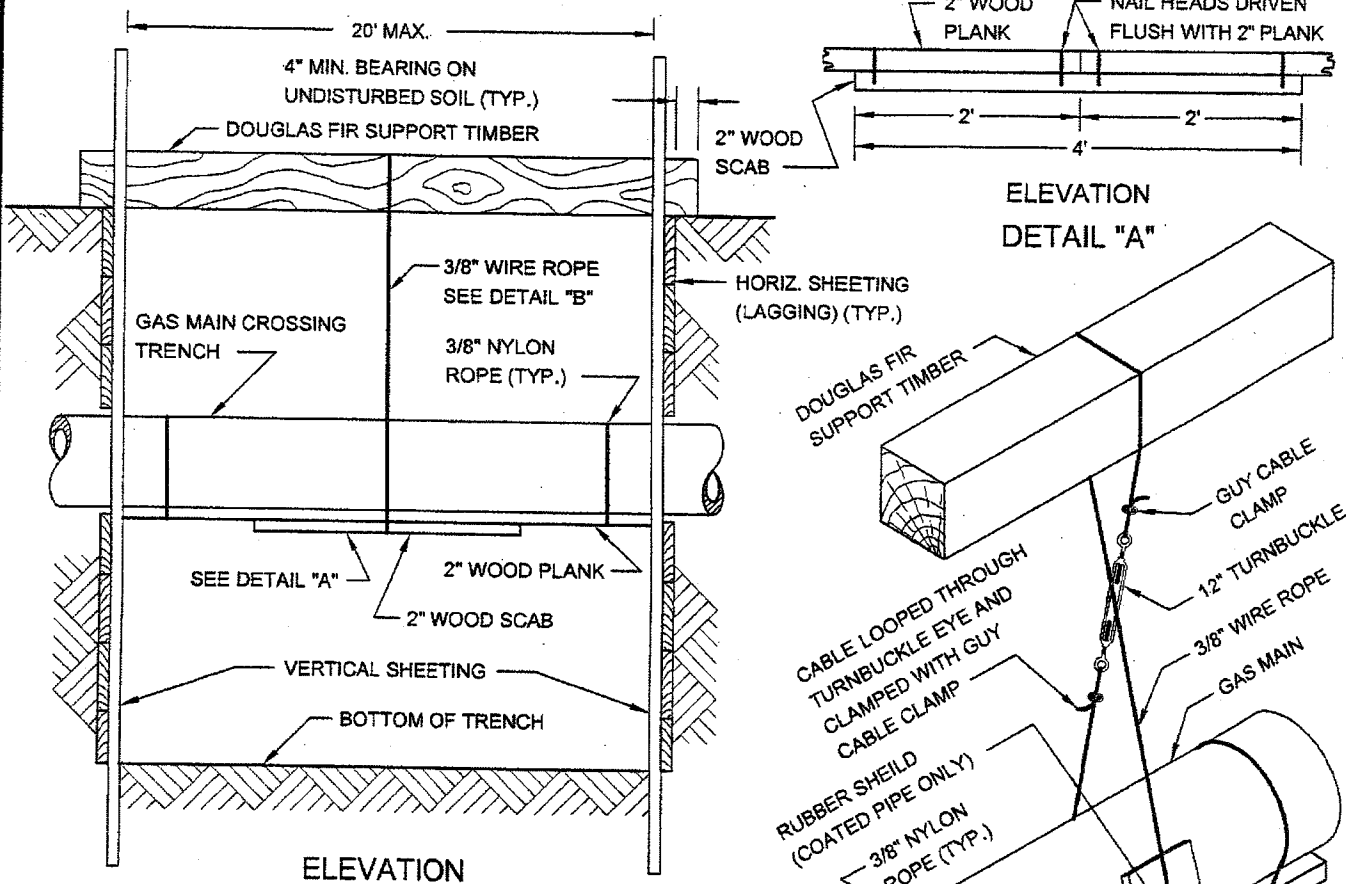
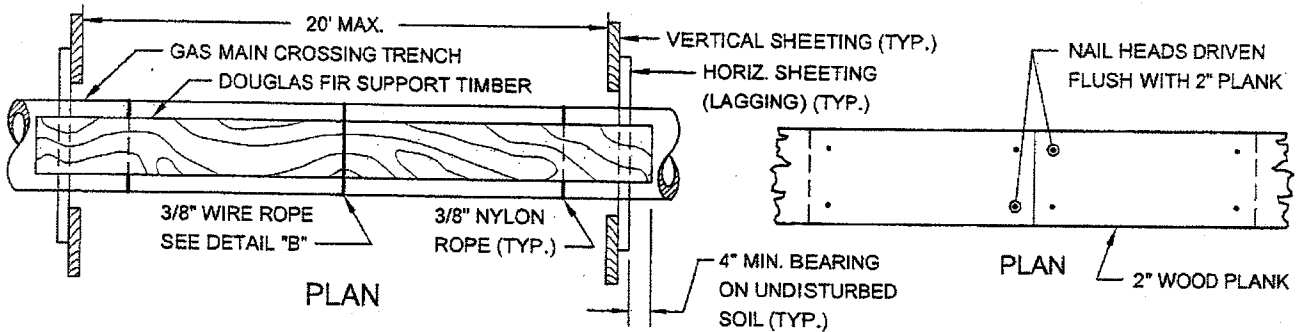
IV - STANDARD SKETCHES; GAS COST SHARING WORK

Hereinafter attached are the following Standard Sketches for Gas Cost Sharing Work:

- Sketch No. 1 - Support Requirements For Gas Mains And Services Crossing Excavation Greater Than 4' - 0" Wide At Any Angle
- Sketch No. 1A - Support Requirements For Gas Mains Over 16" Diameter Up To And Including 48" Diameter Crossing Excavation At Any Angle
- Sketch No. 2 - Typical Methods Of Measurement For Gas Crossings
- Sketch No. 3 - Utility Crossings During Catch Basin Chute Connection Pipe Installation
- Sketch No. 4 - Utility Crossings During Catch Basin Chute Connection Pipe Installation (Extra Depth)
- Sketch No. 5 - Gas Main Encroachment On And/Or Parallel To Excavation Of Unsheeted Trench

GAS COST SHARING WORK (SKETCH NO. 1)

SUPPORT REQUIREMENTS FOR GAS MAINS AND SERVICES CROSSING EXCAVATION GREATER THAN 4'-0" WIDE AT ANY ANGLE

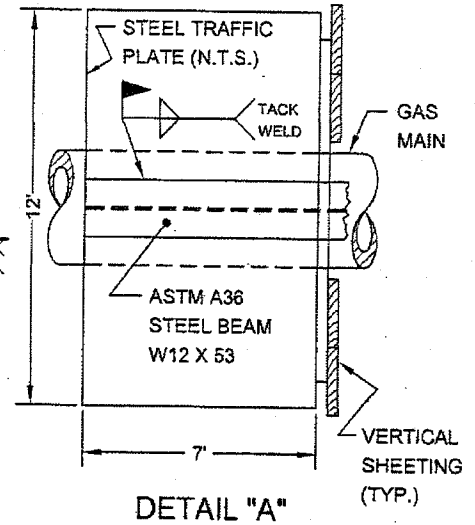
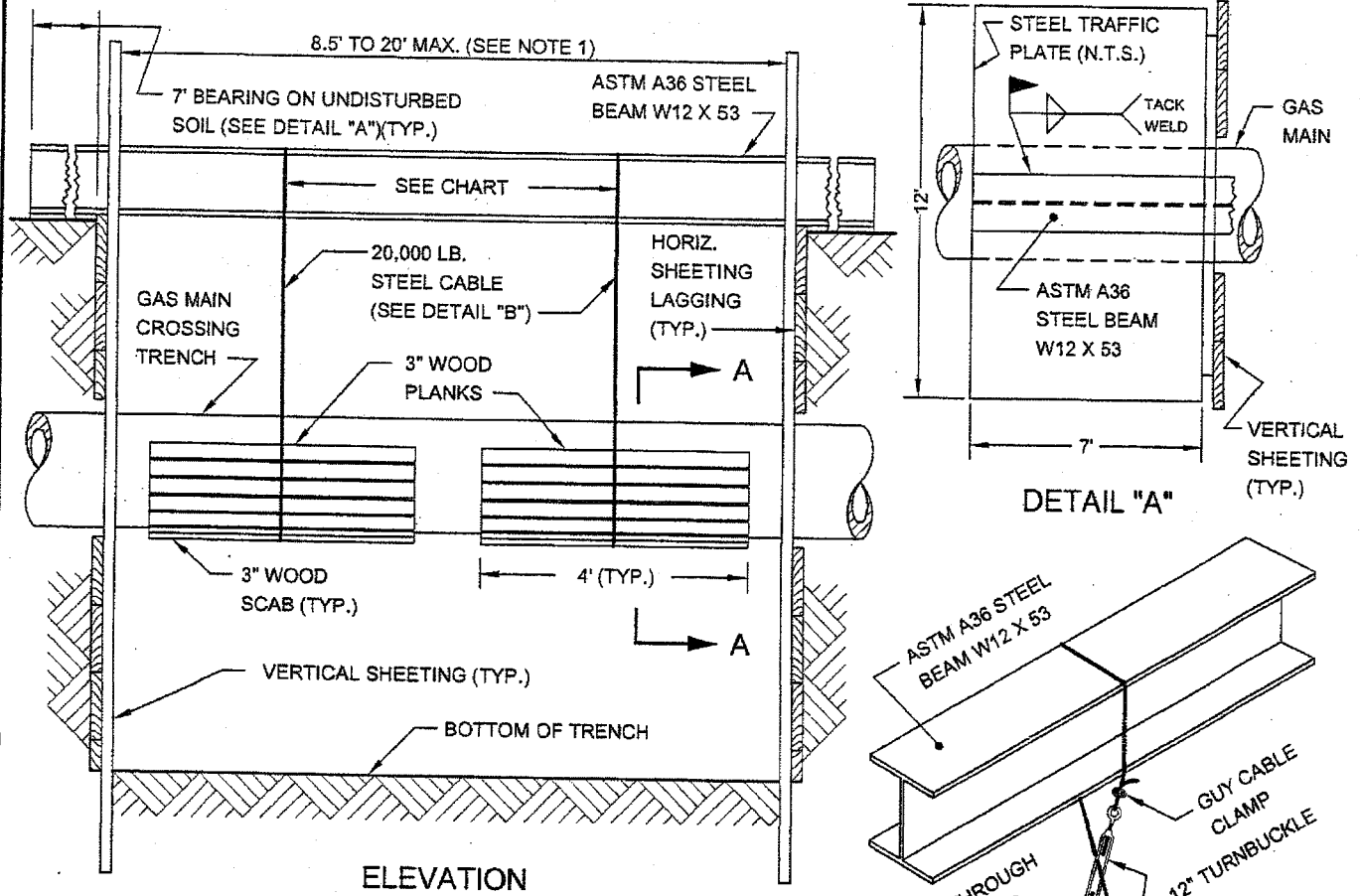


CABLE SUPPORT		TIMBER SUPPORT	
MAIN TYPE	SPACING	MAIN SIZE	TIMBER SIZE
CAST IRON	4' O.C. MAX.	UP TO 6"	6" X 6"
STEEL	10' O.C. MAX.	8" TO 10"	8" X 8"
PLASTIC	10' O.C. MAX.	12" TO 16"	10" X 10"

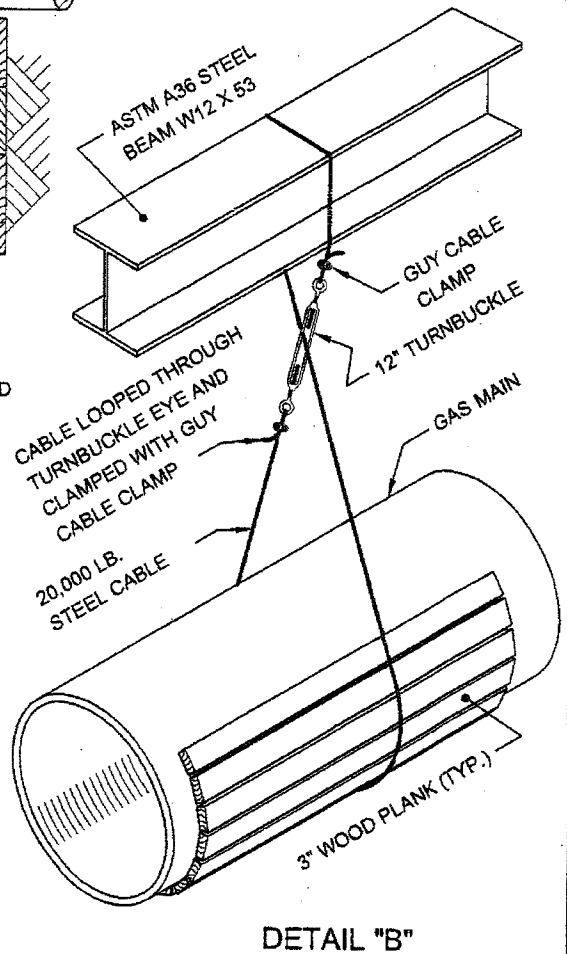
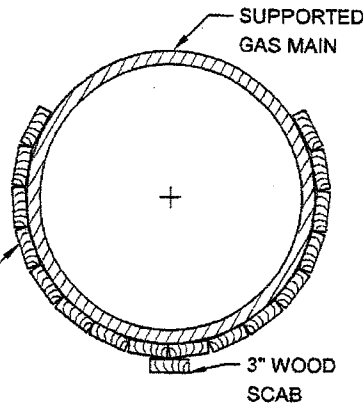
REVISED OCT. 2004 - L. ADRIEN
REVISED JUNE 1998 - J. WONG / W. PATALANO / P. MOY

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



CABLE SUPPORT	
MAIN TYPE	SPACING
CAST IRON	4' O.C. MAX.
STEEL	10' O.C. MAX.



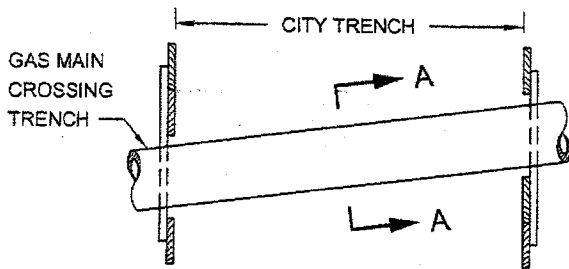
NOTES:

- (1) NO SUPPORT IS REQUIRED FOR GAS MAINS OVER 16" DIA. UP TO AND INCLUDING 48" DIA. CROSSING TRENCHES LESS THAN 8.5' WIDE.
- (2) UNDERMINE A MAXIMUM OF 8.5 L.F. OF CAST IRON GAS MAIN AT A TIME.
- (3) SET STEEL CABLE OVER 3" WOOD PROTECTIVE PLANKS AND PLACE AN ADDITIONAL 3" SCAB ON THE BOTTOM OF THE GAS MAIN.
- (4) ADJUST STEEL CABLE UNTIL DEAD WEIGHT OF THE UNDERMINED GAS MAIN HAS BEEN TAKEN UP BY THE OVERHEAD STEEL BEAM SUPPORT.
- (5) ALL SUPPORTS AND STEEL CABLES CAN BE REMOVED ONLY AFTER THE REQUIRED BACKFILL (AROUND AND BELOW GAS MAIN) HAS BEEN COMPACTED IN ACCORDANCE WITH NEW YORK CITY STANDARDS AND AT THE DIRECTIONS OF THE ENGINEER.

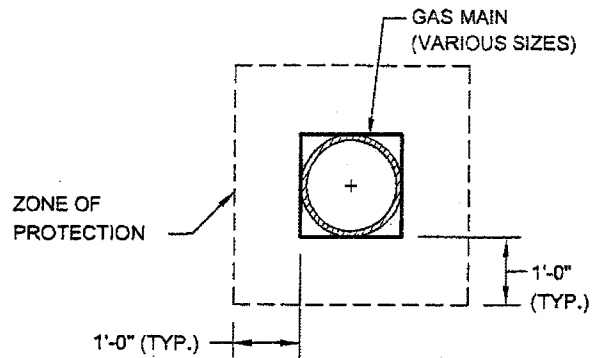
2004 - J. ADRIEN
 REVISION
 1998 - J. WONG / W. PATALANOP. MOY

GAS COST SHARING WORK (SKETCH NO. 2)

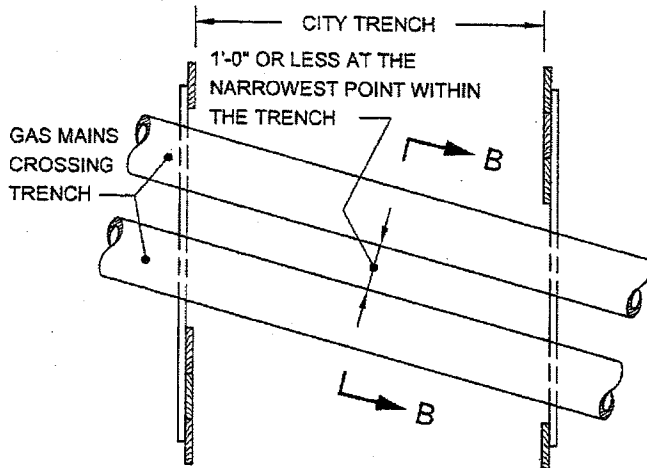
TYPICAL METHODS OF MEASUREMENT FOR GAS CROSSINGS



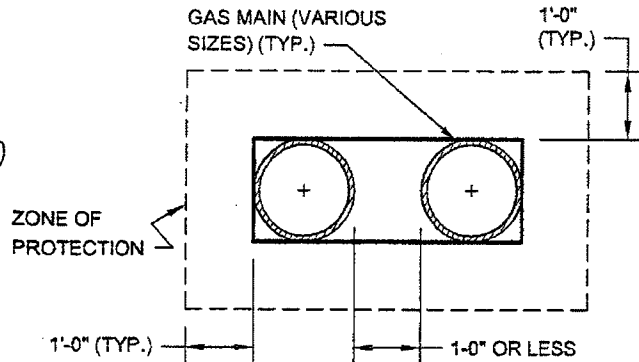
SINGLE FACILITY CROSSING



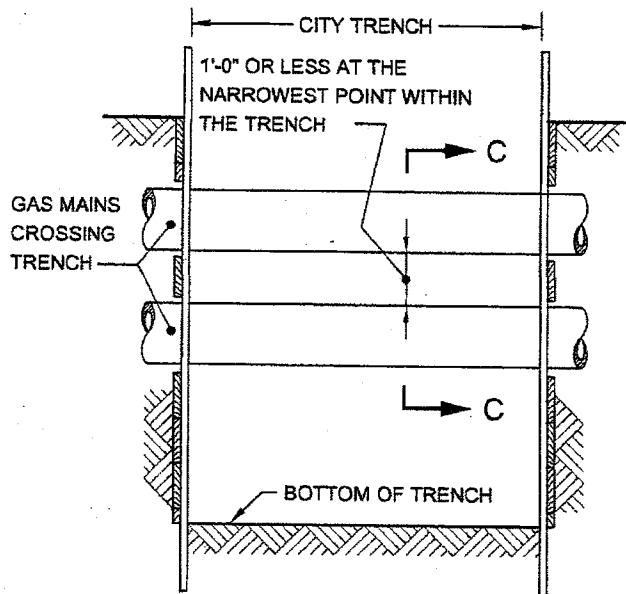
SECTION A-A



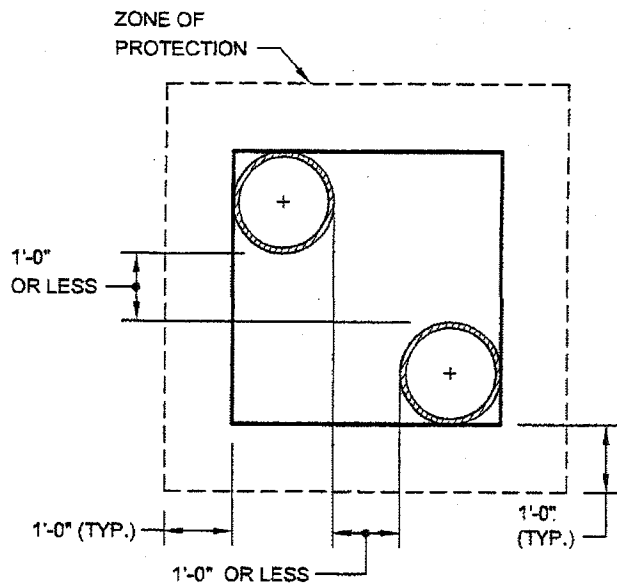
**MULTIPLE FACILITIES
(GAS MAINS AT SAME ELEVATION)**



SECTION B-B



**MULTIPLE FACILITIES
(ONE CROSSING AT DIFFERENT ELEVATIONS)**



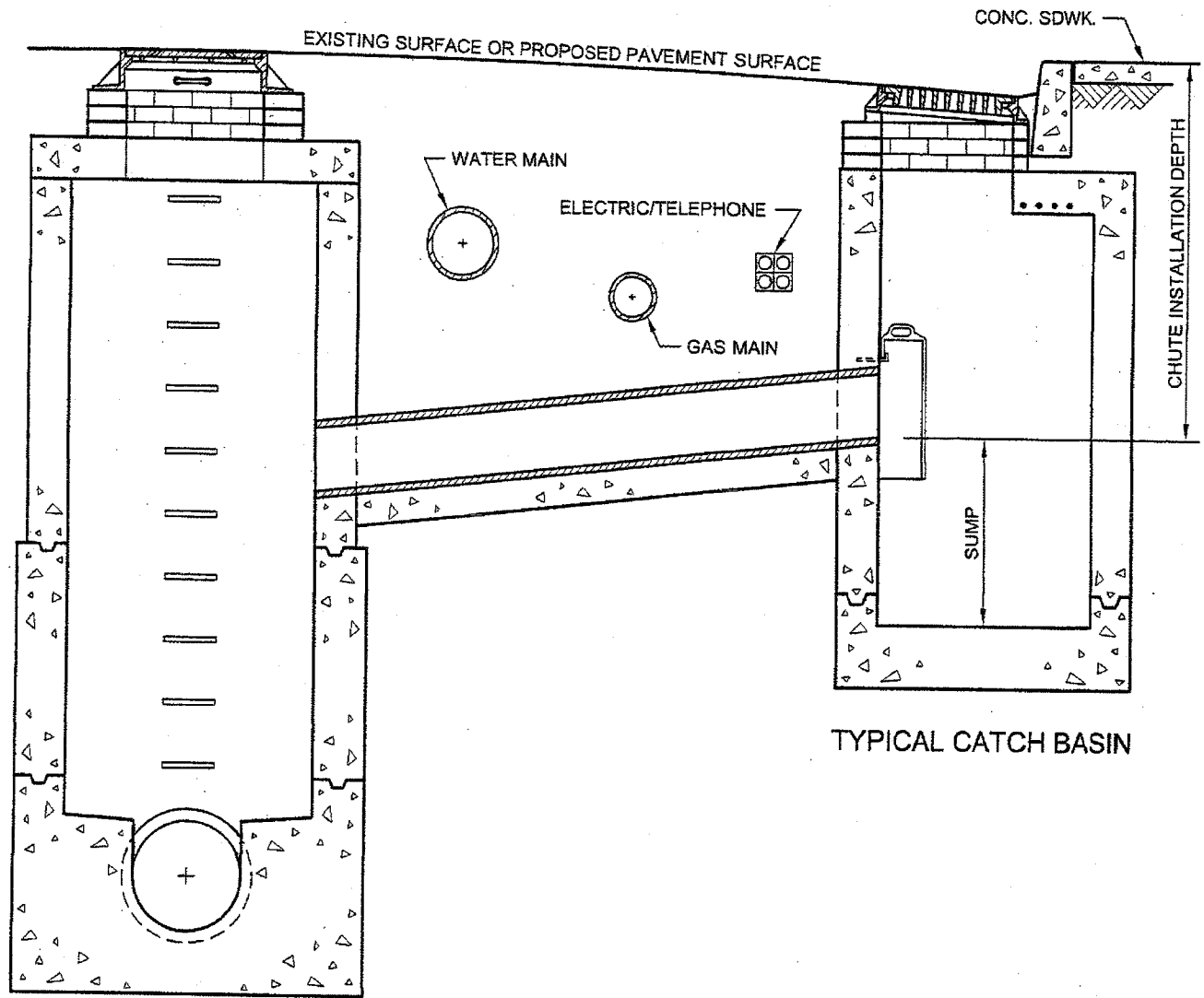
SECTION C-C

NOTE:

GAS MAINS MAY OR MAY NOT BE PARALLEL TO EACH OTHER.

REVISED SEPT. 2004 - J. ADRIEN
REVISED SEPT. 2004 - J. WONG/W. PATALANDIP. MOY

GAS COST SHARING WORK (SKETCH NO. 3)
UTILITY CROSSINGS DURING CATCH BASIN CHUTE
CONNECTION PIPE INSTALLATION

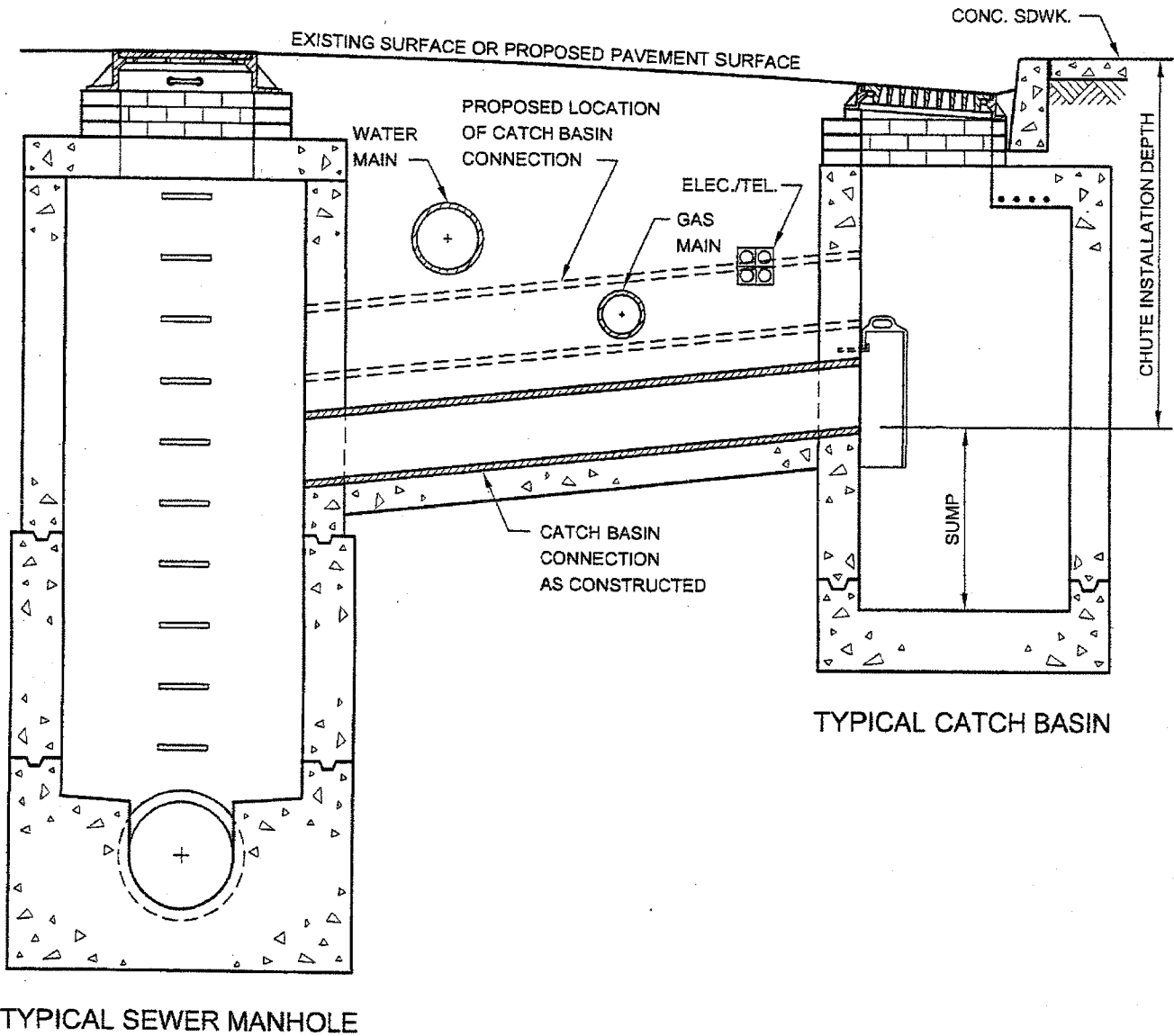


TYPICAL SEWER MANHOLE

TYPICAL CATCH BASIN

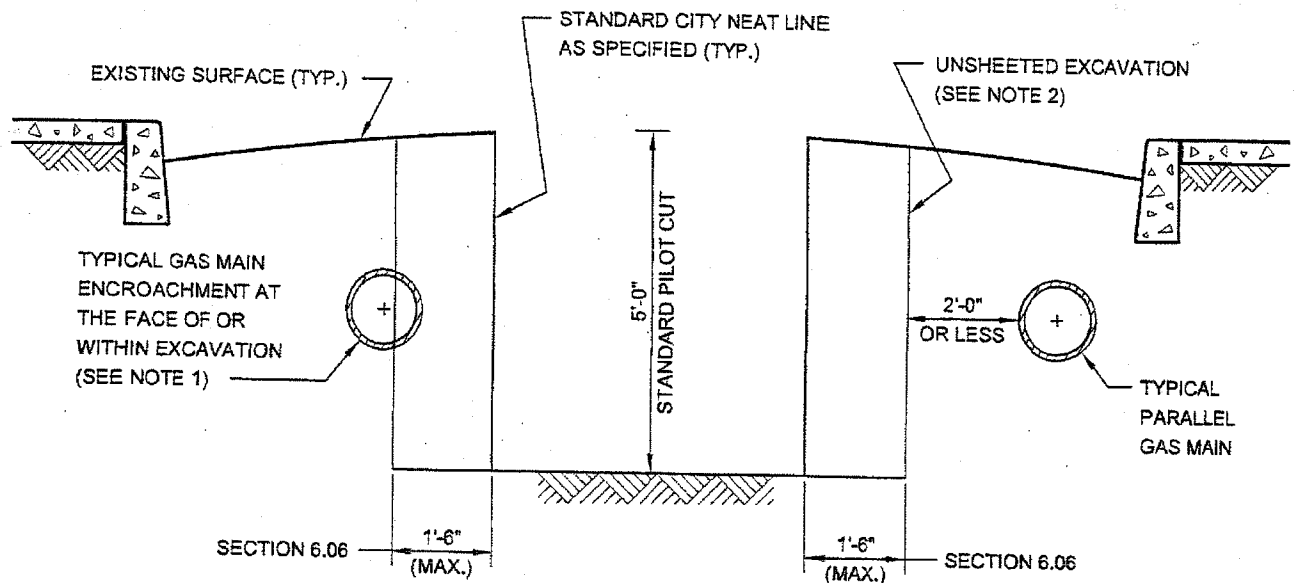
REV. 11/2003 - I. ADRIEN
REV. 01/1998 - J. WONGW. PATALANOP. MOY

GAS COST SHARING WORK (SKETCH NO. 4)
 UTILITY CROSSINGS DURING CATCH BASIN CHUTE
 CONNECTION PIPE INSTALLATION (EXTRA DEPTH)



REVISED OCT. 2004 - J. ADRIEN
 REVISED OCT. 1998 - J. WONG/W. PATALANO/P. MOY

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.

OCT. 2004 - L. ADRIEN
 OCT. 1988 - J. WONGW. PATALANOP. MOY

IV - STANDARD SKETCHES; GAS COST SHARING WORK

(NO TEXT IN THIS AREA, TURN PAGE)

**V - PRELIMINARY GAS WORK TO BE PERFORMED BY
FACILITY OPERATOR**

APPLICABLE TO ALL GAS DRAWINGS:

- ALL RELOCATION WORK SHOWN IN THIS ADDENDUM 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 RELOCATION WORK, THE CONTRACTOR IS ADVISED TO CONTACT THE GAS COMPANY REPRESENTATIVE:

MR. GERARD LUNDQUIST
NATIONAL GRID
287 MASPETH AVENUE
BROOKLYN, NY 11211
TEL.: 718-963-5506

(NO TEXT IN THIS AREA, TURN PAGE)

CONTRACT# HWQ-411B
 ENGINEER: C. Giambrone
 DATE: 5/22/13

ITEM	SHEET	ON STREET	SIZE	PRESSURE	MATERIAL	LENGTH	REIM/NON
1	1	CROSS BAY BLVD	12"	6WC	CI	120'-0"	REIM
2	1,2	LINDEN BLVD	6"	6WC	CI	125'-0"	REIM
3	2	LINDEN BLVD	6"	6WC	ST	100'-0"	REIM
4	2	LINDEN BLVD	6"	6WC	CI	45'-0"	REIM
5	2,11	LINDEN BLVD	8"	6WC	PE	55'-0"	REIM
6	11	LINDEN BLVD	6"	6WC	CI	120'-0"	REIM
7	1	LINDEN BLVD	12"	6WC	ST	220'-0"	REIM
8	2,11	LINDEN BLVD	8"	6WC	PE	320'-0"	REIM
9	2	94 ST	6"	6WC	ST	40'-0"	REIM
10	2	94 ST	6"	6WC	CI	235'-0"	REIM
11	2	94 ST	6"	6WC	ST	20'-0"	REIM
12	2	94 ST	6"	6WC	CI	100'-0"	REIM
13	2,3	94 ST	6"	6WC	ST	35'-0"	REIM
14	3,4	94 ST	6"	6WC	CI	540'-0"	REIM
15	4	94 ST	6"	6WC	ST	175'-0"	REIM
16	4	94 ST	6"	6WC	CI	65'-0"	NON/REIM
17	4	94 ST	12"	6WC	ST	50'-0"	NON/REIM
18	2-4	94 ST	8"	6WC	PE	810'-0"	NON/REIM
19	4	94 ST	8"	6WC	PE	125'-0"	NON/REIM
20	4	ALBERT RD	12"	6WC	ST	30'-0"	REIM
21	4	ALBERT RD	12"	6WC	ST	20'-0"	NON/REIM
22	4	ALBERT RD	12"	6WC	ST	123'-0"	REIM
23	4	ALBERT RD	12"	6WC	CI	70'-0"	REIM
24	4,5	ALBERT RD	12"	6WC	ST	90'-0"	REIM
25	4,5	ALBERT RD	12"	6WC	ST	347'-0"	REIM
26	4	ALBERT RD	3"	6WC	PE	30'-0"	REIM
27	4	ALBERT RD	3"	6WC	PE	20'-0"	REIM
28	3,10	PITKIN AVE	6"	6WC	CI	265'-0"	NON/REIM
29	3,10	PITKIN AVE	8"	6WC	PE	275'-0"	NON/REIM
30	3,6-9	PITKIN AVE	6"	6WC	CI	970'-0"	REIM

A3-22A

CONTRACT# HWQ-411B
 ORACLE# D59476 (R) /D59477 (N/R)
 ENGINEER: C. Giambone
 DATE: November 29, 2010

ITEM	SHEET	ON STREET	SIZE	PRESSURE	MATERIAL	LENGTH	REIM/NON
31	3,6-9	PITKIN AVE	8"	6WC	PE	970'-0"	REIM
32	9	PITKIN AVE	8"	6WC	PE	100'-0"	REIM
33	6,11	95 ST	6"	6WC	CI	745'-0"	REIM
34	6	95 ST	6"	6WC	PE	60'-0"	REIM
35	6,22	95 ST	6"	6WC	CI	275'-0"	REIM
36	22	95 ST	6"	6WC	ST	75'-0"	REIM
37	22	95 ST	6"	6WC	ST	10'-0"	NON/REIM
38	22,23	95 ST	4"	6WC	ST	30'-0"	NON/REIM
39	23	95 ST	4"	6WC	ST	45'-0"	REIM
40	23	95 ST	6"	6WC	ST	35'-0"	REIM
41	22,23	95 ST	8"	6WC	PE	145'-0"	NON/REIM
42	6,11,22	95 ST	8"	6WC	PE	1,165'-0"	REIM
43	11-14	LINDEN BLVD	6"	6WC	CI	720'-0"	NON/REIM
44	14	LINDEN BLVD	6"	6WC	ST	80'-0"	NON/REIM
45	14	LINDEN BLVD	6"	6WC	ST	35'-0"	REIM
46	14	LINDEN BLVD	6"	6WC	CI	345'-0"	NON/REIM
47	11-14	LINDEN BLVD	8"	6WC	PE	920'-0"	REIM
48	14,15	LINDEN BLVD	8"	6WC	PE	425'-0"	REIM
49	15	HAWTREE ST	6"	6WC	ST	65'-0"	REIM
50	15,16	HAWTREE ST	6"	6WC	CI	260'-0"	REIM
51	16,17	HAWTREE ST	6"	6WC	ST	180'-0"	REIM
52	15-17	HAWTREE ST	8"	6WC	PE	490'-0"	REIM
53	17	HAWTREE ST	8"	6WC	CI	120'-0"	REIM
54	17	CENTERVILLE	8"	6WC	PE	15'-0"	REIM
55	17	PITKIN AVE	6"	6WC	ST	15'-0"	REIM
56	17	PITKIN AVE	8"	6WC	PE	30'-0"	REIM
57	17	PITKIN AVE	2"	6WC	ST	20'-0"	REIM
58	17	PITKIN AVE	2"	6WC	PE	60'-0"	REIM
59	17	PITKIN AVE	6"	6WC	CI	240'-0"	REIM
60	17	PITKIN AVE	8"	6WC	PE	240'-0"	REIM

A3-22B

CONTRACT# HWQ-411B

ORACLE# D59476 (R) /D59477 (N/R)
 ENGINEER: C. Giambrone
 DATE: November 29, 2010

ITEM	SHEET	ON STREET	SIZE	PRESSURE	MATERIAL	LENGTH	REIM/NON
61	17,18	CENTERVILLE	8"	6WC	CI	475'-0"	REIM
62	18	CENTERVILLE	8"	6WC	PE	55'-0"	REIM
63	18,19	CENTERVILLE	8"	6WC	CI	395'-0"	REIM
64	19	CENTERVILLE	8"	6WC	ST	40'-0"	REIM
65	19	CENTERVILLE	8"	6WC	CI	165'-0"	REIM
66	19	CENTERVILLE	8"	6WC	ST	30'-0"	REIM
67	20	CENTERVILLE	8"	6WC	CI	135'-0"	REIM
68	20	CENTERVILLE	8"	6WC	ST	50'-0"	REIM
69	20	CENTERVILLE	6"	6WC	ST	80'-0"	REIM
70	20,21	CENTERVILLE	6"	6WC	CI	315'-0"	REIM
71	21	CENTERVILLE	6"	6WC	ST	125'-0"	REIM
72	17-20	CENTERVILLE	8"	6WC	PE	1,450'-0"	REIM
73	20	CENTERVILLE	12"	6WC	ST	45'-0"	REIM
74	20,21	CENTERVILLE	8"	6WC	PE	435'-0"	REIM
75	21	SO. CONDUIT	4"	6WC	ST	60'-0"	REIM
76	21	SO. CONDUIT	6"	6WC	ST	10'-0"	REIM
77	21	SO. CONDUIT	8"	6WC	PE	130'-0"	REIM
78	21,30	TAHOE ST	6"	6WC	CI	425'-0"	REIM
79	21,30	TAHOE ST	8"	6WC	PE	415'-0"	REIM
80	14	97 ST	6"	6WC	ST	60'-0"	REIM
81	9,14	97 ST	8"	6WC	PE	480'-0"	REIM
82	14	97 ST	6"	6WC	CI	170'-0"	REIM
83	14	97 ST	6"	6WC	ST	70'-0"	REIM
84	14	97 ST	8"	6WC	PE	15'-0"	REIM
85	9,14	97 ST	6"	6WC	ST	130'-0"	REIM
86	14	97 ST	6"	6WC	CI	20'-0"	REIM
87	9	97 ST	6"	6WC	PE	100'-0"	REIM
88	9	97 ST	6"	6WC	ST	50'-0"	REIM
89	9,18	97 ST	6"	6WC	CI	405'-0"	REIM
90	18	CENTERVILLE	6"	6WC	ST	20'-0"	REIM

AS-22C

CONTRACT# HWQ-411B

ORACLE# D59476 (R) /D59477 (N/R)
 ENGINEER: C. Giambrore
 DATE: November 29, 2010

ITEM	SHEET	ON STREET	SIZE	PRESSURE	MATERIAL	LENGTH	REIM/NON
91	9	97 ST	8"	6WC	CI	185'-0"	NON/REIM
92	9,18	97 ST	8"	6WC	PE	425'-0"	REIM
93	14	135 RD	6"	6WC	ST	30'-0"	REIM
94	14,16	135 RD	6"	6WC	CI	300'-0"	REIM
95	16	135 RD	6"	6WC	ST	55'-0"	REIM
96	14,16	135 RD	8"	6WC	PE	420'-0"	REIM
97	20	ALBERT RD	12"	6WC	ST	85'-0"	REIM
98	20	ALBERT RD	12"	6WC	ST	40'-0"	REIM
99	20,24	ALBERT RD	12"	6WC	CI	440'-0"	REIM
100	24	96 ST	4"	6WC	PE	15'-0"	REIM
101	20,23,24	ALBERT RD	12"	6WC	ST	480'-0"	REIM
102	23	ALBERT RD	12"	6WC	ST	155'-0"	REIM
103	23	95 ST	6"	6WC	PE	45'-0"	REIM
104	23	ALBERT RD	12"	6WC	ST	345'-0"	REIM
105	4	149 AVE	6"	6WC	ST	20'-0"	REIM
106	4	149 AVE	6"	6WC	ST	305'-0"	NON/REIM
107	4,22	149 AVE	8"	6WC	PE	315'-0"	NON/REIM
108	12	96 ST	6"	6WC	CI	55'-0"	NON/REIM
109	12	96 ST	6"	6WC	CI	200'-0"	REIM
110	12	96 ST	6"	6WC	ST	35'-0"	REIM
111	7,12	96 ST	6"	6WC	CI	190'-0"	REIM
112	7	96 ST	6"	6WC	ST	35'-0"	REIM
113	7	96 ST	6"	6WC	CI	35'-0"	REIM
114	7	96 ST	6"	6WC	CI	55'-0"	REIM
115	7,25	96 ST	6"	6WC	PE	100'-0"	REIM
116	7,12,25	96 ST	6"	6WC	CI	285'-0"	REIM
117	25	96 ST	8"	6WC	PE	935'-0"	REIM
118	25	149 AVE	8"	6WC	PE	210'-0"	NON/REIM
119	18,26	149 AVE	6"	6WC	ST	160'-0"	REIM
120	18	149 AVE	6"	6WC	CI	355'-0"	REIM
			6"	6WC	ST	10'-0"	REIM

A3-22D

CONTRACT# HWQ-411B

ORACLE#
ENGINEER:
DATE:

D59476 (R) /D59477 (N/R)
C. Giambone
November 29, 2010

ITEM	SHEET	ON STREET	SIZE	PRESSURE	MATERIAL	LENGTH	REIM/NON
121	18,25,26	149 AVE.	8"	6WC	PE	685'-0"	REIM
122	18,27	BRISTOL AVE	6"	6WC	CI	495'-0"	REIM
123	18,27	BRISTOL AVE	8"	6WC	PE	485'-0"	REIM
124	8	96 PL	6"	6WC	CI	110'-0"	REIM
125	8	96 PL	6"	6WC	PE	52'-0"	REIM
126	8,26	96 PL	6"	6WC	CI	225'-0"	REIM
127	8,26	96 PL	8"	6WC	PE	595'-0"	REIM
128	13	96 PL	6"	6WC	CI	40'-0"	NON/REIM
129	13	96 PL	6"	6WC	CI	275'-0"	REIM
130	13	96 PL	8"	6WC	PE	290'-0"	REIM
131	8	96 PL	8"	6WC	PE	195'-0"	NON/REIM
132	19,28	ECKFORD ST	6"	6WC	CI	157'-0"	REIM
133	28	ECKFORD ST	6"	6WC	PE	135'-0"	REIM
134	28,29	ECKFORD ST	6"	6WC	CI	135'-0"	REIM
135	29	ECKFORD ST	6"	6WC	ST	30'-0"	REIM
136	29	ECKFORD ST	6"	6WC	CI	27'-0"	REIM
137	29	ECKFORD ST	6"	6WC	ST	78'-0"	REIM
138	19,28,29	ECKFORD ST	8"	6WC	PE	565'-0"	REIM
139	28	TAHOE ST	6"	6WC	PE	65'-0"	REIM
140	28	TAHOE ST	8"	6WC	PE	60'-0"	REIM
141	28	TAHOE ST	6"	6WC	ST	50'-0"	REIM
142	28	TAHOE ST	6"	6WC	CI	25'-0"	REIM
143	28	TAHOE ST	8"	6WC	PE	145'-0"	REIM
144	28	ALBERT RD	12"	6WC	ST	30'-0"	REIM
145	28,30,31	ALBERT RD	12"	6WC	CI	450'-0"	REIM
146	28,30,31	ALBERT RD	12"	6WC	ST	495'-0"	REIM
147	29,30	RALEIGH ST	6"	6WC	CI	250'-0"	REIM
148	30	RALEIGH ST	6"	6WC	ST	60'-0"	REIM
149	30	RALEIGH ST	6"	6WC	CI	105'-0"	REIM
150	30	RALEIGH ST	6"	6WC	ST	90'-0"	REIM

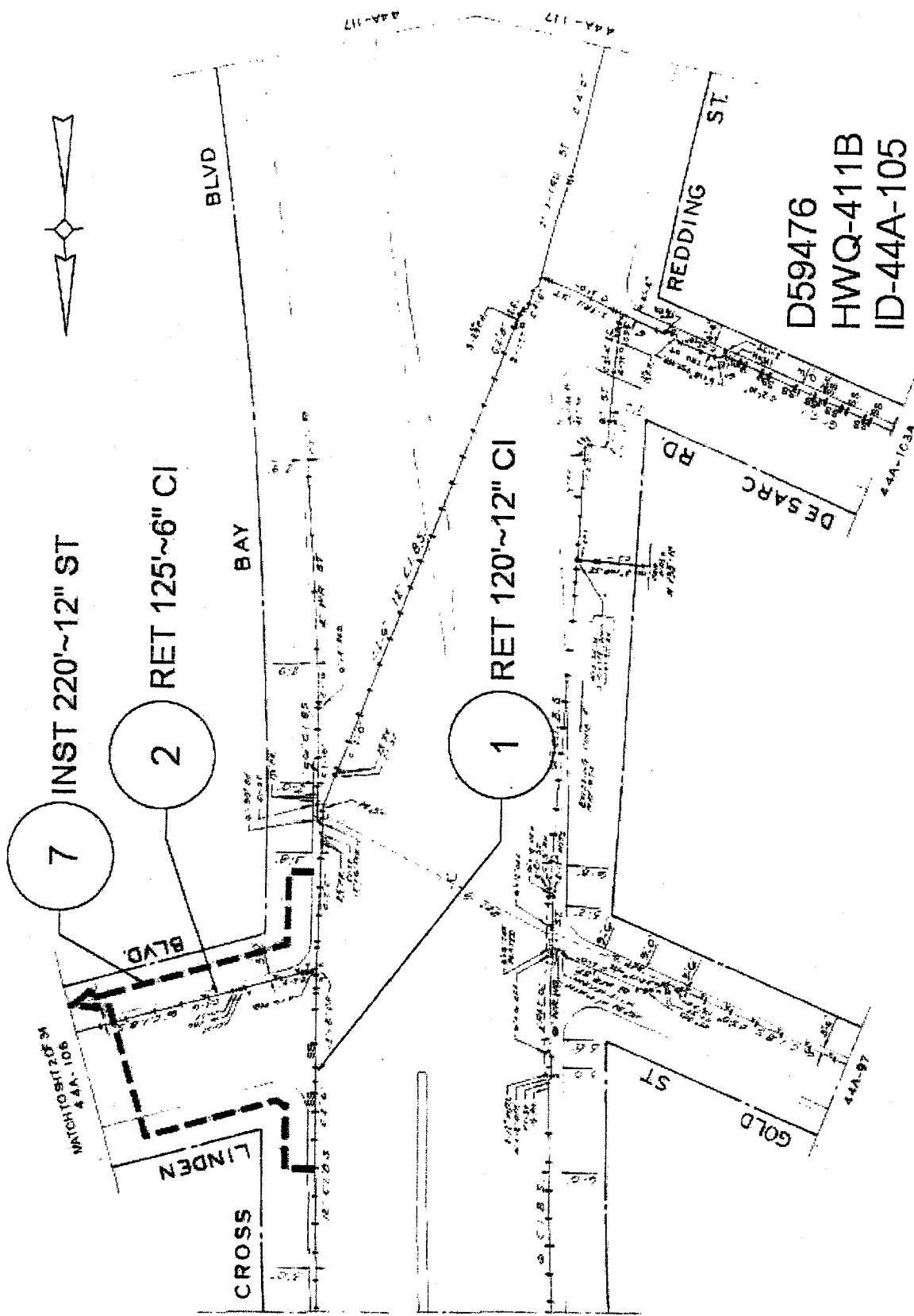
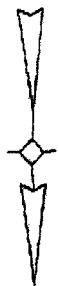
A3-227

CONTRACT# HWQ-411B

ORACLE# D59476 (R) /D59477 (N/R)
 ENGINEER: C. Giambone
 DATE: November 29, 2010

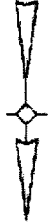
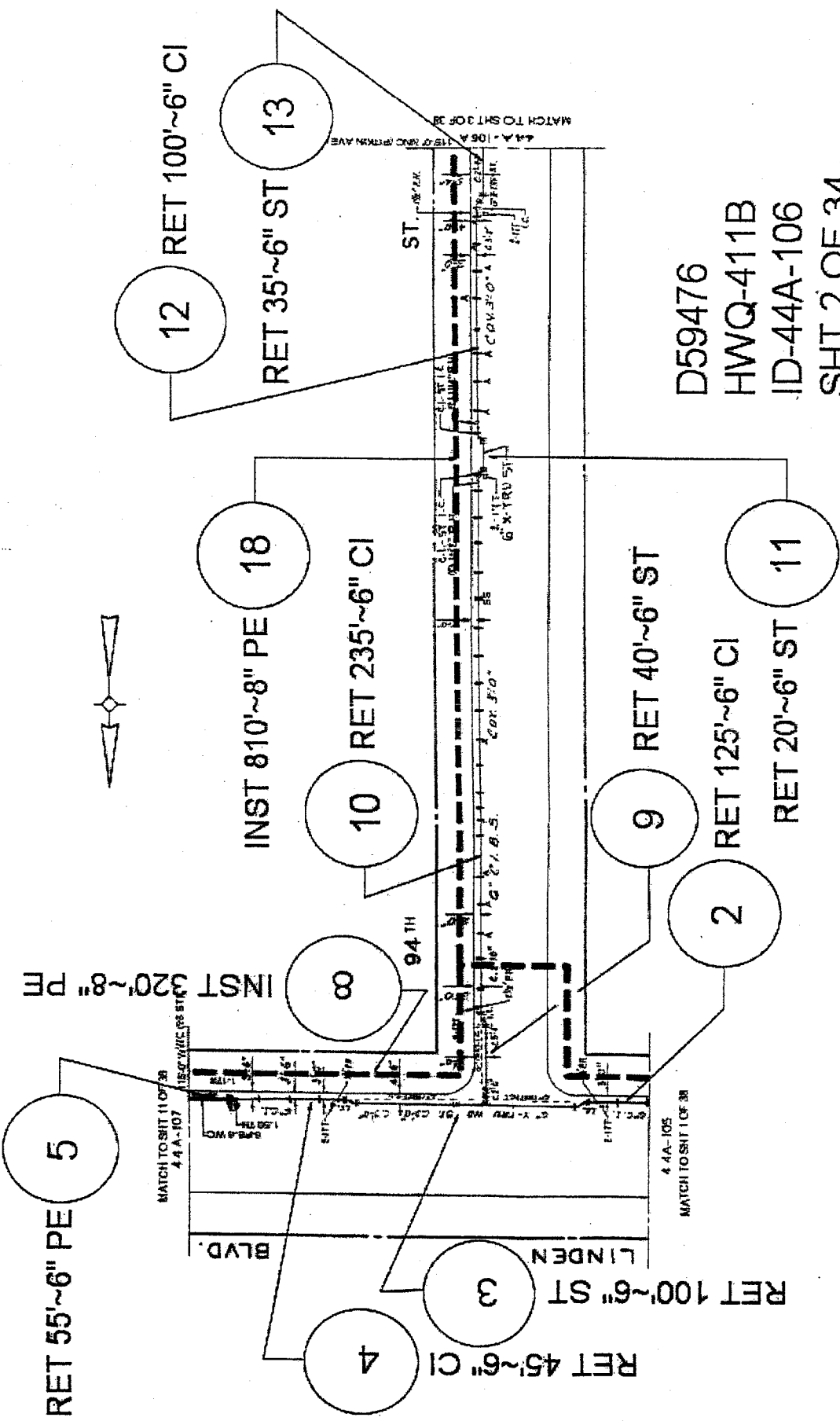
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151	29,30	RALEIGH ST	8"	6WC	PE	510'-0"	REIM
152	31-33	ALBERT RD	12"	6WC	CI	670'-0"	NON/REIM
153	33	ALBERT RD	12"	6WC	ST	50'-0"	NON/REIM
154	31-34	ALBERT RD	12"	6WC	ST	825'-0"	NON/REIM
155	31	HURON AVE	6"	6WC	CI	30'-0"	NON/REIM
156	31	HURON AVE	6"	6WC	ST	65'-0"	NON/REIM
157	31	HURON AVE	6"	6WC	CI	395'-0"	NON/REIM
158	31	HURON AVE	8"	6WC	PE	520'-0"	NON/REIM
159	32	BRIDGETON	6"	6WC	PE	95'-0"	NON/REIM
160	32	BRIDGETON	8"	6WC	PE	65'-0"	REIM
161	32,34	BRIDGETON	6"	6WC	CI	400'-0"	REIM
162	32,34	BRIDGETON	8"	6WC	PE	505'-0"	REIM

A3-22F



D59476
 HWQ-411B
 ID-44A-105
 SHT 1 OF 34

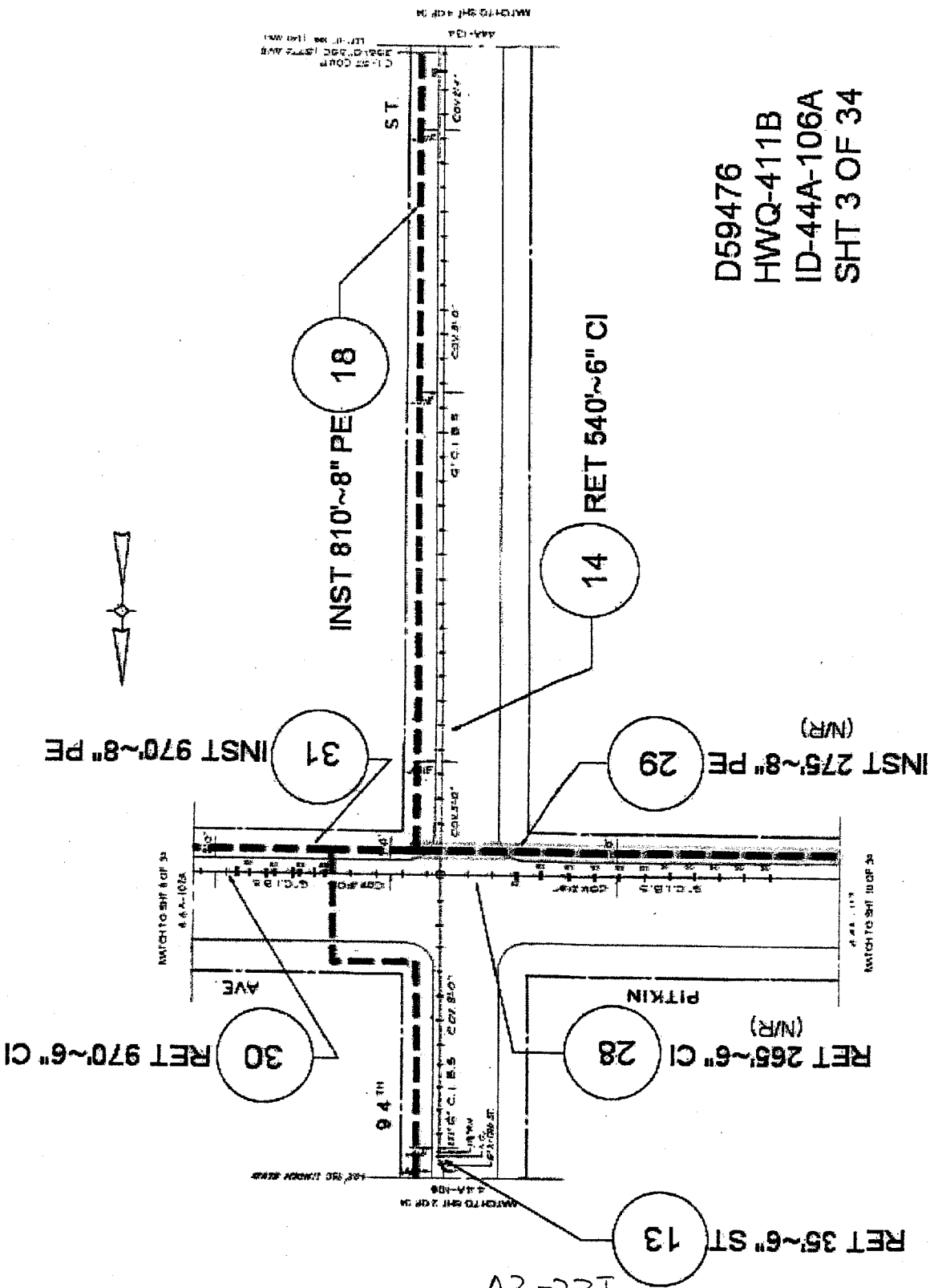
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D59476
 HWQ-411B
 ID-44A-106
 SHT 2 OF 34

H-22-34

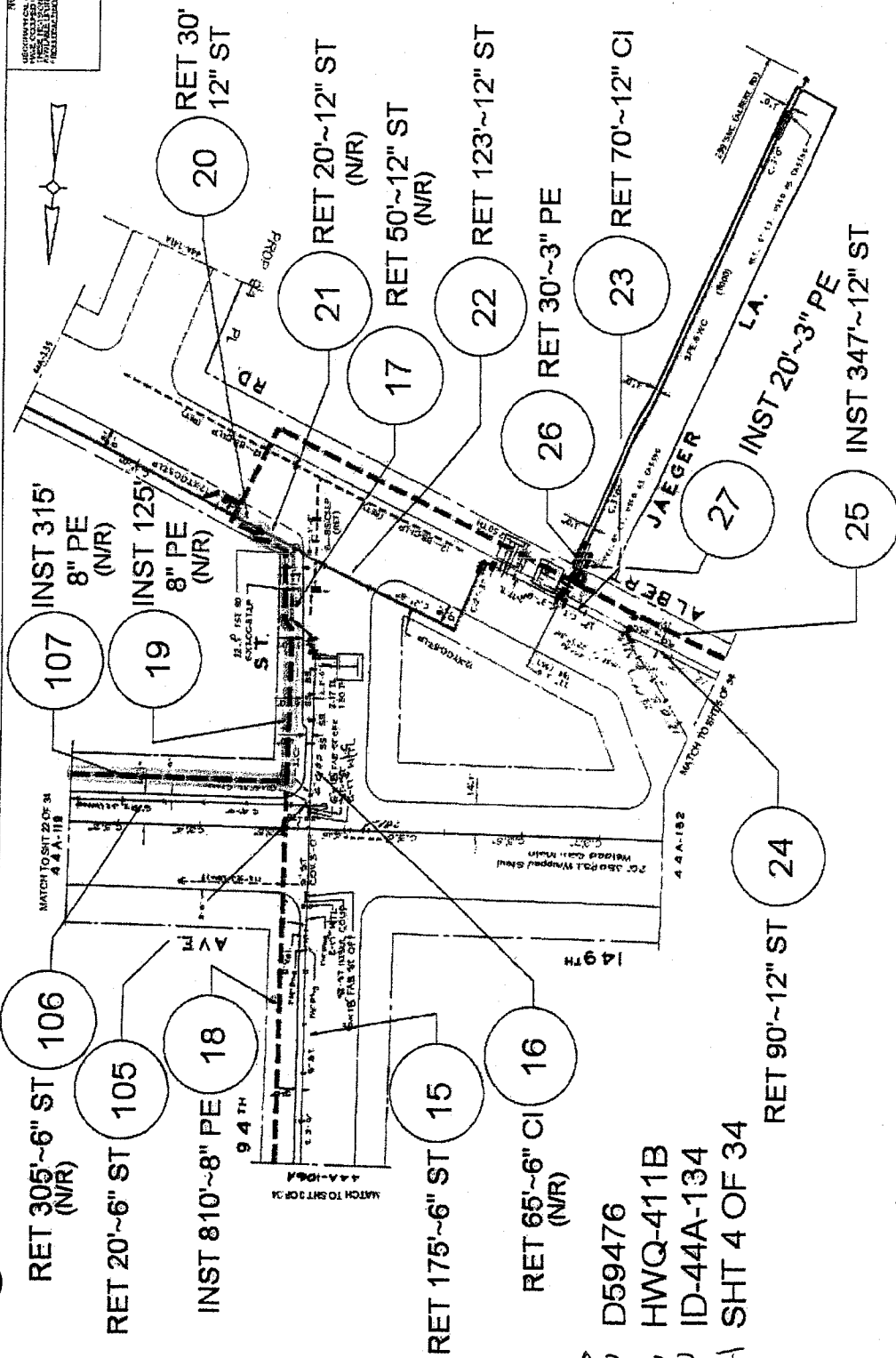
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D59476
 HWQ-411B
 ID-44A-106A
 SHT 3 OF 34

RECEIVED

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THIS DRAWING
ARE TO BE
MADE ONLY BY
THE ORIGINAL
DESIGNER



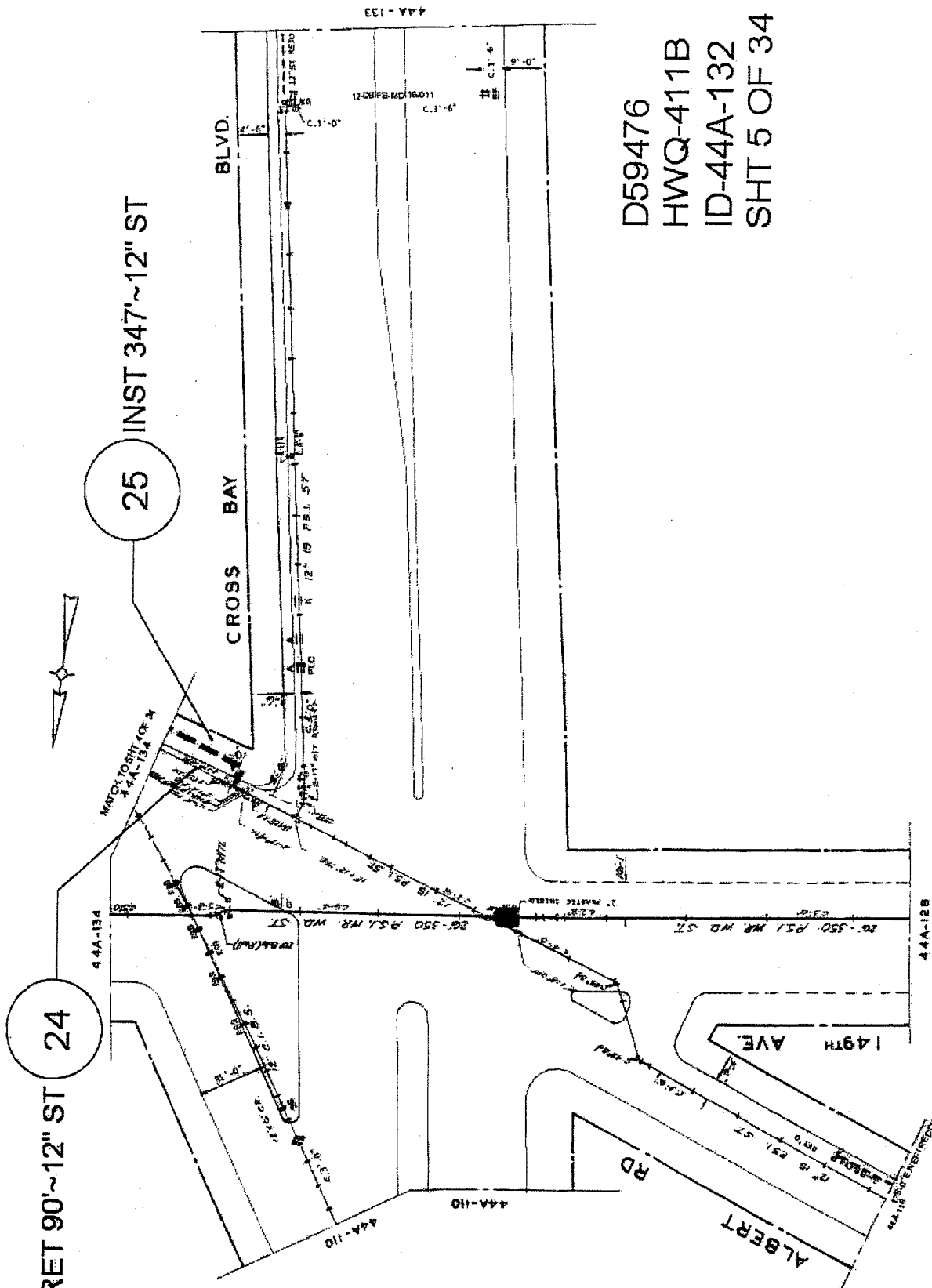
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D59476
HWQ-411B
ID-44A-134
SHT 4 OF 34

JAN 17-20 1989 REV. 4.008 & 4.009 5' x 11' DRAWING 9 (1/4)

RET 90'~12" ST

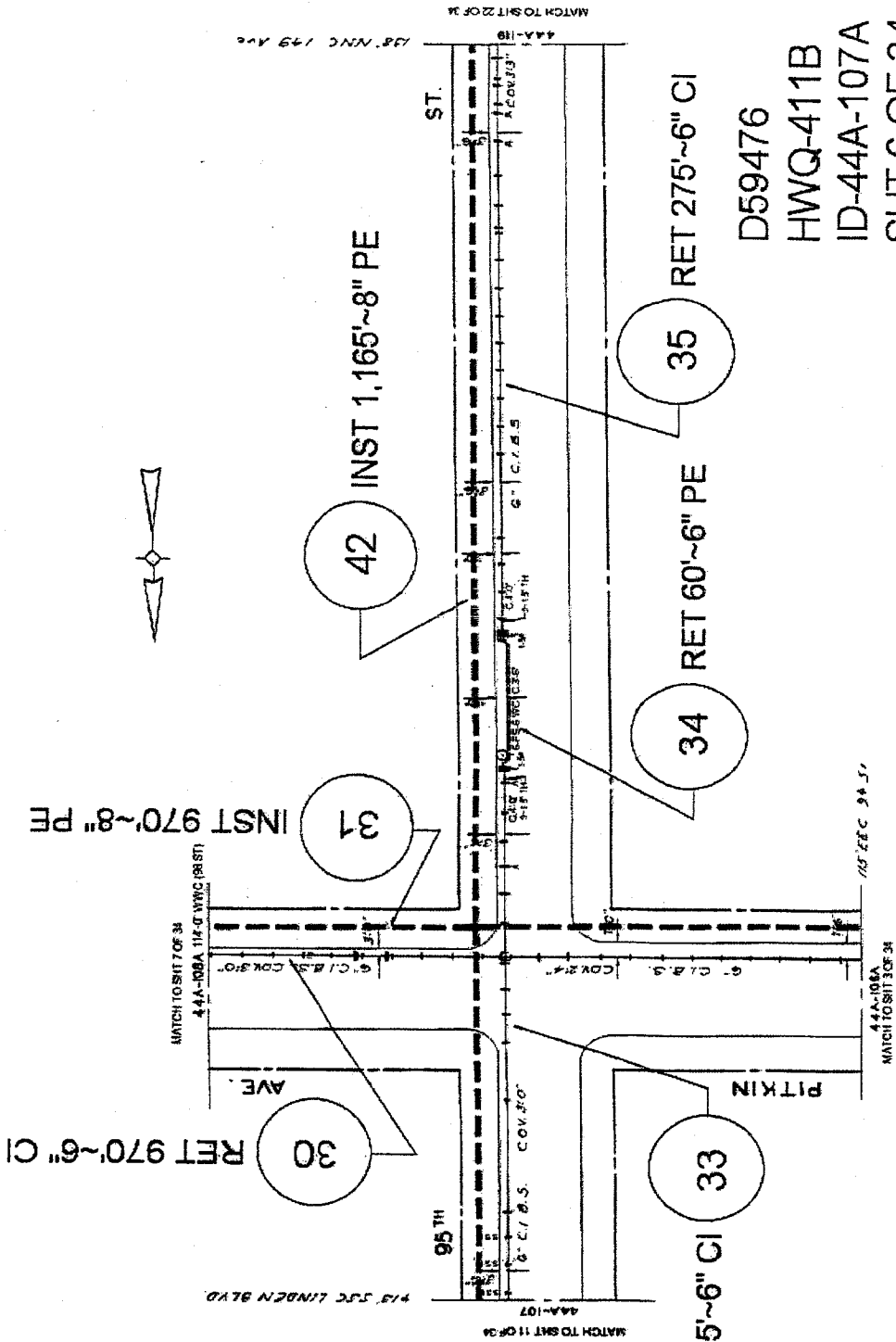
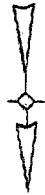
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25 INST 347'~12" ST



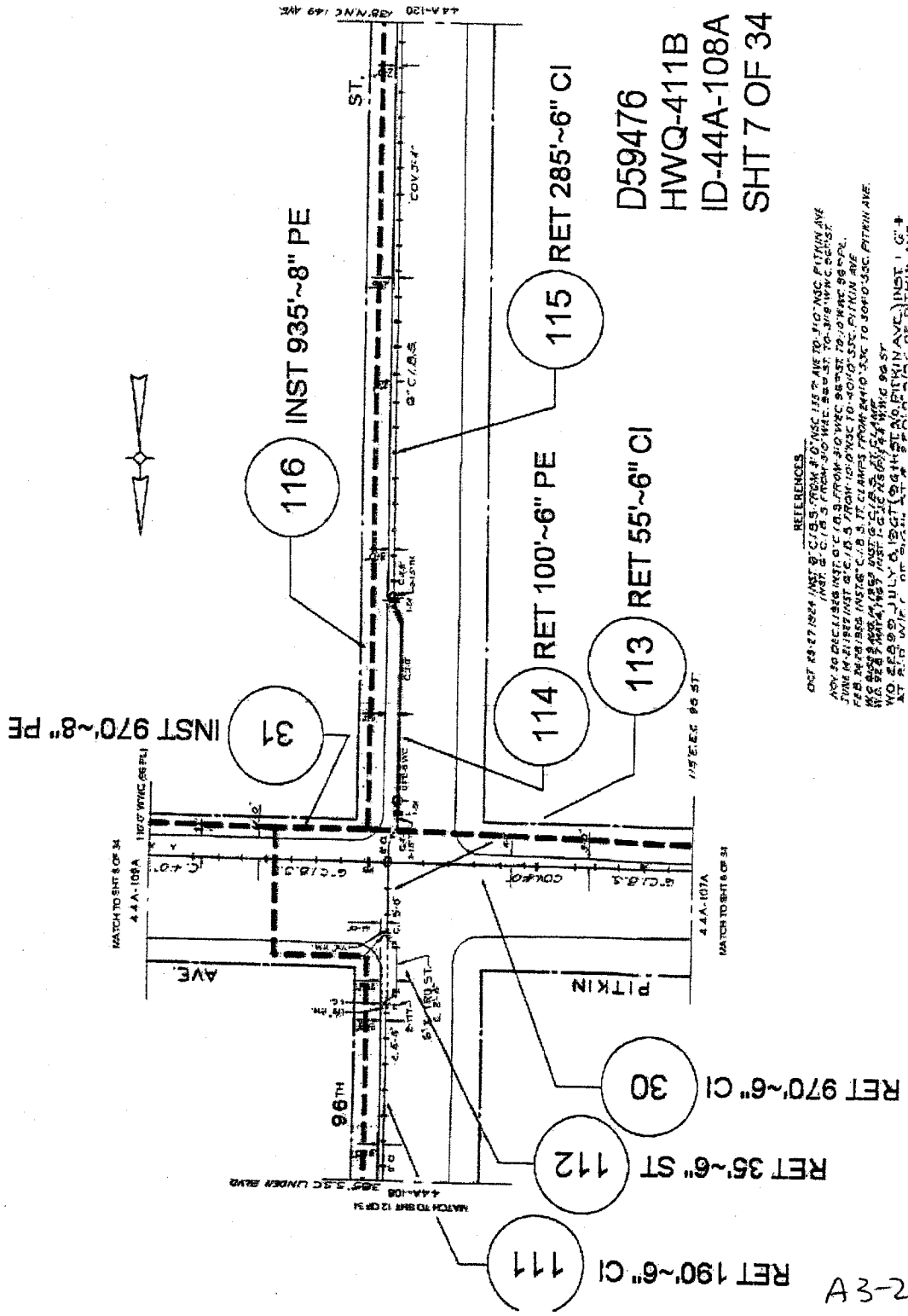
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HWQ-411B
ID-44A-132
SHT 5 OF 34

A3-22K



A3-22L

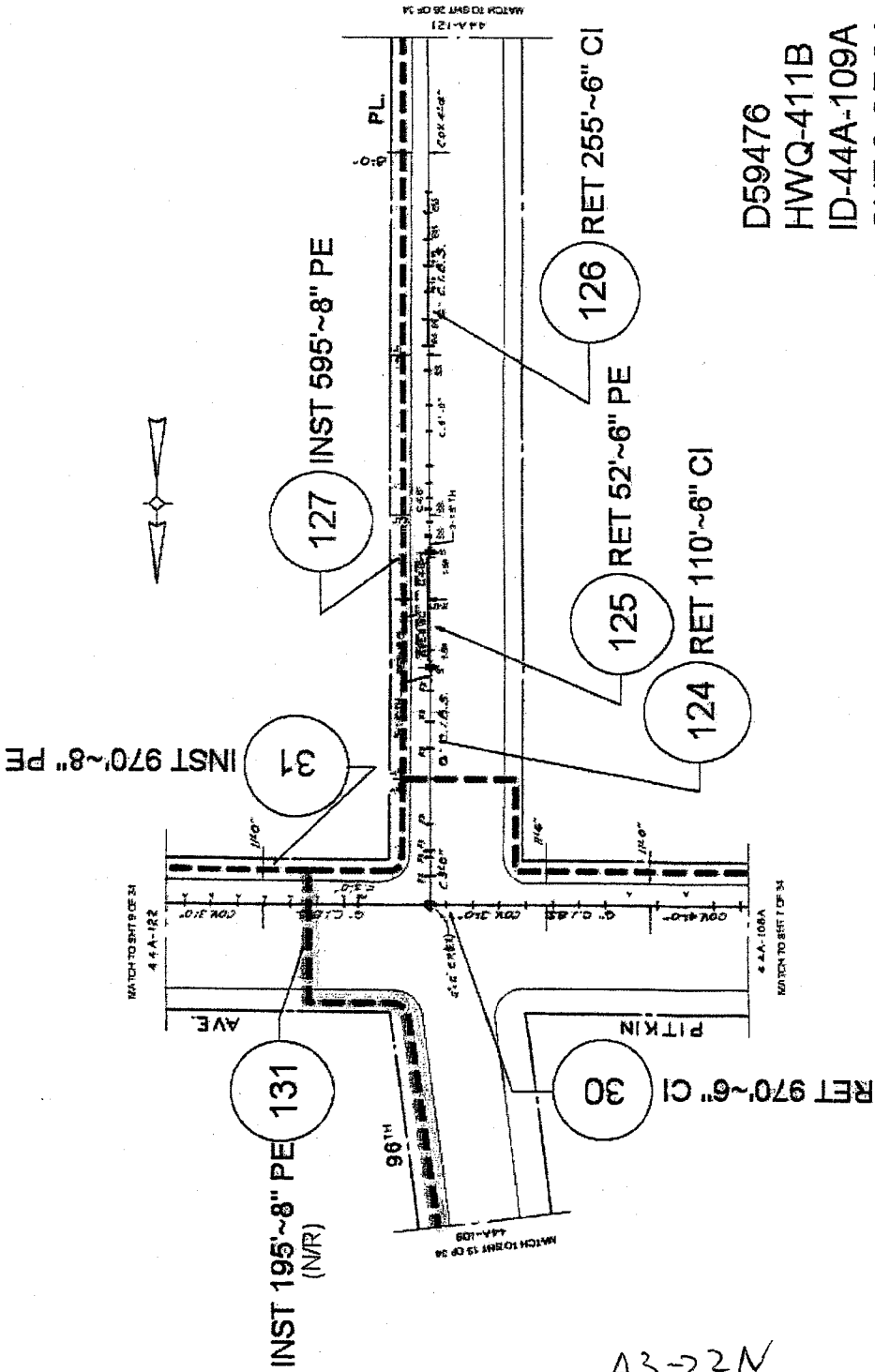
RET 745'-6" CI 33
 RET 60'-6" PE 34
 RET 275'-6" CI 35
 INST 970'-8" PE 31
 INST 1,165'-8" PE 42
 D59476
 HWQ-411B
 ID-44A-107A
 SHT 6 OF 34



D59476
 HWQ-411B
 ID-44A-108A
 SHT 7 OF 34

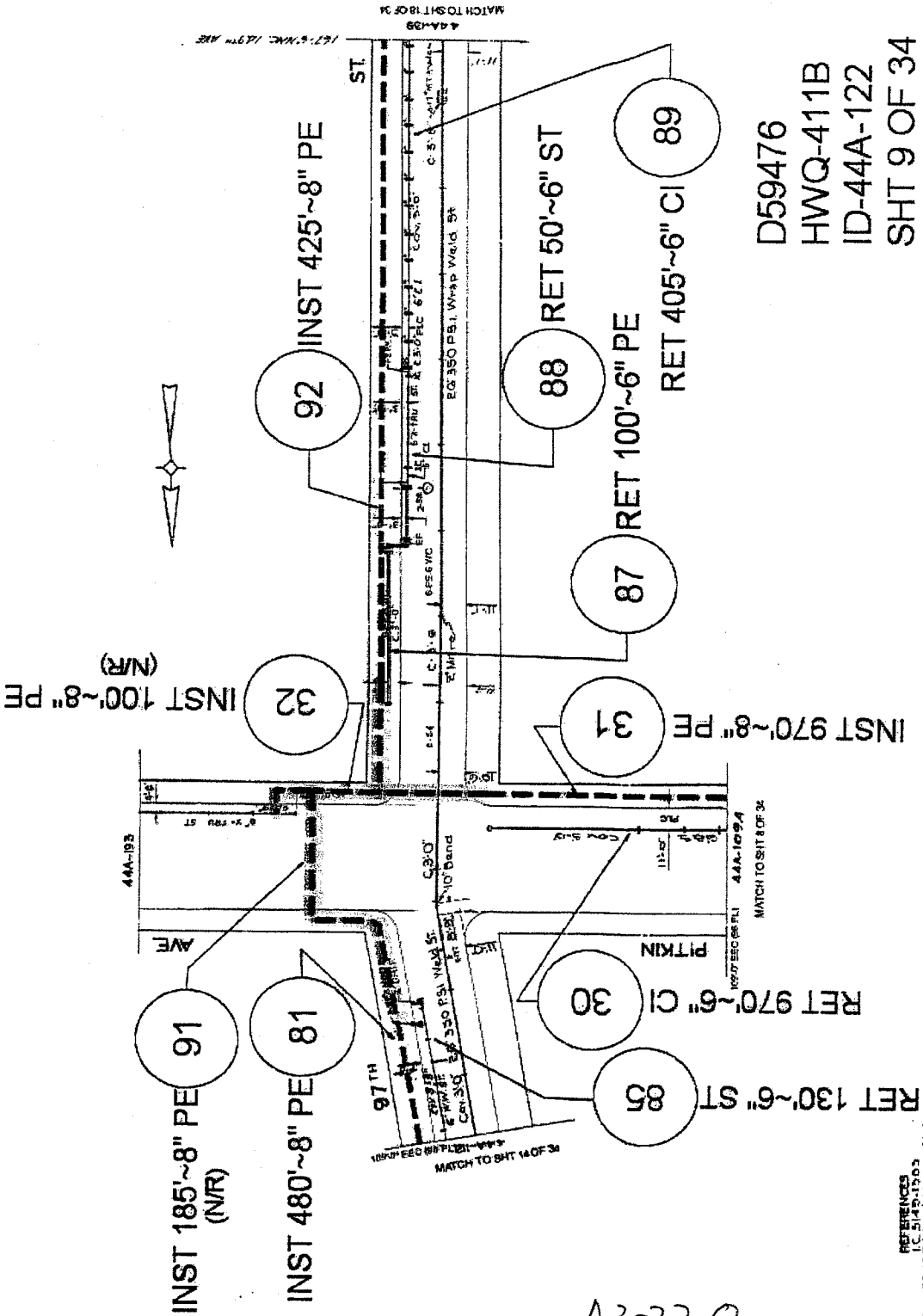
REFERENCES
 OCT 29 1982 INST 9' C.I.B. FROM 3' D.W.C. 115' TO 110' W.C. PITKIN AVE
 NOV 30 1982 INST 9' C.I.B. FROM 3' W.C. 115' TO 318' W.C. 96 ST
 JUN 18 1983 INST 9' C.I.B. FROM 3' W.C. 96 ST TO 318' W.C. 96 ST
 FEB 14 1983 INST 9' C.I.B. FROM 3' W.C. 96 ST TO 318' W.C. 96 ST
 MAR 22 1983 INST 9' C.I.B. FROM 3' W.C. 96 ST TO 318' W.C. 96 ST
 MAY 22 1983 INST 9' C.I.B. FROM 3' W.C. 96 ST TO 318' W.C. 96 ST
 JULY 6 1983 INST 9' C.I.B. FROM 3' W.C. 96 ST TO 318' W.C. 96 ST
 AUG 13 1983 INST 9' C.I.B. FROM 3' W.C. 96 ST TO 318' W.C. 96 ST

A3-22A



D59476
 HWQ-411B
 ID-44A-109A
 SHT 8 OF 34

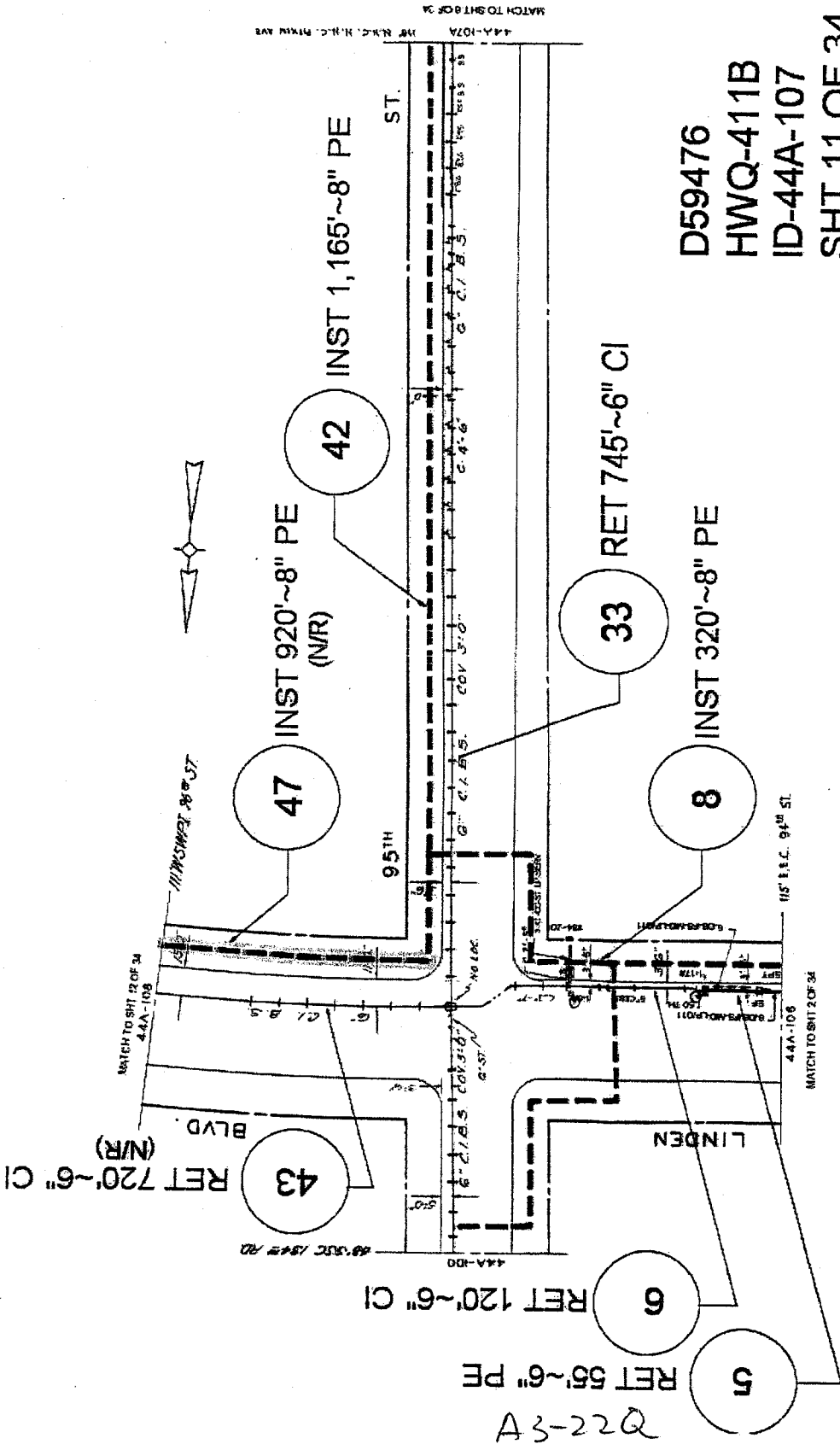
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D59476
 HWQ-411B
 ID-44A-122
 SHT 9 OF 34

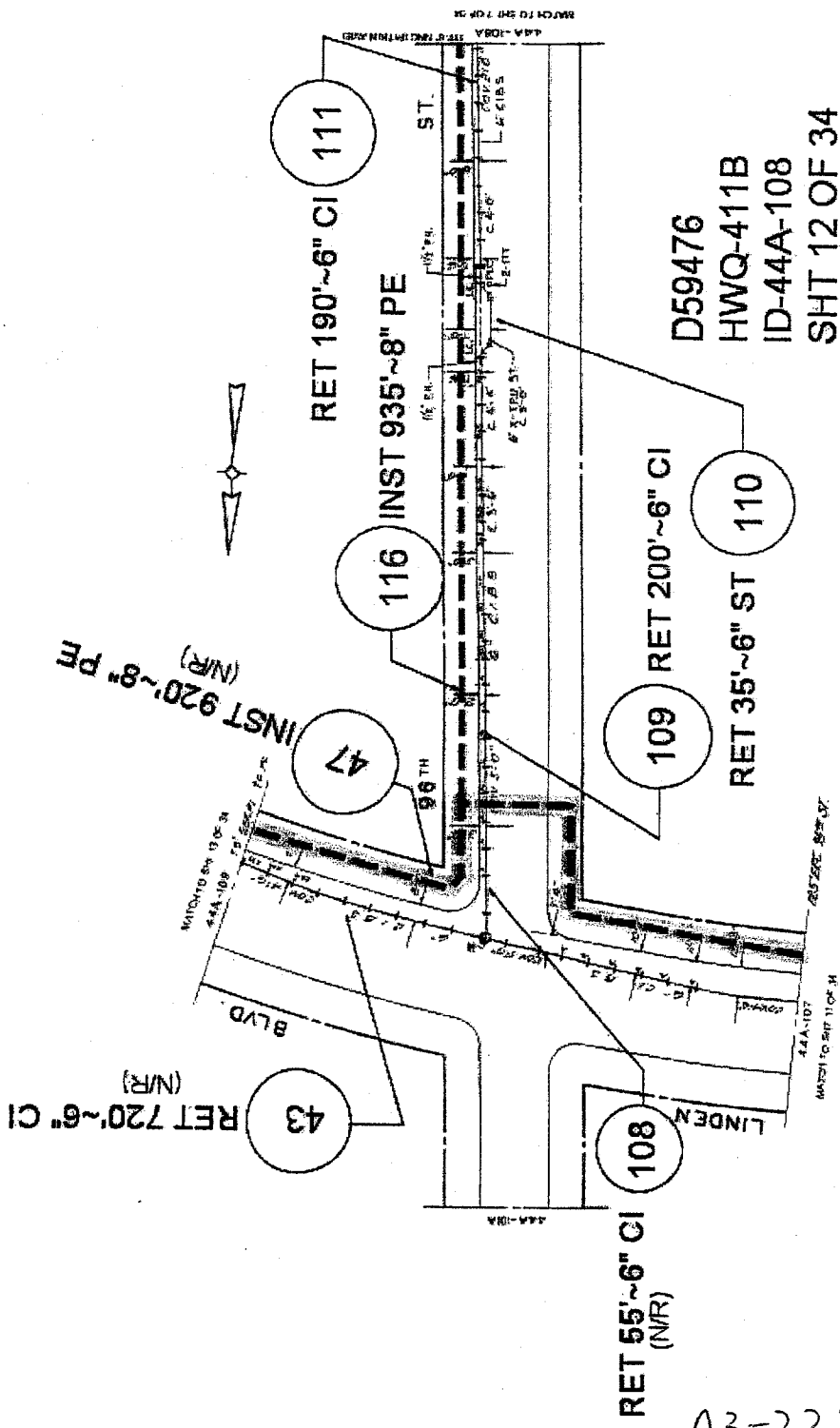
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A3-220



D59476
 HWQ-411B
 ID-44A-107
 SHT 11 OF 34

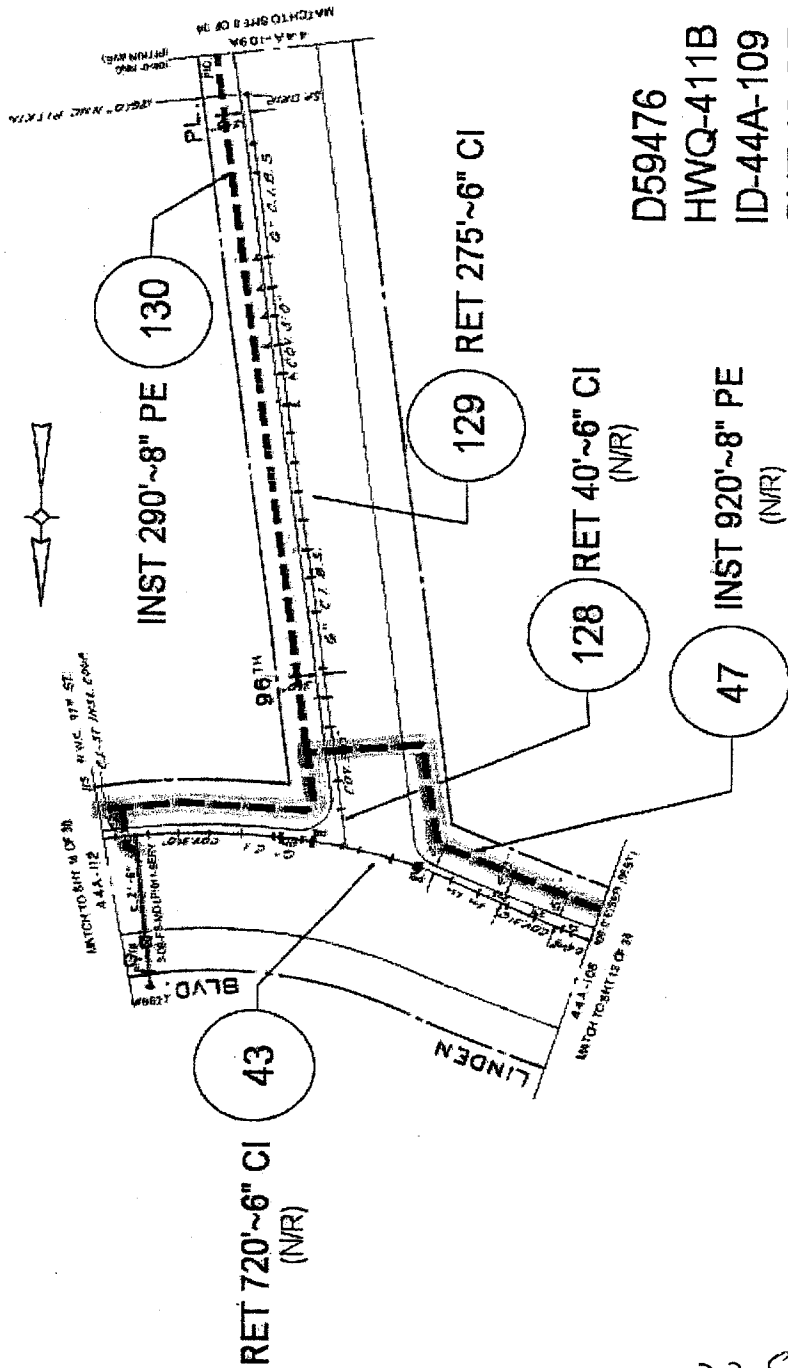
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D59476
 HWQ-411B
 ID-44A-108
 SHT 12 OF 34

RET 55'-6" CI
 (N/R)

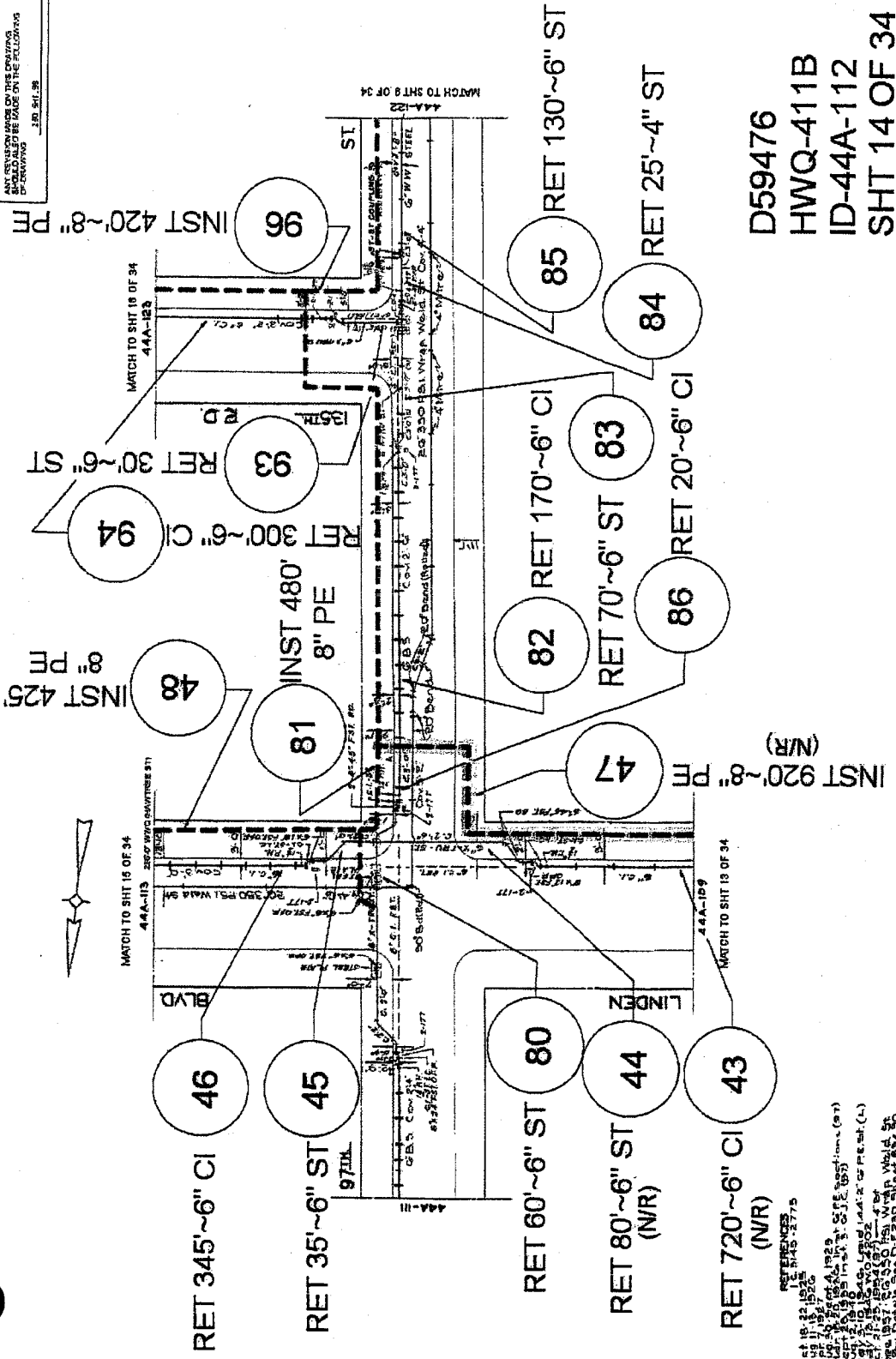
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D59476
 HWQ-411B
 ID-44A-109
 SHT 13 OF 34

A3-22S

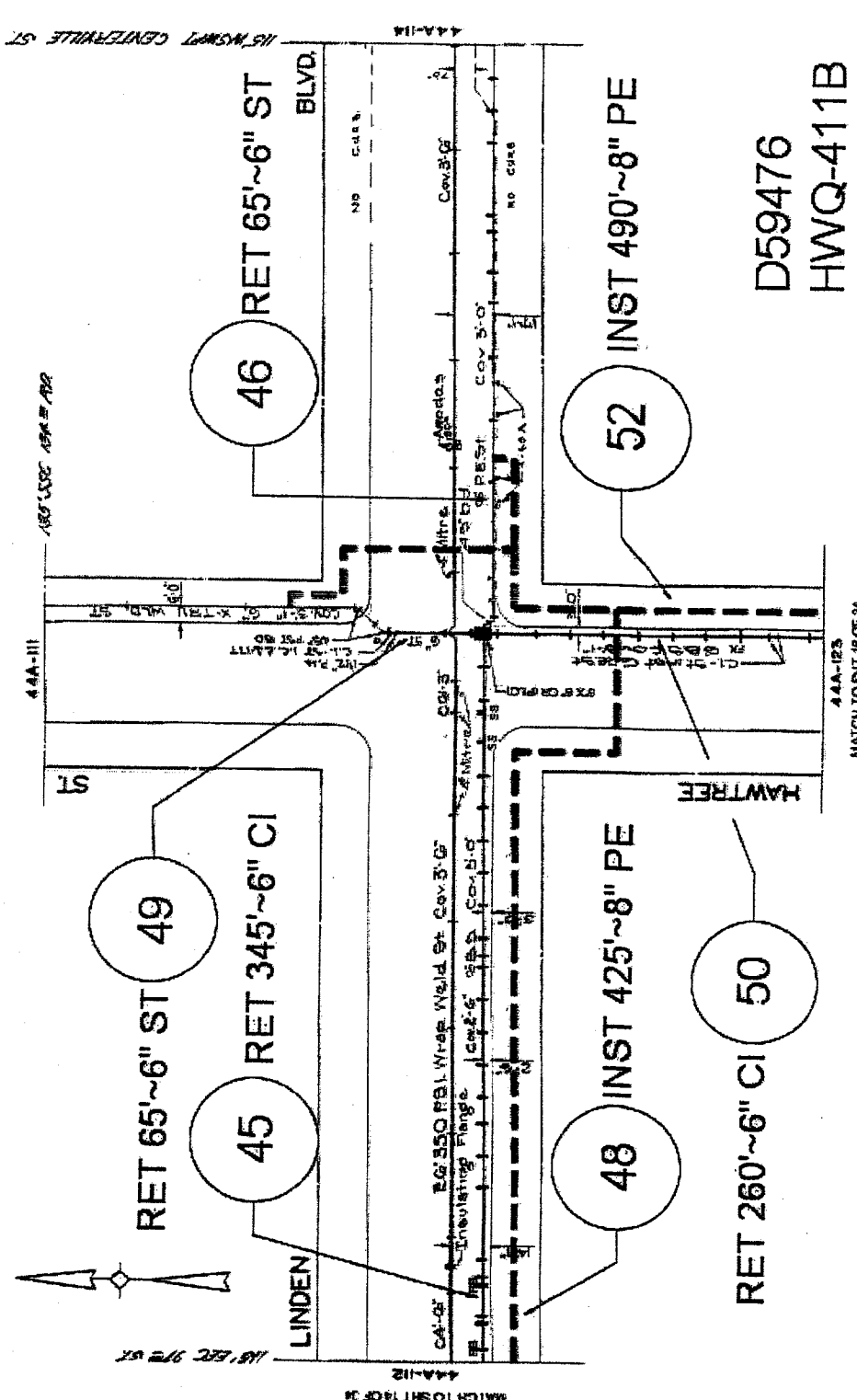
ALL DIMENSIONS ARE IN FEET AND INCHES
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D59476
 HWQ-411B
 ID-44A-112
 SHT 14 OF 34

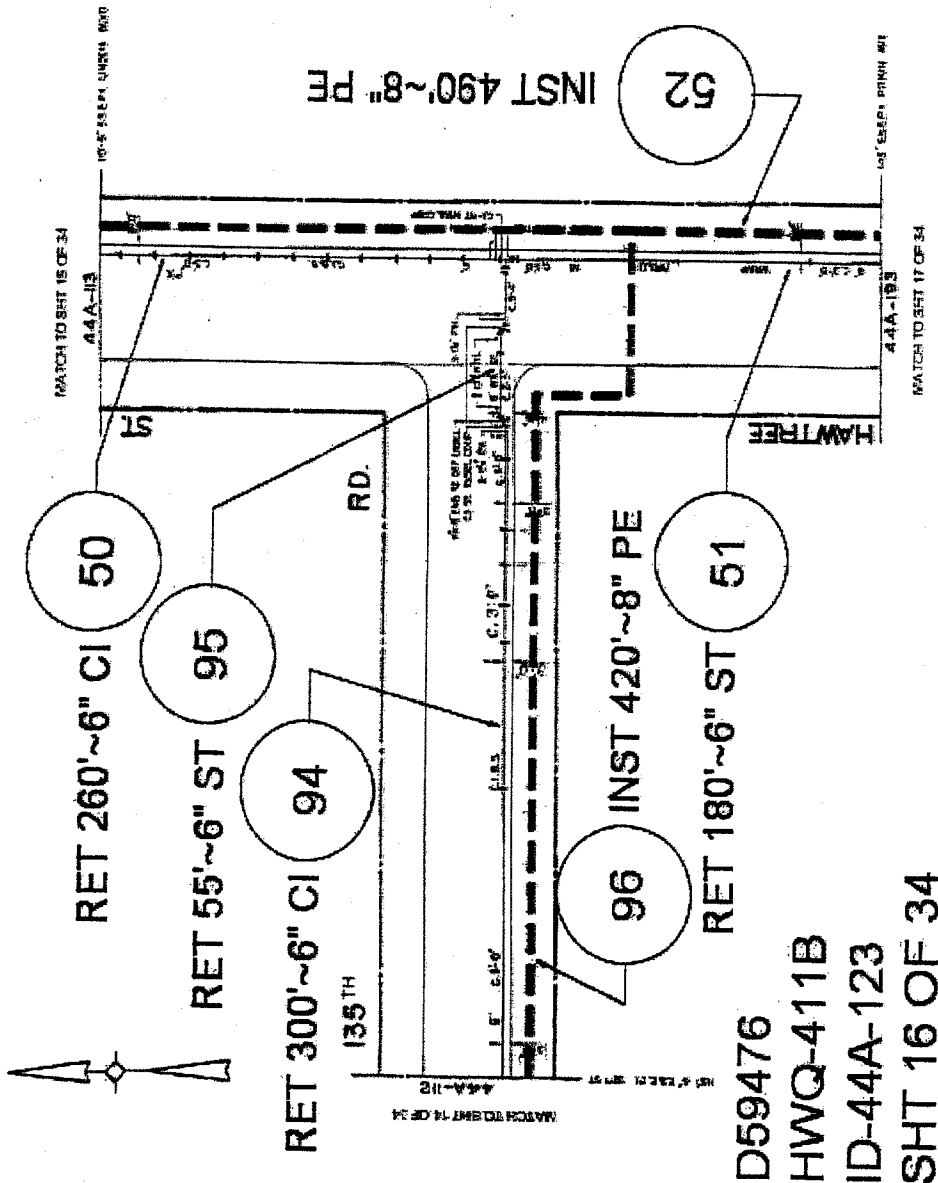
A3-22T

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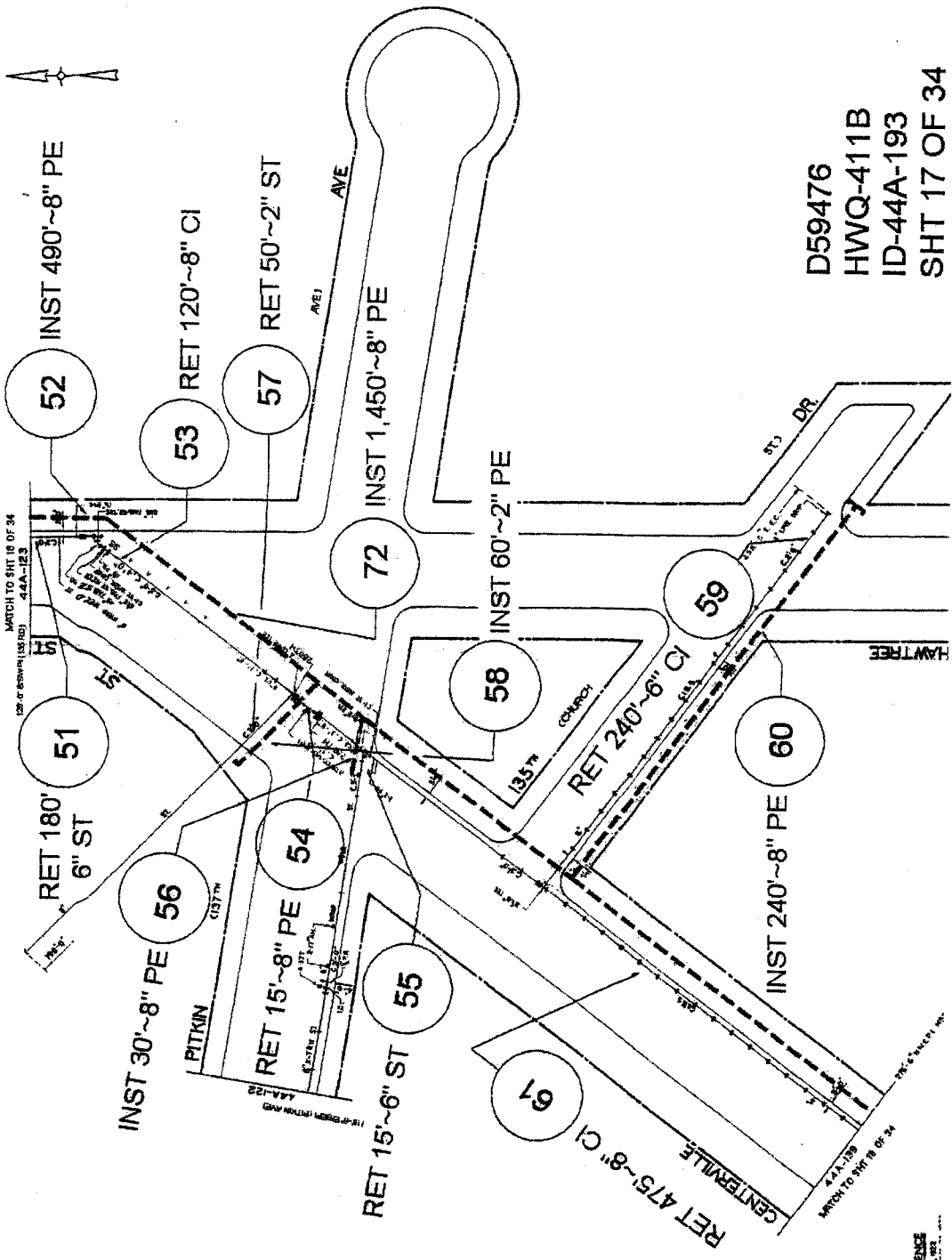
D59476
 HWQ-411B
 ID-44A-113
 SHT 15 OF 34

A3-224



A3-22V

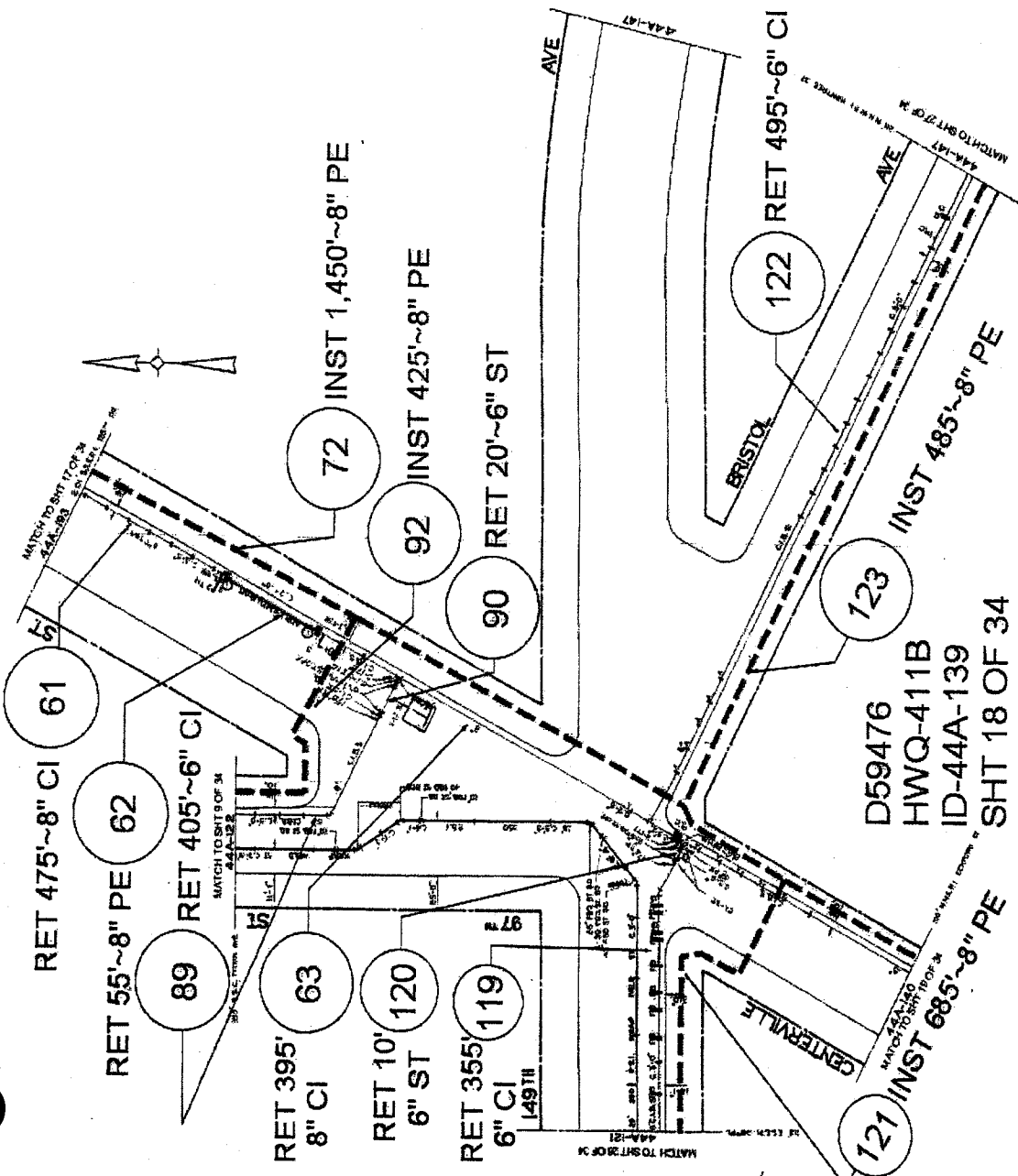
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 ID-44A-123
 SHT 16 OF 34



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ID-44A-193
SHT 17 OF 34

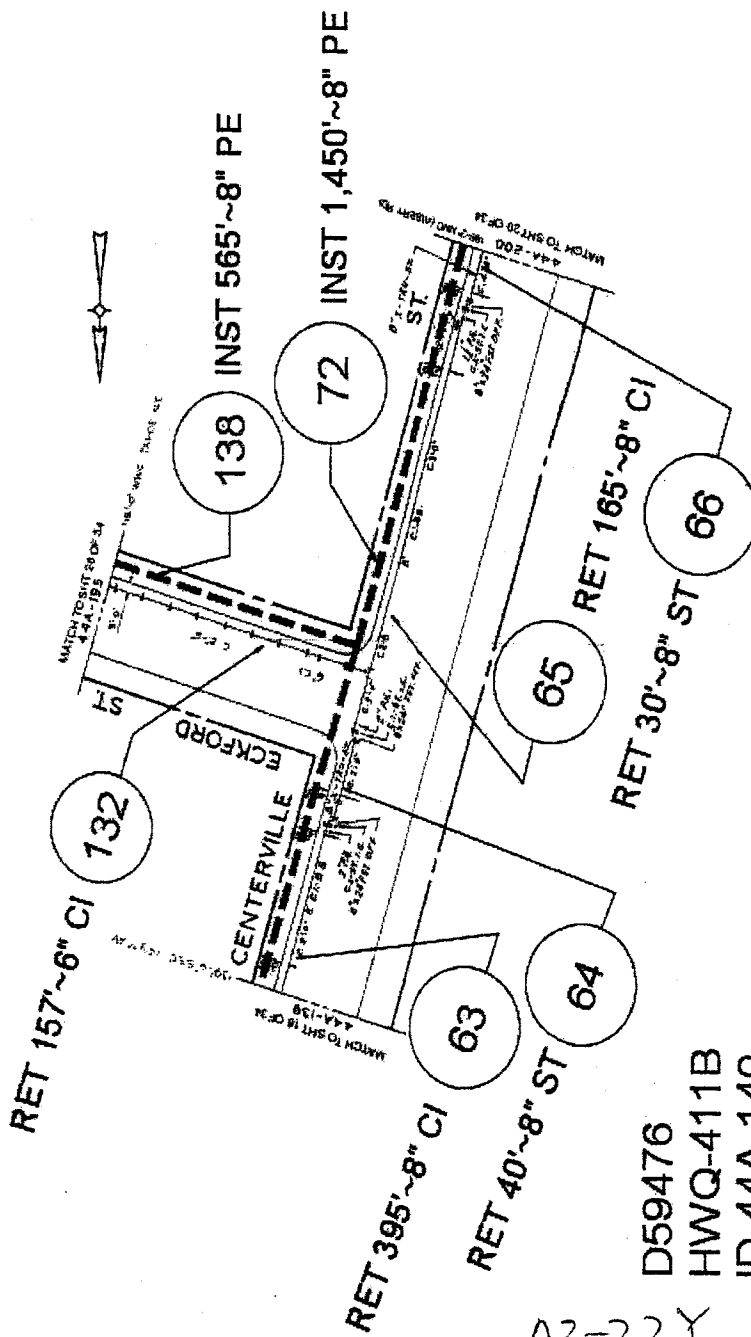
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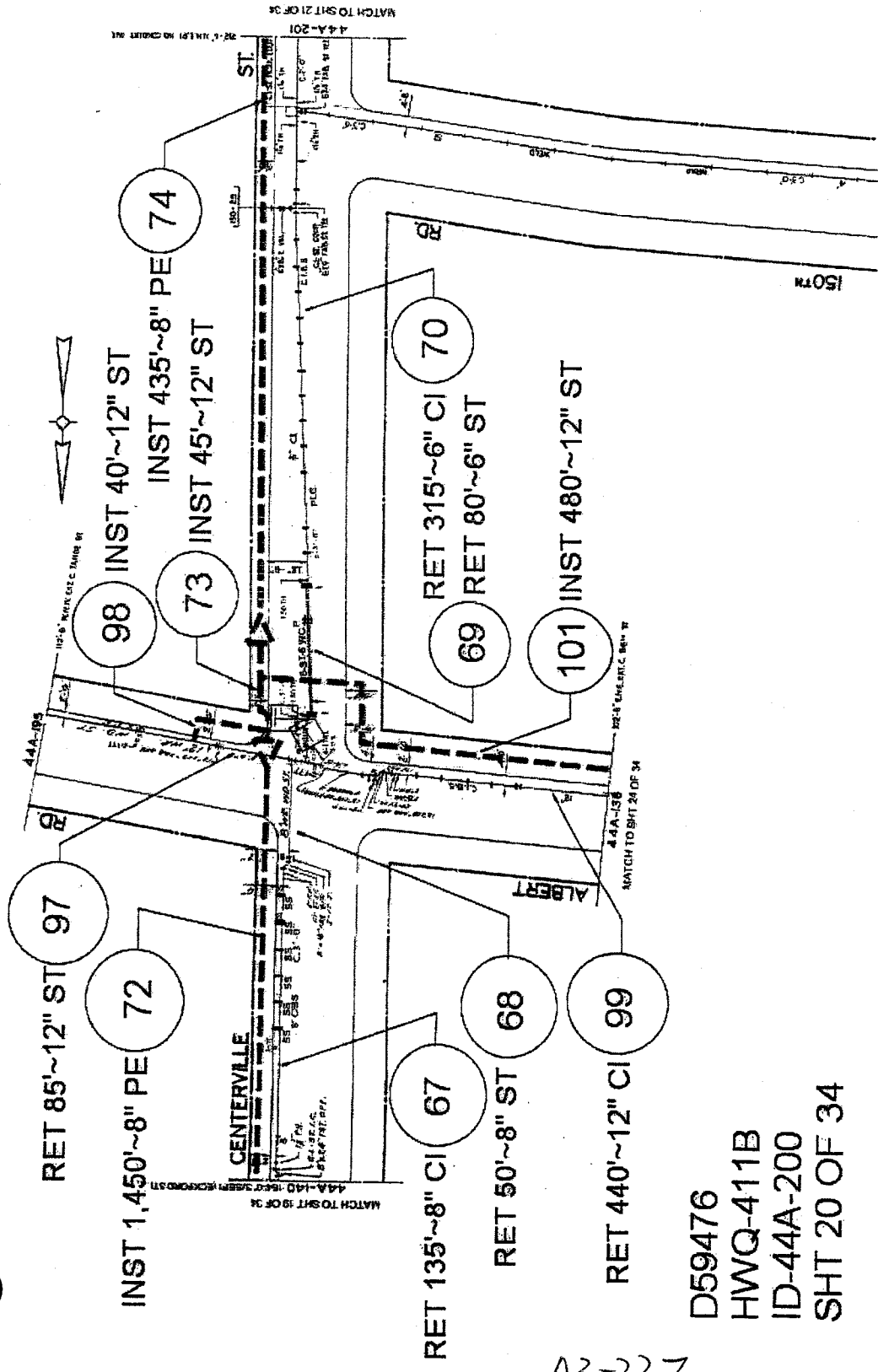
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 SHT 18 OF 34

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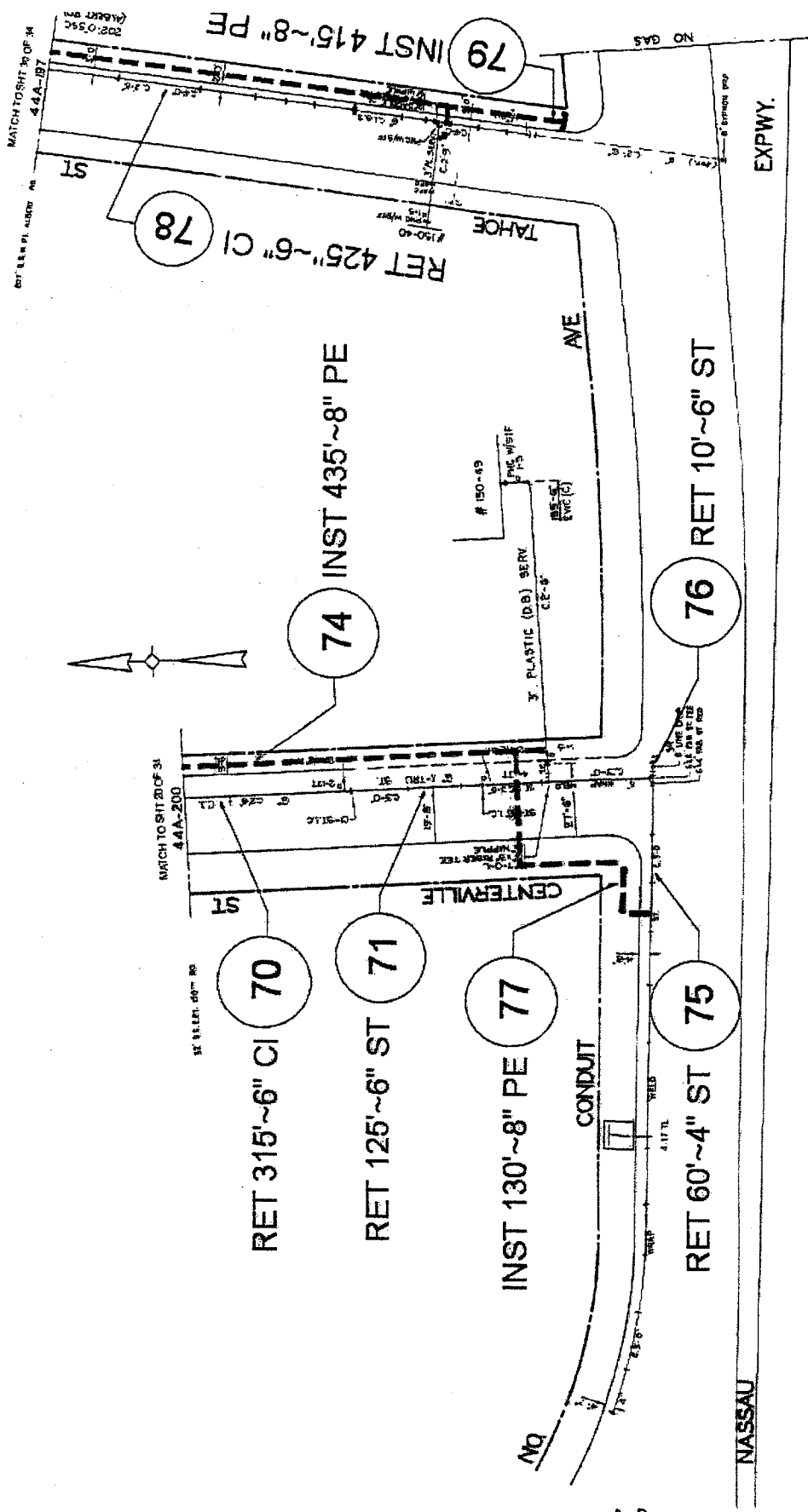
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 SHT 19 OF 34

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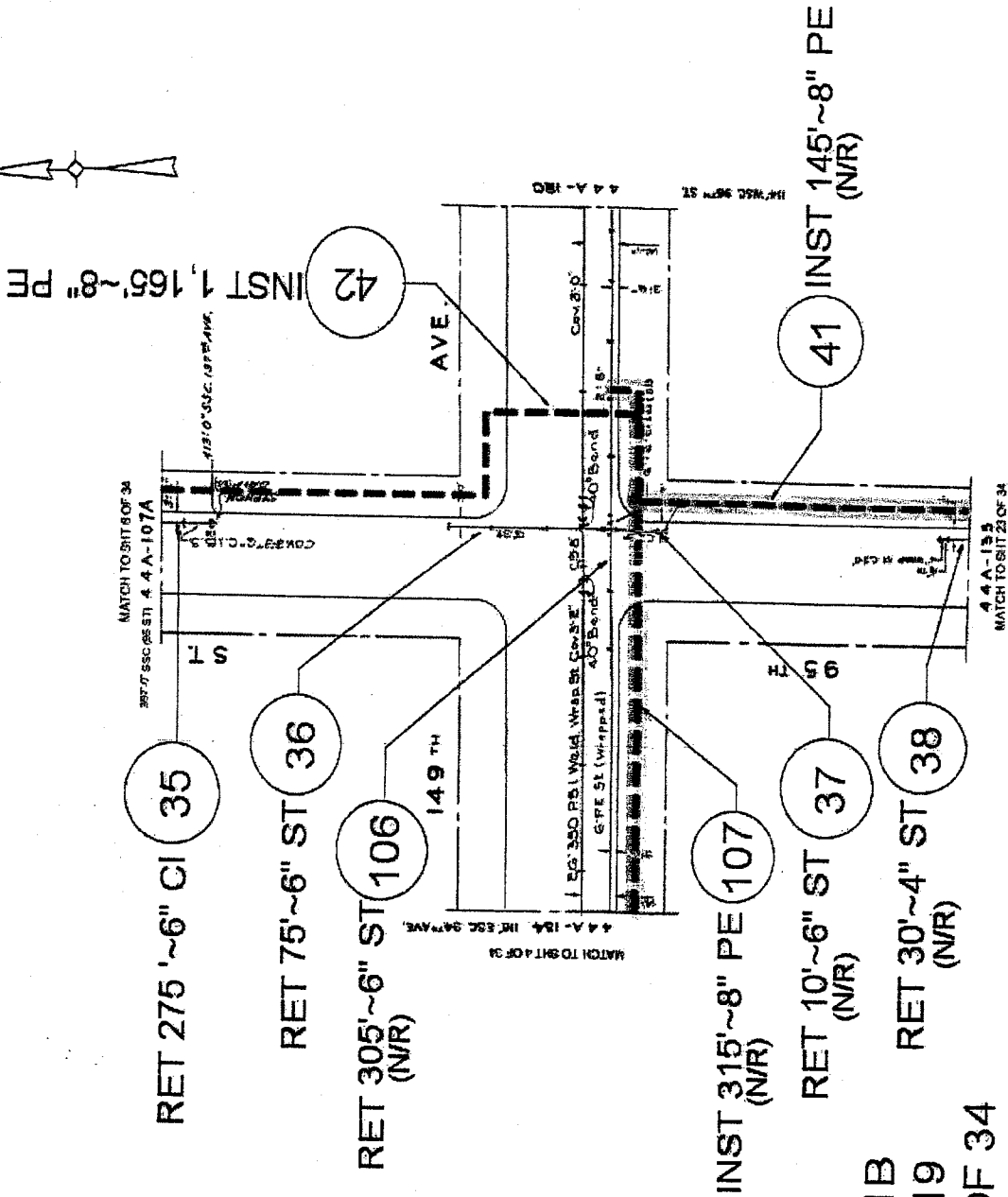
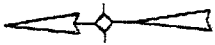
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 SHT 20 OF 34

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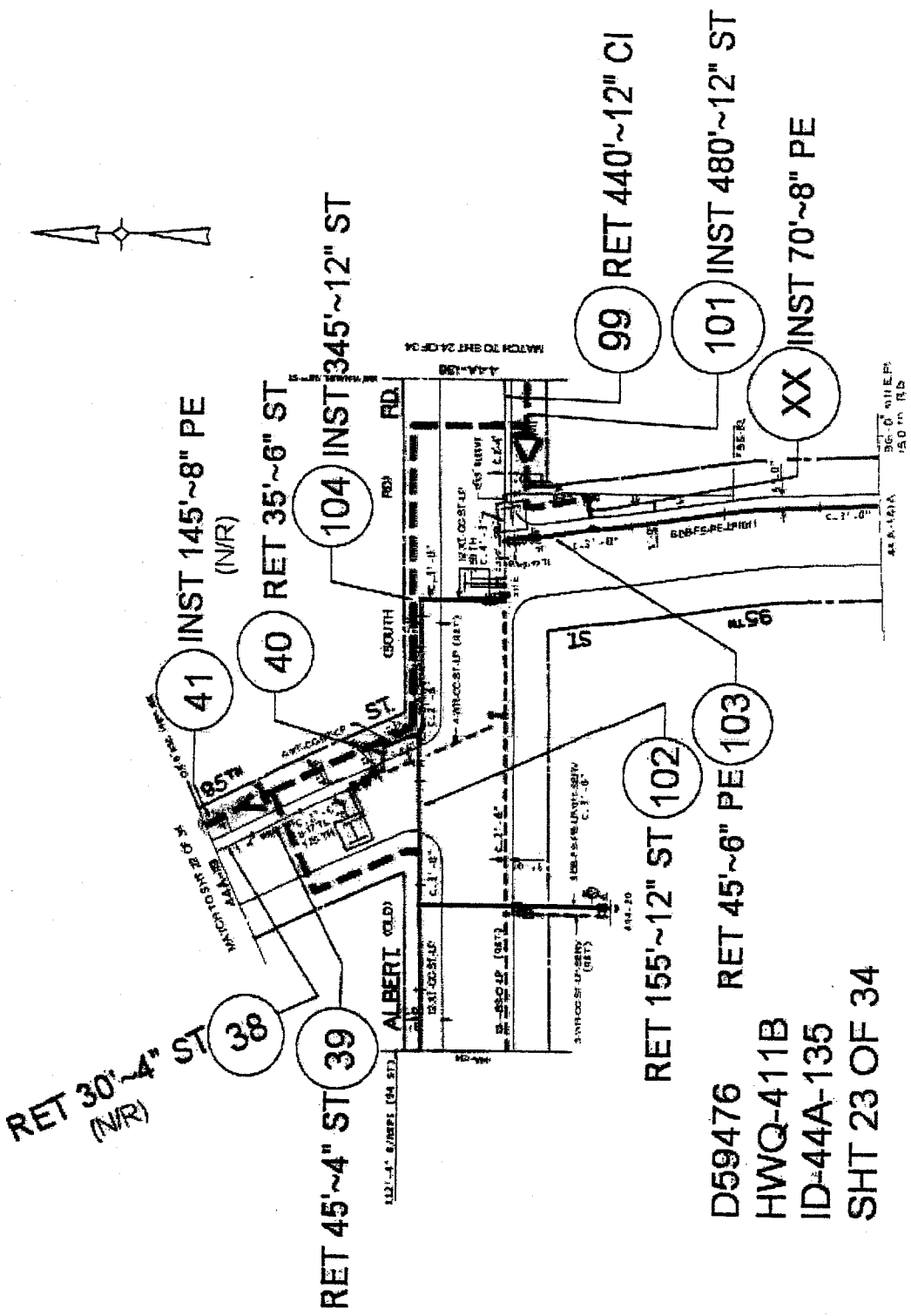
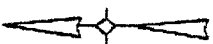
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D59476
 HWQ-411B
 ID-44A-201
 SHT 21 OF 34



A3-22 BB

D59476
 HWQ-411B
 ID-44A-119
 SHT 22 OF 34



RET 30'~4" ST
(N/R)

RET 45'~4" ST 39

38

40

41

RET 35'~6" ST

104 INST 345'~12" ST

RET 155'~12" ST 102

103

RET 45'~6" PE

D59476

HWQ-411B

ID-44A-135

SHT 23 OF 34

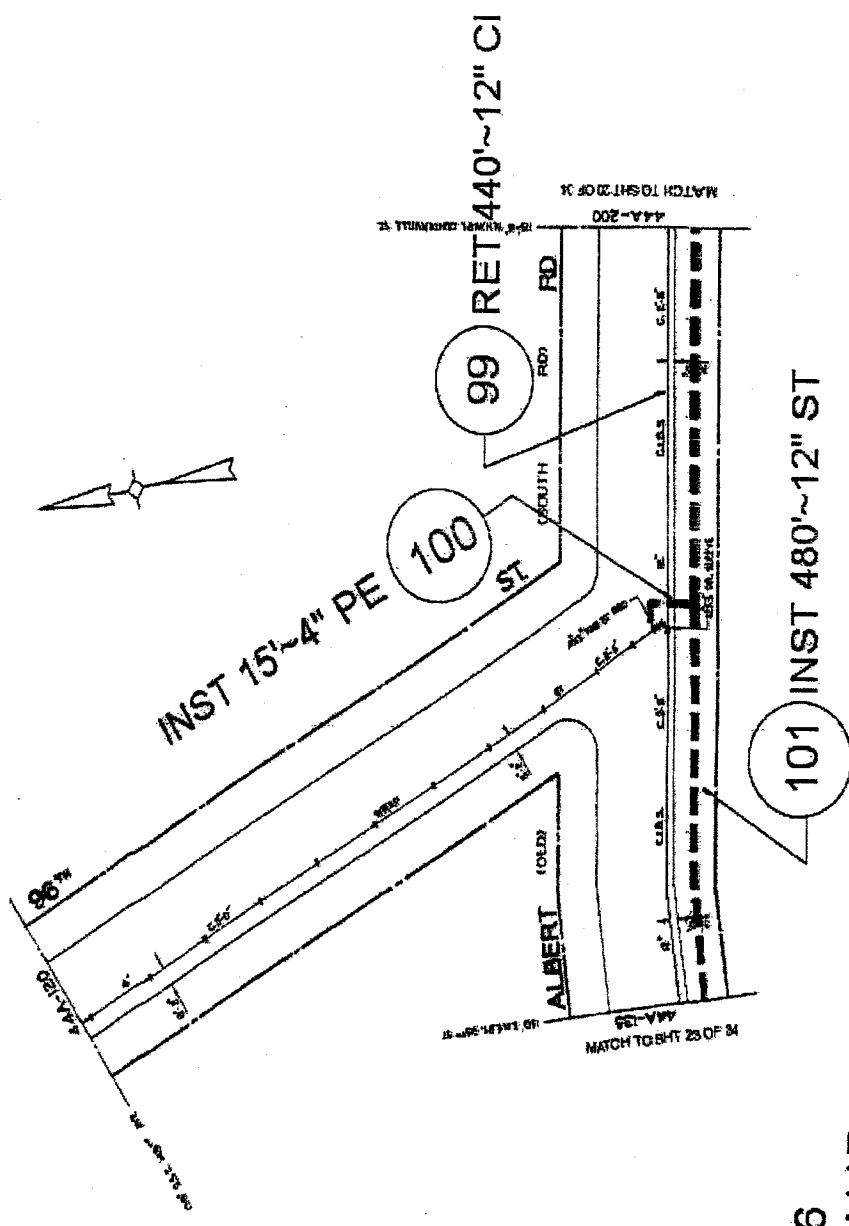
99 RET 440'~12" CI

101

INST 480'~12" ST

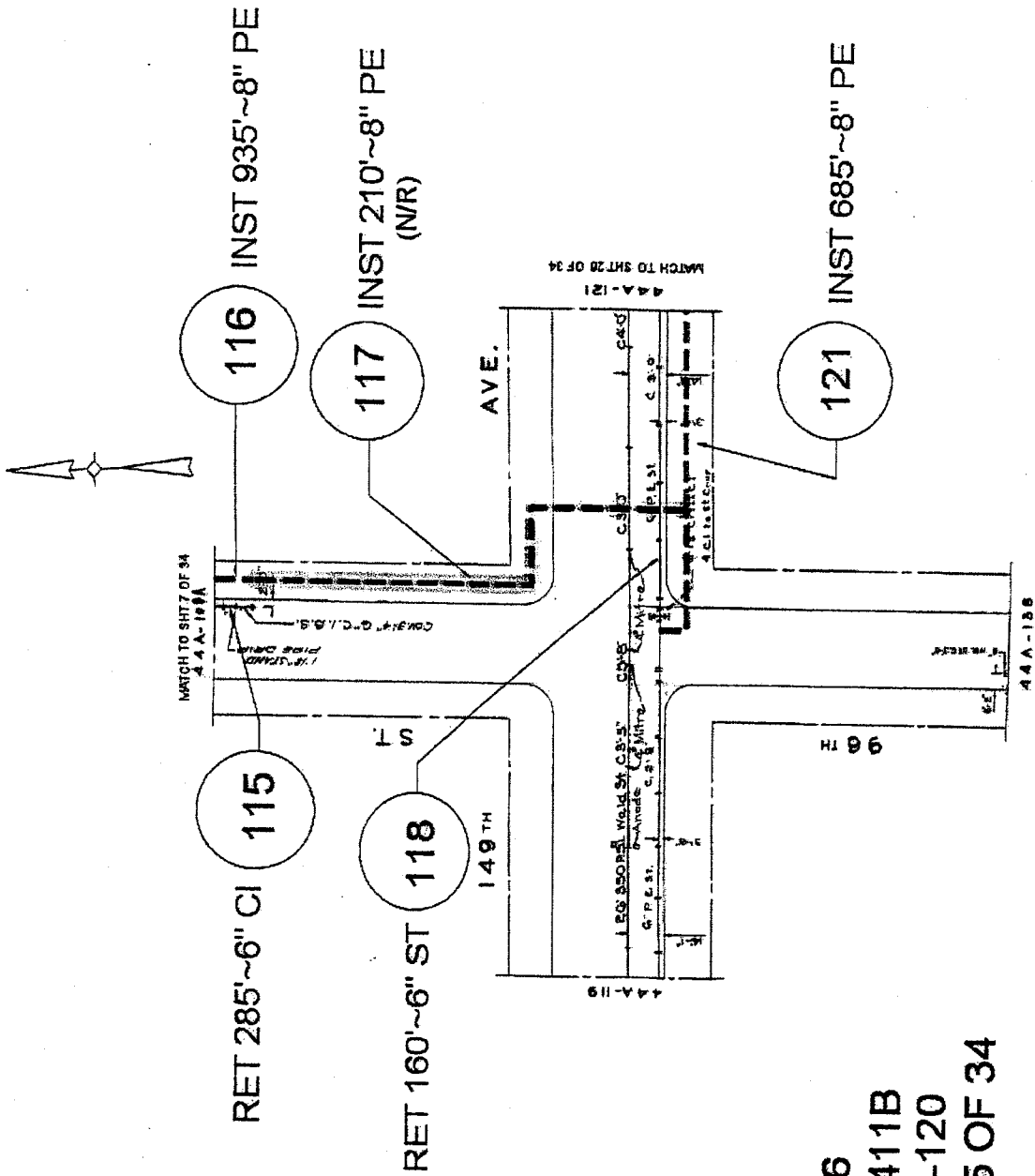
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INST 70'~8" PE



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 ID-44A-136
 SHT 24 OF 34

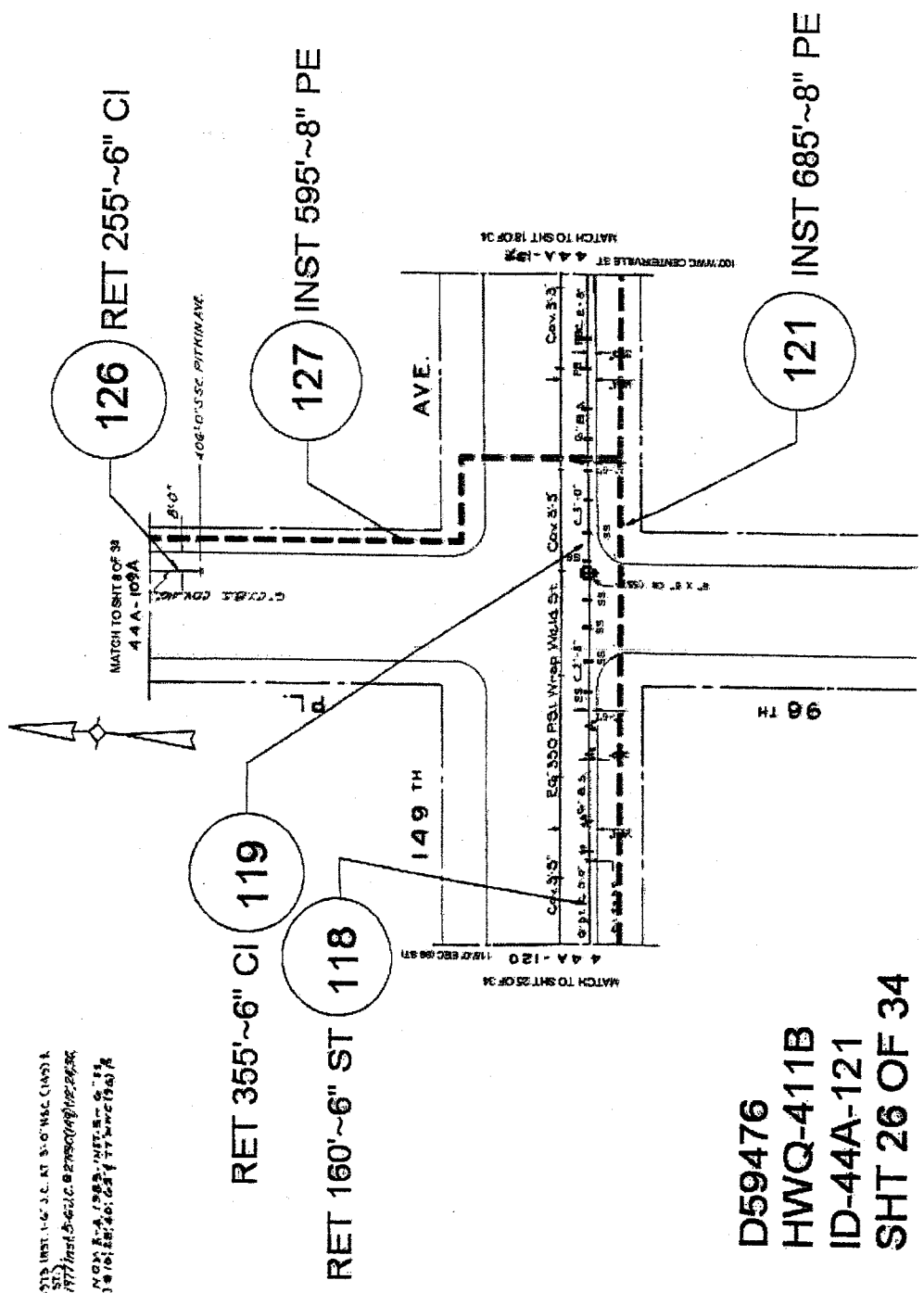
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 SHT 25 OF 34

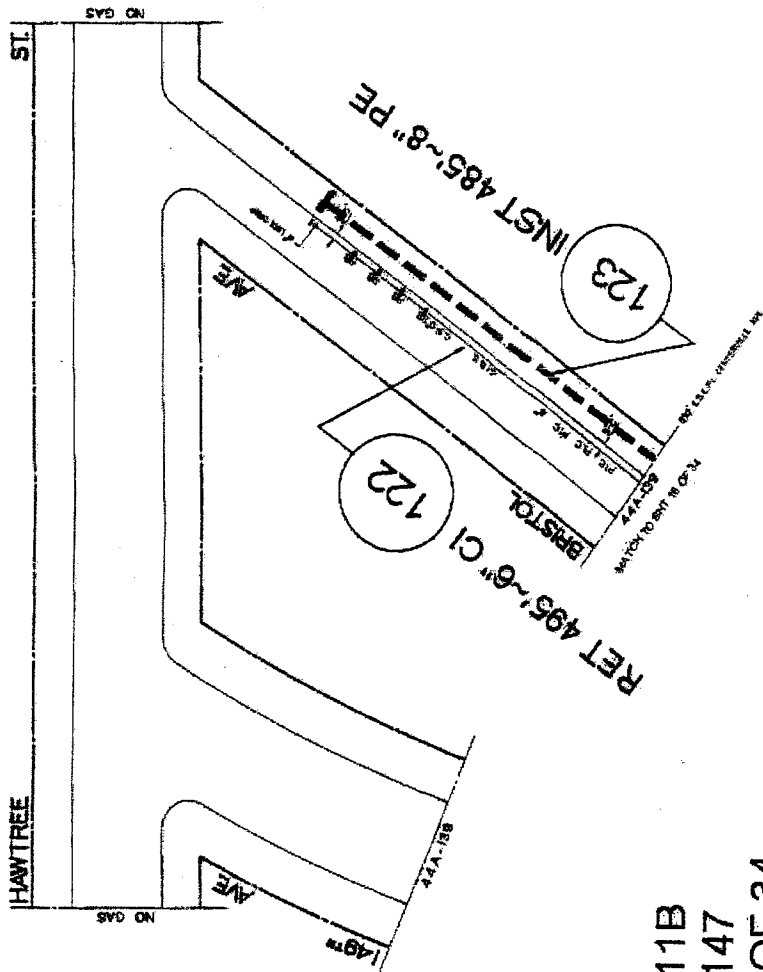
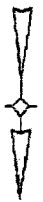
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1073 INST. 1-C J.C. AT 5'-0" WAC (145) A
 2 ST. 1
 3/17/77 INST. 5-621-C. B. ENRSC (145) 102 242 282
 5-10-77 INST. 1-108-B. WIT. E. 6-11-77
 5-10-77 INST. 4-61-102 1-11-77 102 242 282



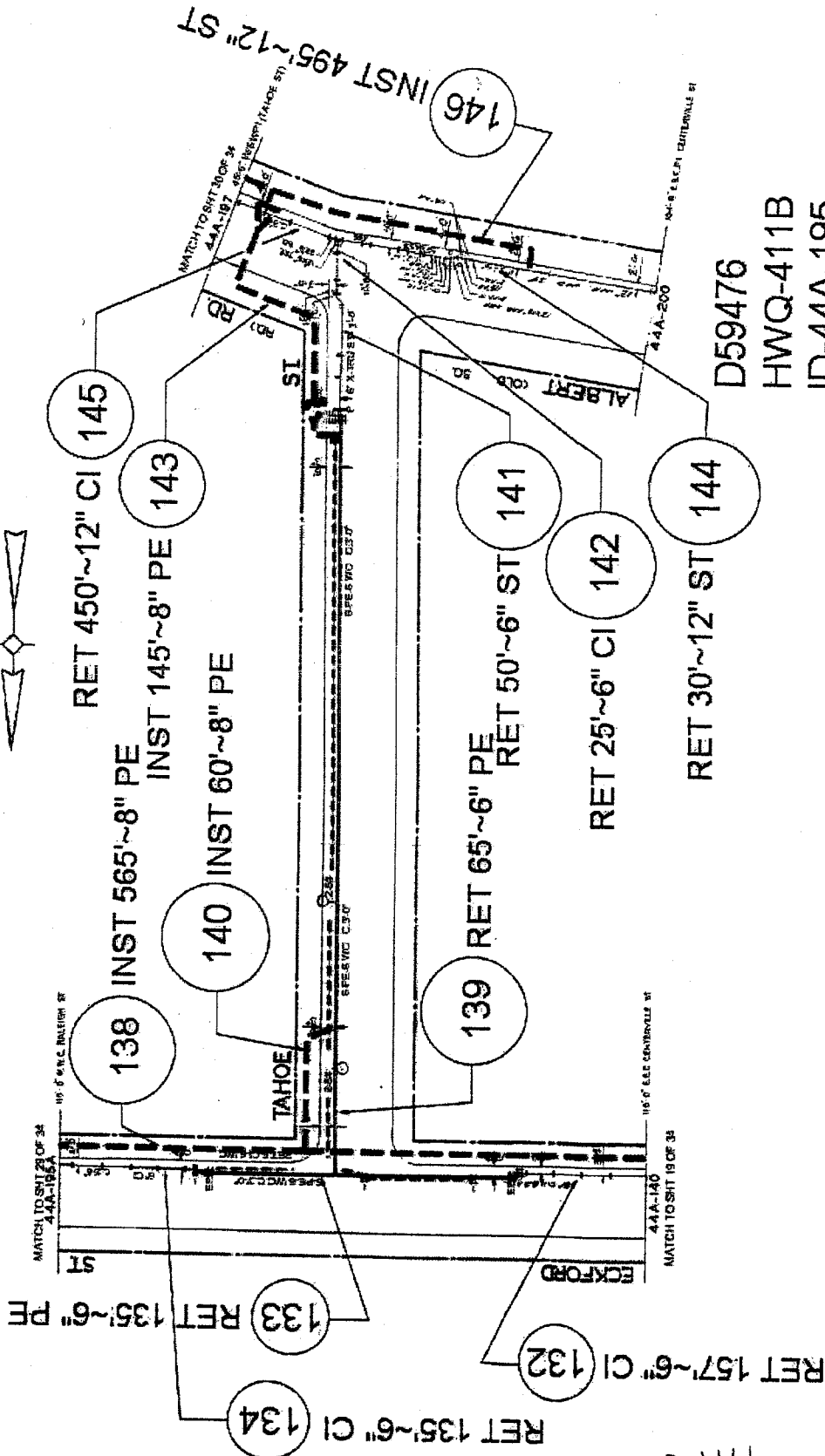
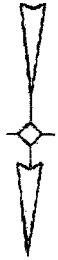
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 ID-44A-121
 SHT 26 OF 34

A3-22FF



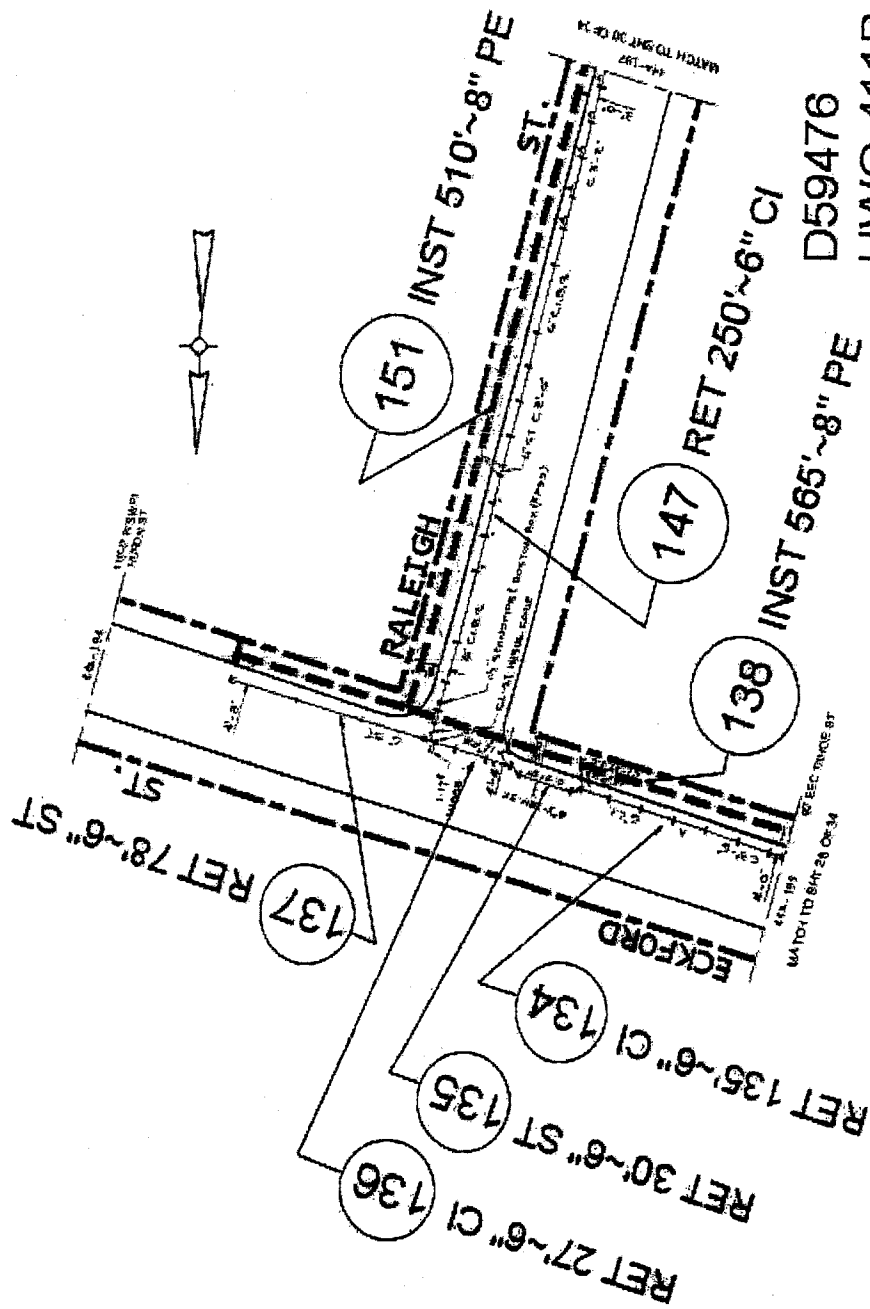
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ID-44A-147
SHT 27 OF 34

A3-22GG



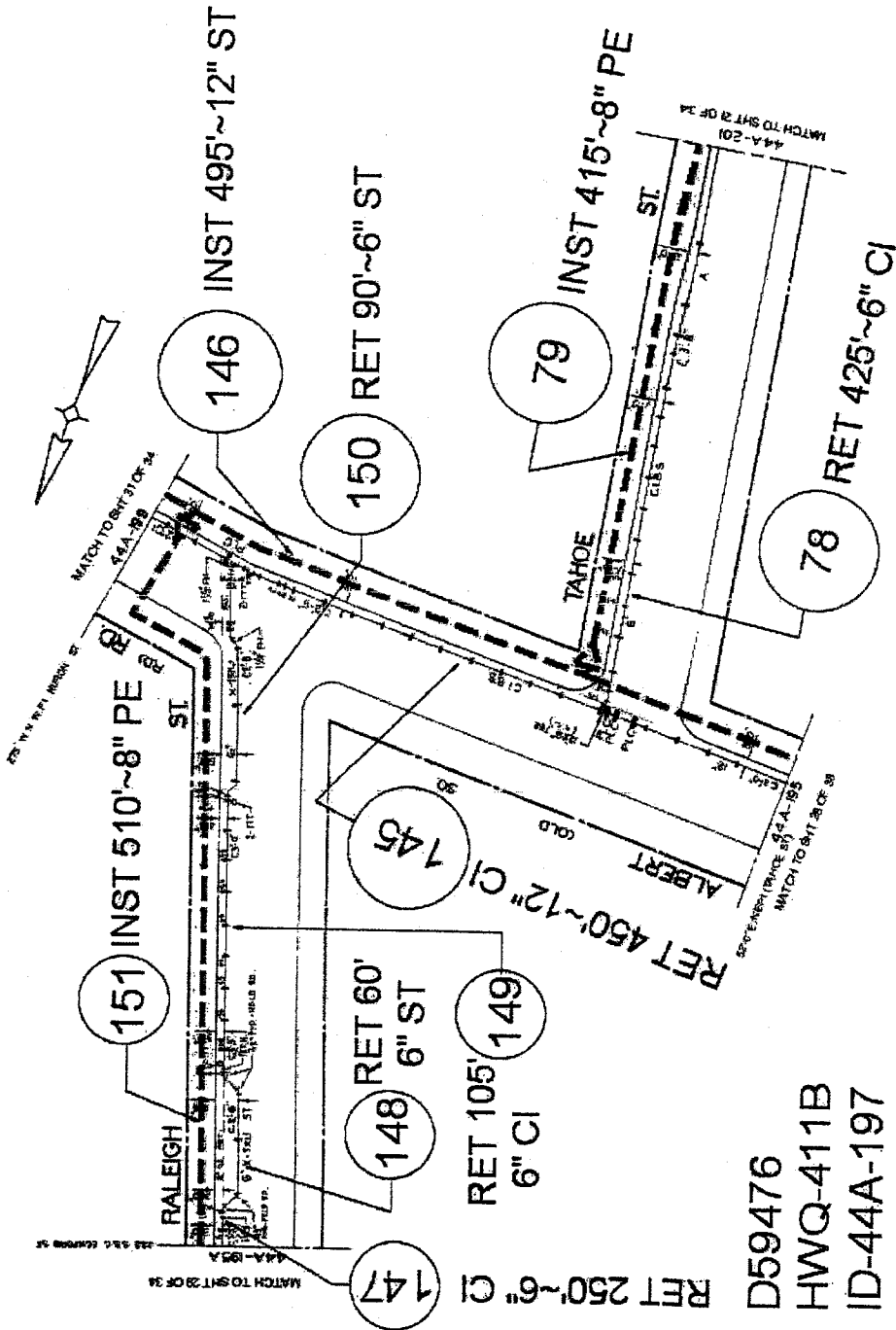
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 SHT 28 OF 34

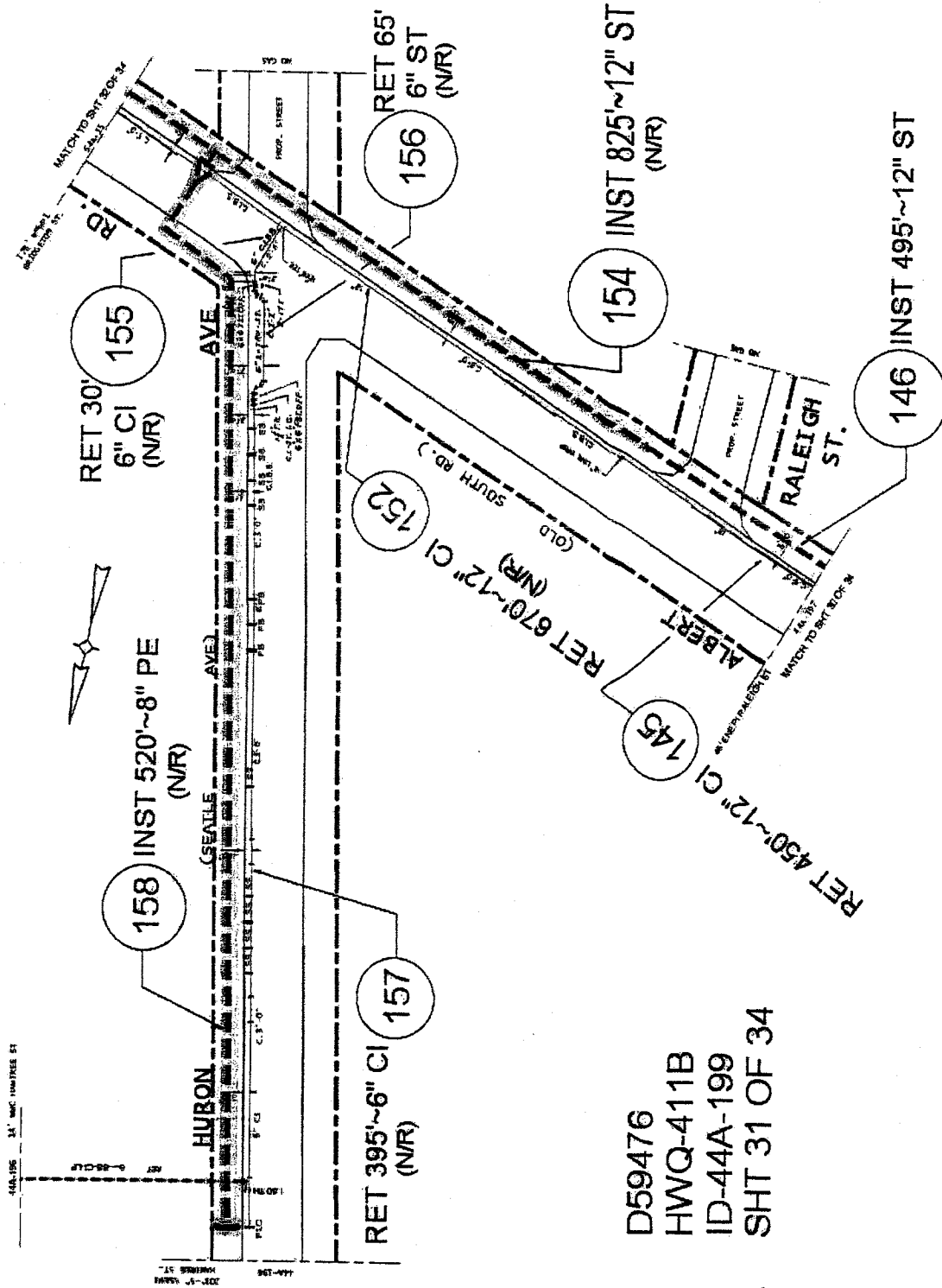


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 ID-44A-195A
 SHT 29 OF 34

A3-22II

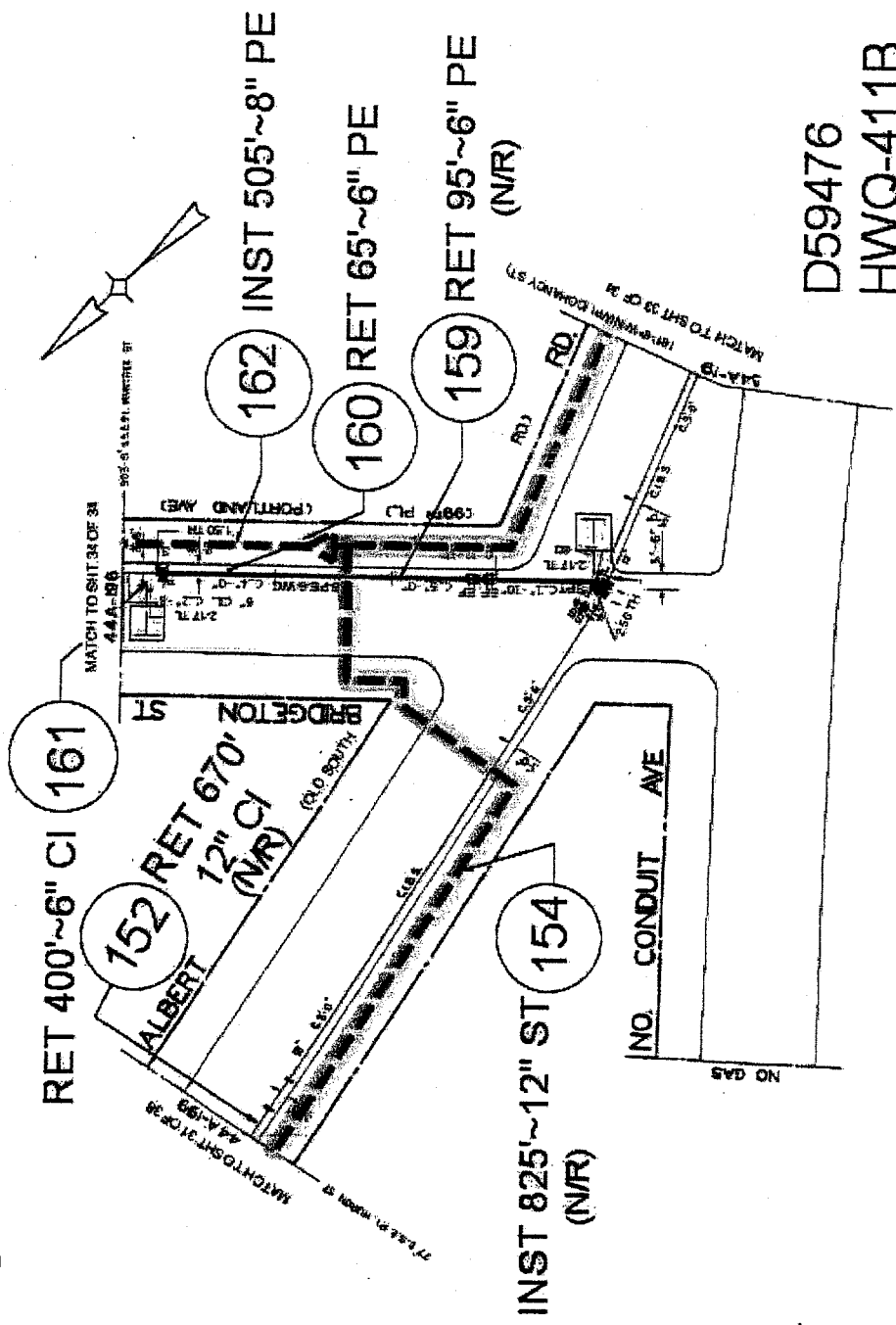


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 ID-44A-197
 SHT 30 OF 34



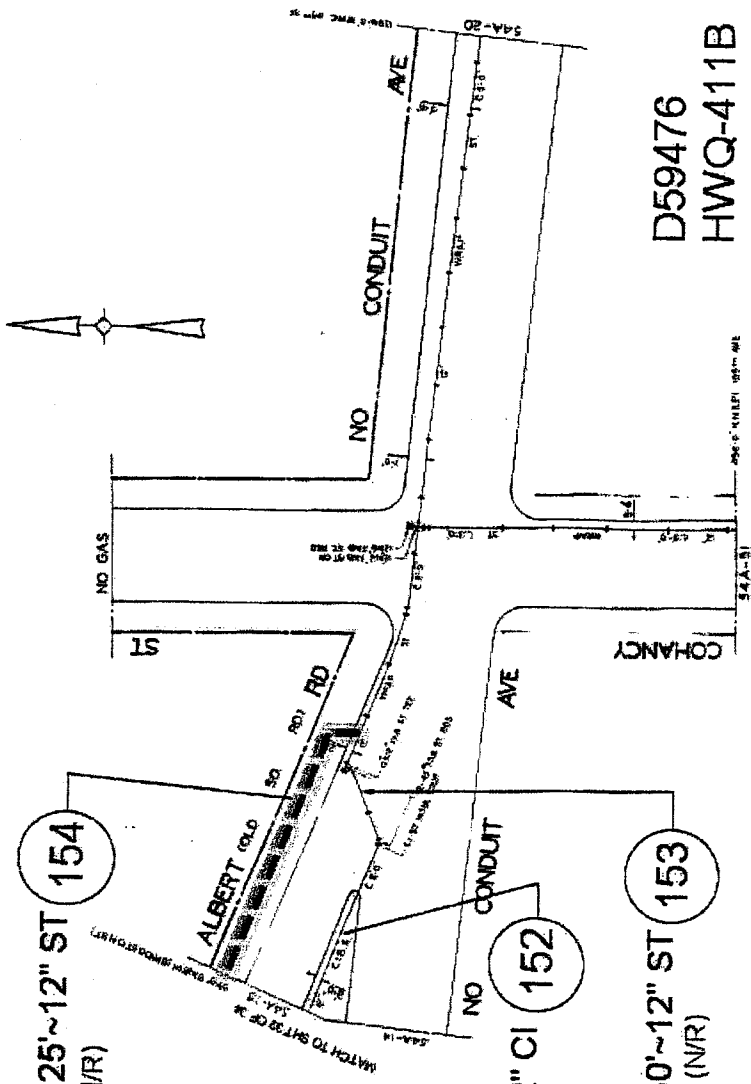
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 ID-44A-199
 SHT 31 OF 34

A3-22 KK



D59476
 HWQ-411B
 ID-54A-15
 SHT 32 OF 34

A3-22LL



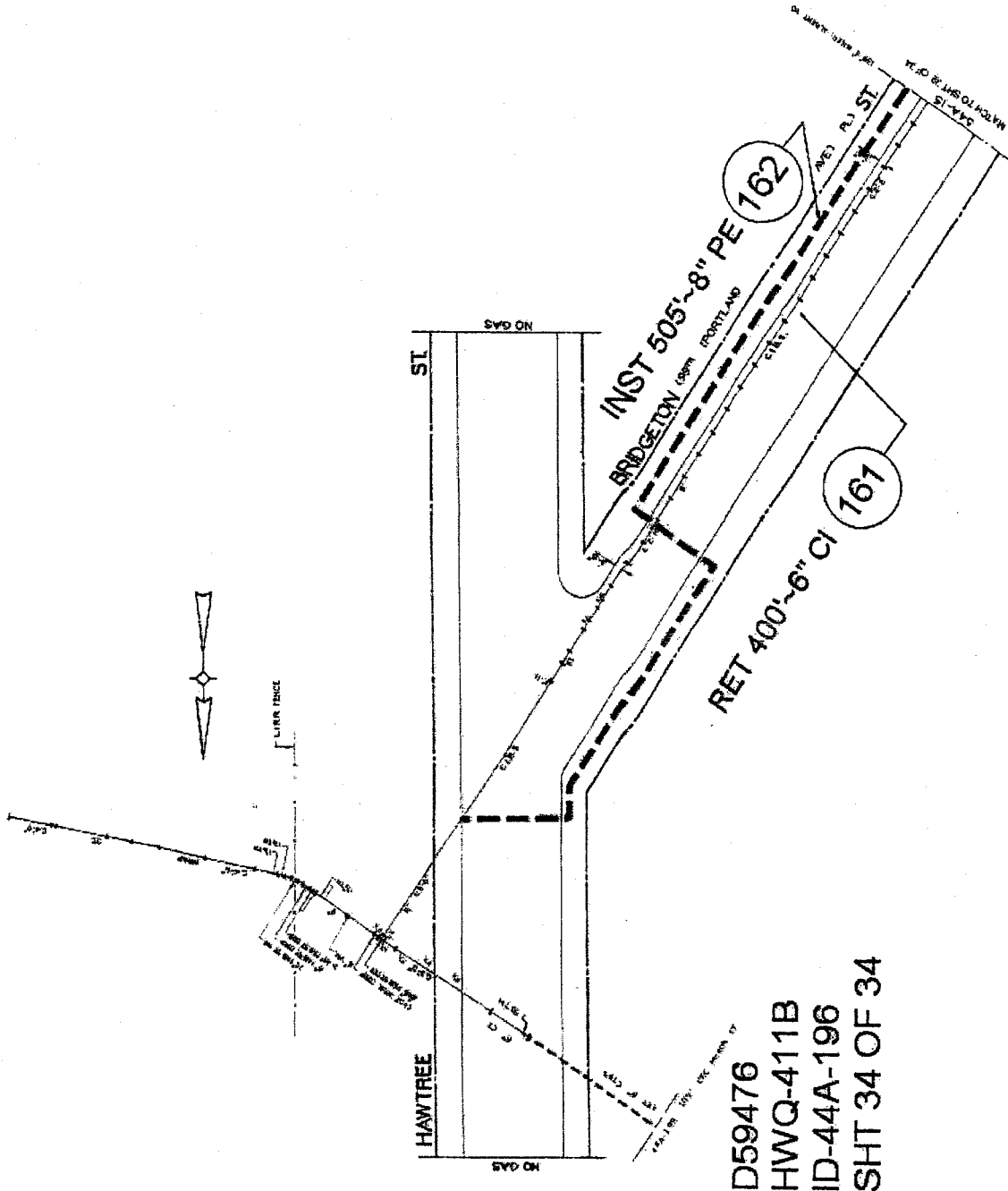
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(N/R)

RET 670'~12" CI 152
(N/R)

RET 50'~12" ST 153
(N/R)

D59476
HWQ-411B
ID-54A-19
SHT 33 OF 34

A3-22MM



A3-22NN

**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 HWQ-411B**

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.)

1 in 95 St. @ Linden Blvd.
1 in 149 Ave. @ Centreville St.
1 in 135 Dr. @ Centreville St.
1 in 97 St. @ Centreville St.
1 in Centreville St. @ Albert Rd.
2 in Centreville St. Bet. N. Conduit Ave. & 150 Rd.
2 in 135 Rd. @ 97 St.
1 in 94 St. @ Linden Blvd.
1 in 97 St. @ Linden Blvd.
1 in Albert Rd. @ Tahoe St.
1 in 149 Ave. @ 96 Pl.
1 in 149 Ave. @ 96 St.
1 in 96 Pl. @ Linden Blvd.
1 in Pitkin Ave. Bet. 94 St. & 95 St.
1 in 95 St. @ Pitkin Ave.
1 in 95 St. @ Albert Rd.
1 in Pitkin Ave. Bet. 96 St. & 96 Pl.
1 in 96 Pl. Bet. Pitkin Ave. & 149 Ave.
2 in 97 St. @ Pitkin Ave.
1 in 96 St. @ Linden Blvd.
1 in Centreville St. @ Pitkin Ave.
1 in 95 St. @ 149 Ave.
2 in 96 St. @ 149 Ave.
2 in 96 Pl. @ 149 Ave.
1 in 99 Pl. @ Albert Rd.
1 in Albert Rd. @ 95 St.

6.01.2 - Support & Protect Gas Main Crossing Sewer 30" In Diameter (Ea.)

1 in Hawtree St. @ 135 Rd.
2 in Hawtree St. @ Linden Blvd.
1 in Albert Rd. @ 95 St.
2 in Centreville St. @ Pitkin Ave.

**SCOPE OF WORK
SUPPORT AND PROTECTION
FOR CONTRACT NUMBER HWQ-411B**

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.

6.01.3 - Support & Protect Gas Main Crossing Sewer 36" Thru 42" In Diameter (Ea.)

1 in Raleigh St. @ Eckford Ave.

1 in Raleigh St. @ Albert Rd.

6.01.4 - Support & Protect Gas Main Crossing Sewer 48" Thru 54" In Diameter (Ea.)

1 in 97 St. @ Linden Blvd.

6.01.5 - Support & Protect Gas Main Crossing Sewer 60" In Diameter (Ea.)

1 in Tahoe St. @ Albert Rd.

6.01.8 - Support & Protect Gas Services Crossing Trenches And/Or Excavations (Ea.)

7 in 96 Pl. Bet. Pitkin Ave. & Linden Blvd.

4 in Pitkin Ave. Bet. 96 St. & 96 Pl.

3 in 135 Dr. @ Hawtree St.

14 in Albert Rd. Bet. Centreville St. & Tahoe St.

20 in Albert Rd. Bet. Tahoe St. & Raleigh St.

15 in 150 Rd. Bet. 95 St. & Centreville St.

15 in Tahoe St. Bet. N. Conduit Ave. & Albert Rd.

18 in Centreville St. Bet. Albert Rd. & 150 Rd.

15 in 99 Pl. Bet. Albert Rd. & Hawtree St.

15 in 95 St. Bet. Pitkin Ave. & Linden Blvd.

12 in 97 St. Bet. 135 Rd. & Linden Blvd.

15 in 94 St. Bet. 149 Ave. & Pitkin Ave.

14 in Eckford Ave. Bet. Tahoe St. & Raleigh St.

9 in 97 St. Bet. 149 Ave. & Pitkin Ave.

25 in 95 St. Bet. 149 Ave. & Pitkin Ave.

25 in 96 Pl. Bet. 149 Ave. & Pitkin Ave.

12 in 96 St. Bet. Pitkin Ave. & Linden Blvd.

20 in 96 St. Bet. 149 Ave. & Pitkin Ave.

11 in Centreville St. Bet. Bristol Ave. & 135 Dr.

15 in Pitkin Ave. Bet. 95 St. & 96 St.

13 in Raleigh St. Bet. Albert Rd. & Eckford Ave.

20 in Tahoe St. Bet. Albert Rd. & Eckford Ave.

25 in 94 St. Bet. Pitkin Ave. & Linden Blvd.

**SCOPE OF WORK
SUPPORT AND PROTECTION
FOR CONTRACT NUMBER HWQ-411B**

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.

20 in Hawtree St. Bet. Pitkin Ave. & 135 Rd.
11 in Linden Blvd. Bet. 97 St. & Hawtree St.
20 in 135 Rd. Bet. 97 St. & Hawtree St.
9 in Pitkin Ave. Bet. 94 St. & 95 St.
2 in Pitkin Ave. Bet. 97 St. & Centreville St.
18 in Pitkin Ave. Bet. 96 Pl. & 97 St.

6.01.9 - Support & Protect Gas Main Crossing Water Main Up To 20" In Diameter (Ea.)

3 in 149 Ave. @ 95 St.
1 in Albert Rd. @ 95 St.
3 in 96 St. @ 149 Ave.
1 in 149 Ave. @ 96 Pl.
1 in 99 Pl. @ Albert Rd.
2 in 96 St. @ Pitkin Ave.
2 in Centreville St. @ Albert Rd.
1 in Raleigh St. @ Eckford Ave.
1 in 99 Pl. @ Hawtree St.
2 in 95 St. @ Pitkin Ave.
2 in 94 St. @ Pitkin Ave.
1 in 96 Pl. @ Linden Blvd.
1 in 96 St. @ Linden Blvd.
1 in 95 St. @ Linden Blvd.
2 in 94 St. @ 149 Ave.
1 in Linden Blvd. Bet. Cross Bay Blvd. & 94 St.
2 in Centreville St. Bet. N. Conduit Ave. & 150 Rd.
2 in 96 Pl. @ Pitkin Ave.
2 in 97 St. @ Linden Blvd.
1 in 135 Rd. @ 97 St.
1 in 97 St. @ Pitkin Ave.
1 in Eckford Ave. @ Centreville St.
2 in 149 Ave. Bet. Cross Bay Blvd. & 94 St.
1 in Tahoe St. @ Eckford Ave.
1 in 96 St. @ Albert Rd.
1 in Linden Blvd. Bet. 94 St. & 95 St.
2 in Tahoe St. @ Albert Rd.

**SCOPE OF WORK
SUPPORT AND PROTECTION
FOR CONTRACT NUMBER HWQ-411B**

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.

6.02 - Extra Excavation For The Installation Of Catch Basin Sewer Drain Pipes With Gas Interferences (Ea.)

10 in Various Locations As Required

6.03 - Removal Of Abandoned Gas Facilities. All Sizes (L.F.)

10000 in Various Locations As Required

6.03.1 - Removal Of Abandoned Gas Facilities With Possible Coal Tar Wrap. All Sizes. (For National Grid Work Only) (L.F.)

1500 in Various Locations As Required

6.04 - Adjust Hardware To Grade Using Spacer Rings / Adaptor (Street Repaving) (Ea.)

300 in Various Locations As Required

6.05 - Adjust Hardware To Grade By Resetting (Road Reconstruction) (Ea.)

500 in Various Locations As Required

6.06 - Special Care Excavation & Backfilling (C.Y.)

2500 CY In Various Locations As Required, Including But Not Limited To All Gas Services Crossing Unsheeted Water Main Trenches.

6.06A - Special Care Excavation & Backfilling For Transmission Mains (C.Y.)

1600 CY In Various Locations As Required, Including But Not Limited To All Gas Services Crossing Unsheeted Water Main Trenches And The Following Locations:

500 CY in 97 St. Bet. Centreville St. & Linden Blvd.

35 CY in 149 Ave. @ 96 pl.

35 CY in 149 Ave. @ 95 St.

250 CY in Linden Blvd. Bet. 97 St. Hawtree St.

550 CY in 149 Ave. Bet. 95 St. & 97 St.

**SCOPE OF WORK
SUPPORT AND PROTECTION
FOR CONTRACT NUMBER HWQ-411B**

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.

25 CY in 97 St. @ 149 Ave.

35 CY in 149 Ave. @ 94 St.

5 CY in 149 Ave. Bet. Cross Bay Blvd. & 94 St.

6.07 - Test Pits For Gas Facilities (C.Y.)

1000 in Various Locations As Required.

**SECTION 6.06A - Special Care Excavation and Backfilling for Transmission Mains.
(Transmission Main is described as any gas main with a MAOP greater than 124 psig)**

1. Description:

Under this section, the contractor shall provide all labor, materials (except for sand to be utilized for backfill of a one foot envelope around the facility to be furnished by the facility operator), equipment, and incidentals required to support and protect the integrity of Gas Transmission Main during excavations. This facility is owned by the gas company operating in the area, hereafter referred to as facility operator. The work shall be performed in accordance with the contract plans, specifications and at the directions of the Resident Engineer in consultation with authorized representatives of the facility operator.

2. Applicability of Section:

This section shall apply to Transmission Main of various sizes located within any excavation sheeted or unsheeted (excavation refers to any excavation performed for city work and includes excavations performed that are to be subsequently unsheeted/sheeted using approved shoring methods and paralleling, encroaching and crossing any excavation. Parallel facilities are not exposed at any time during excavation (within 2' of edge of excavation)). Encroaching facilities are partially/fully exposed inside the limit of excavation. This section shall also apply to gas facility crossing catch basins excavation and catch basins sewer connections (chutes), water mains, fire hydrant branch connections, sanitary sewer, storm sewer, combination sewer, house sewer and/or water service connections excavations. The excavation around fully exposed live gas facilities along and within limits of excavation shall be covered by this section also, however the support requirement, if any is required, of such facilities is beyond the scope of these specifications and therefore shall be the responsibility of facility operator to determine and prescribe, at no cost to the City contract, but shall be a matter of adjustment between the contractor and facility operator.

3. Payment Restriction:

The bid item specified under this section shall not be used in combination with items covered under other sections for work done due to a particular gas facility. This item shall not be paid for new gas facilities when trenching for such new facilities has been performed by the contractor of record in common with trench excavation for City Work (overlapping trench limits). The cost of excavating with care as defined in this section shall be deemed included in the cost of trench excavation for the new gas facilities. This restriction shall apply even if such gas common trench excavation is not part of the contract. If facilities are in direct interference with City work, meaning that "minimum clearances" described in the General Provisions for Gas Cost Sharing (Para. No.8) cannot be maintained, the excavation shall be abandoned and the contractor shall be compensated as per the provisions specified in Paragraphs Nos. 5 and 6 of this item (6.06A).

4. Method of Construction:

All excavations in the vicinity of gas facilities shall be as required by NYS Industrial Code 753. No saw cutting of pavement or masonry for gas mains having less than 2 feet of cover to break asphalt/concrete as determined by the facility operator. The contractor shall use power excavation for the removal of pavement or masonry but only to the depth of such pavement or masonry (**breaking of pavement or masonry shall be done by means of hand held pneumatic breaking equipment**). Upon removal of pavement or masonry the contractor shall use hand excavation methods only (**pick and shovel; no power tools**) to ascertain the clearances of these facilities with respect to the proposed excavation. Once the location of these facilities with respect to the proposed excavation is verified to the satisfaction of the Resident Engineer and the facility operator the contractor shall then proceed with hand only within the zone of protection described as 2 feet from the face of the facility in all directions of the facility as required to preserve the integrity of the facility. Once outside of the zone of protection as described above the contractor may use a combination of hand and machine to complete the excavation.

5. Method of Payment:

The unit price for this work item shall be based on cubic yard (CY) of average excavation with special care and, is to be considered as an incremental cost for performing City work with gas facilities interferences.

6. Method of Measurement:

A. For Paralleling Facilities:

Volume calculated as: Depth as measured from existing street surface to the bottom of facility, multiplied by, the width measured as two (2) feet from the face of excavation toward the center of excavation, multiplied by the length of parallel facility, divided by twenty-seven (27) cubic feet per cubic yard. Only hand excavation shall be utilized within the zone of protection identified as 2 feet from face of facility, beyond 2 feet from the face of facility the contractor can use a combination of hand and machine.

B. For Encroaching Facilities:

Volume calculated as: Depth as measured from existing street surface to the bottom of facility, multiplied by, the width measured as two (2) feet plus the exposed facility toward the center of excavation, multiplied by the length of the encroached facility, divided by twenty-seven (27) cubic feet per cubic yard. Only hand excavation shall be utilized within the zone of protection identified as 2 feet from face of facility, beyond 2 feet from the face of facility the contractor can use a combination of hand and machine.

C. Fully Exposed Gas Facilities:

Volume calculated as: Depth as measured from existing street surface to the bottom of facility, multiplied by, the width measured as two (2) feet from the face of the facility on

either side plus the facility, multiplied by the length of the facility, divided by 27 cubic feet per cubic yard. Only hand excavation shall be utilized within the zone of protection identified as 2 feet from face of facility in all directions, beyond 2 feet from the face of facility in all directions the contractor can use a combination of hand and machine.

D. For Additional Excavation And Restoration Due To So Called "Loss Trench", When The 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 defined above 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").

7. Price to Cover:

The bid price shall also cover all additional supervision, labor, material, equipment and insurance necessary to excavate while protecting and maintaining (excluding supports for fully exposed live gas) gas facilities without disruption of service to the public and in accordance with contract specifications. The price shall also include, changes of sheeting method and excavation width configuration where necessary to accommodate gas facilities in their existing locations; difficulties during the installation of catch basins, chute connections, hydrant branch, and house sewer, sanitary sewer, storm sewer, combination sewer and water connections under or over gas facilities; loss of productivity due to slower rate of excavation (special care) during excavation, compaction, removal of sheeting from the facilities, extra roadway base restoration and temporary pavement, associated maintenance of traffic, barricades, and traffic plates that may be required to temporarily close and/or complete the work. Breaking shall be done by means of hand held pneumatic breaking equipment. Inspection of exposed mains shall be performed by facility operator in a timely fashion and shall not unduly impede contractor's progress or productivity.

END OF ADDENDUM NO. 3

This addendum consists of seventy-eight (78) pages

A3-23H

DIVISION VII - DETAILED SPECIFICATIONS –
CONTRACT HWQ411B

TABLE OF CONTENTS

CONSTRUCTION OF BEST MANAGEMENT PRACTICES

SPECIFIC PROVISIONS

<u>Section No.</u>	<u>Title</u>	<u>Page No.</u>
7.01	Location of Work	A4-5
7.02	Work Included	A4-5
7.03	Inspections Before Bidding and Mandatory Pre-Bid Conference	A4-8
7.04	Standard Specifications	A4-8
7.05	Inspection by the City, State and Federal Government	A4-8
7.06	Existing Utilities	A4-9
7.07	Permits to be Acquired by NYCDDC	A4-9
7.08	Land for Contractor's Use	A4-9
7.09	Licensed Surveyor for Engineer's Use	A4-9
7.10	Construction – Special Requirements	A4-10
7.11	Transportation and Handling of Materials and Equipment	A4-14
7.12	Protection of Materials and Equipment at the Site	A4-17
7.13	Final Cleaning	A4-17
7.14	OSHA Requirements	A4-18
7.15	No Separate Payment	A4-18
7.16	(No Text)	A4-19
7.17	Detailed Work Description of BMPs	A4-19

DIVISION VII - DETAILED SPECIFICATIONS -
CONTRACT HWQ411B

STRUCTURES AND MISCELLANEOUS EQUIPMENT

<u>Section No.</u>	<u>Title</u>	<u>Page No.</u>
7.101	Work Included	A4-20
7.129	Stormwater Culvert	A4-22

DIVISION VII - DETAILED SPECIFICATIONS -
CONTRACT HWQ411B

LANDSCAPING AND RESTORATION

<u>Section No.</u>	<u>Title</u>	<u>Page No.</u>
7.400	Work Included	A4-23
7.401	Seeding	A4-24
7.404A	Restoration Specialist (Construction Monitor)	A4-28
7.404B	Erosion and Sediment Control Licensed/Certified Professional	A4-32

DIVISION VII - DETAILED SPECIFICATIONS –
CONTRACT HWQ411B

GREEN INFRASTRUCTURE BIOSWALE DESIGN IN
THE VICINITY OF ALBERT ROAD
QUEENS, NEW YORK

DIVISION VII

SPECIFIC PROVISIONS

7.01 LOCATION OF WORK

Work under this Contract is to be performed along Hawtree Street from Bristol Avenue to Cohancy Street, along Bristol Avenue and Eckford Avenue from Centreville Street to Hawtree Street, and along Huron Street south of the intersection with Hawtree Street in the southwest area of Queens, New York. The site is on property owned and regulated by the City of New York.

7.02 WORK INCLUDED

The work under this Contract includes the installation of new storm and sanitary sewers, replacement of water mains, construction of standard right of way bioswales throughout the contract areas, and a larger infiltration green infrastructure practice, consisting of a north bioswale and a south bioswale in the location described in 7.01. 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. The principal items of work include:

1. Storm Sewer and Sanitary Sewer Networks

This entails excavation of trenches and layout of storm sewer and sanitary pipelines. The specifications and plans for this work are included elsewhere in these Contract Documents, not in this Addendum.

2. Right of Way Bioswales

This entails the excavation and construction of right of way bioswales within the sidewalks of the streets in this project. The specifications and plans for this work are included elsewhere in this Contract.

DIVISION VII - DETAILED SPECIFICATIONS –
CONTRACT HWQ411B

3. Hawtree Street Bioswale Construction

This will entail the construction of hydraulic features necessary to treat and convey stormwater runoff at Hawtree Street, Bristol Avenue, Eckford Avenue and Huron Street. BMP construction at this site includes the installation of two infiltration bioswale cells. The north bioswale extends 550 ft from Bristol Avenue to south of Huron Street, and the south bioswale continues 450 ft, from south of Huron Street to Cohancy Street. Specifications for this work are included elsewhere in these Contract Documents in the DEP Office of Green Infrastructure Specifications and Standards for Green Infrastructure, and are supplemented as necessary in this Addendum.

B. Involved Agencies and Firms

Before bidding, the contractor shall become familiar with the following involved agencies and firms and their respective responsibilities in the project:

1. New York City Department of Environmental Protection (DEP)

This City agency is the lead agency for the design of the Right of Way Bioswales to be constructed under this capital project.

2. New York City Department of Transportation (DOT)

This City agency is the client agency for NYCDDC on this capital project.

3. New York City Department of Design and Construction (NYCDDC)

The NYCDDC completed the designs for the storm and sanitary sewer components of the project. They will administer and inspect the Contractor's work with regard to the installation of the storm sewers, BMPs and all other aspects of the project, including managing the overall project schedule, construction sequencing of the sewer work and BMP construction. The DDC will handle permit compliance in relation to sewer construction. Whenever reference is made in these specifications to "the Engineer", it means the Resident Engineer on site, hired by NYCDDC.

4. Hazen and Sawyer, P.C.

DIVISION VII - DETAILED SPECIFICATIONS –
CONTRACT HWQ411B

This Engineering Firm is the design consultant for the Hawtree Street Bioswale. They are engaged by NYCDDC.

5. Restoration Specialist (Construction Monitor)

The Restoration Specialist will be retained by the contractor. The individual or firm filling this position will be responsible for overall oversight of the complete green infrastructure bioswale installation. This individual or firm will also focus on erosion control for the entire project, ensuring that the work adheres to permit requirements. The Restoration Specialist is responsible for compliance with any permits as it relates to bioswale construction. The Restoration Specialist (Construction Monitor) shall meet the requirements of Specification 7.404A.

C. Qualifications of Contractor/Subcontractor

1. The Contractor or its proposed subcontractor shall have performed at least three (3) projects similar in scope and type within the last five years that involved the natural area restoration and/or construction of green infrastructure such as bioswales, infiltration basins, greenstreets, and rain gardens.

To support the Contractor's contention that the Contractor or its proposed subcontractor is qualified to perform work involving the installation of bioswales/greenstreets, the Contractor must provide the following information in a Statement of Qualifications within three (3) days upon request by the City:

Provide specific details on projects (i.e., location, size, cost, client, etc.). Describe any problems encountered during construction and corrective action taken to remedy the problem. Describe any violations issued by NYSDEC or any other regulatory agency. Describe how the violations were resolved. Provide chronological photos recording the progress of the restoration and/or creation efforts, including preconstruction through completion. Include any required sign-offs from client and provide a list of all plants replaced on site.

2. The Contractor shall have performed at least three (3) projects similar in scope and type within the last five years that involved the installation and maintenance of soil erosion and sediment control devices during construction of a project.

DIVISION VII - DETAILED SPECIFICATIONS –
CONTRACT HWQ411B

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.

Within three (3) days upon request by the City the Contractor shall identify a Certified Professional in Erosion and Sediment Control who will be responsible for implementation of this aspect of the project. The certification of professionals is cosponsored by the International Erosion Control Association and the Soil and Water Conservation Society. The Contractor shall also provide a copy of the certification for the person so identified.

3. 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.

7.03 INSPECTION BEFORE BIDDING AND MANDATORY PRE-BID CONFERENCE

The specifications and plans for this work are included elsewhere in these Contract Documents, not in this Addendum.

7.04 STANDARD SPECIFICATIONS

Unless otherwise specified, all work, materials, and equipment shall conform to the applicable sections of the NYCDOT Standard Highway Specifications, NYCDEP Sewer and Water Specifications, as amended through Addendum 1 and 2 respectively.

7.05 INSPECTION BY THE CITY, STATE AND FEDERAL GOVERNMENT

DIVISION VII - DETAILED SPECIFICATIONS –
CONTRACT HWQ411B

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 EXISTING UTILITIES

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 TO BE ACQUIRED BY NYCDDC

No permits will be acquired by NYCDDC prior to the construction of this project. The Contractor will be responsible for acquiring any permits required by DOT for construction activities at the site.

7.08 LAND FOR CONTRACTORS' 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, green infrastructure bioswale as-builts, soundings, cross sections or other measurements as may be required by the Engineer for green infrastructure construction. Surveying services included in the item are for the sole use of the Engineer. The surveyor may be used by the Engineer to verify grades, but surveying services needed for layout of the green infrastructure site and activities not related to green

DIVISION VII - DETAILED SPECIFICATIONS -
CONTRACT HWQ411B

infrastructure construction is the responsibility of the Contractor and is not provided under this item.

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, 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. Access Requirements

DIVISION VII - DETAILED SPECIFICATIONS –
CONTRACT HWQ411B

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. Connections to Existing Piping

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.

E. 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. No separate payment shall be made for this work; the cost thereof shall be included in the bid price for other items.

F. Dust Control

During construction, all appropriate fugitive dust control measures, 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 temporary accessways 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

DIVISION VII - DETAILED SPECIFICATIONS -
CONTRACT HWQ411B

- Prompt removal of earth or other material from paved streets where earth or other material has been deposited by trucking or earth-moving 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.

G. Sequence of Construction

The Contractor is advised to follow the sequence of work in accordance with the Specifications, as noted below. All work shall be coordinated with the construction of the Hawtree Street Roadway and associated sewers. All work shall be completed in accordance with contract drawings, and upon approval of the Engineer and the Restoration Specialist. Stake out and receive approval from the Restoration Specialist for the limits of work and necessary tree guards before beginning any clearing.

Landscaping is not included in construction sequencing. The contractor must receive approval for all landscaping work from the Restoration Specialist prior to construction.

1. No construction or land disturbance activities may begin until all perimeter erosion control measures have been installed, as shown on the contract drawings. Measures shall include a stabilized construction entrance and reinforced silt fence. Measures associated with Hawtree Street roadway and sewer construction, such as inlet protection and tree guards, shall be maintained.
2. All points of construction ingress and egress shall be protected to prevent the deposition of materials onto traversed public thoroughfare by installing and maintaining a stabilized construction entrance. All materials deposited onto public thoroughfare shall be removed immediately. Proper precautions shall be taken to ensure that materials deposited onto public thoroughfare are removed so that they do not enter combined sewers or local waterways. The stabilized construction entrance location shall be determined and placed as shown on the contract drawings or as field directed by field engineer.
3. Bioswale excavation shall not begin until construction in Hawtree Street has been completed and the contributing watershed has been stabilized.
4. If clearing is required for installation of a particular measure, all measures not requiring clearing shall be installed first. Required

DIVISION VII - DETAILED SPECIFICATIONS -
CONTRACT HWQ411B

- clearing for installation of that particular measure may then proceed.
5. Contractor shall obtain prior approval from the Engineer for deviations from the approved erosion and sediment control plan.
 6. Storm drainage inlets shall be protected with appropriate erosion control measures until the entire site has been stabilized.
 7. Install curb cuts and stormwater culverts in coordination with sidewalk, curb, and roadway construction. Stormwater culverts shall be blocked from allowing runoff into the Hawtree Street bioswale area until bioswale construction is complete.
 8. Perform installation of bioswale according to specified bioswale construction sequence (see below).
 9. Temporary stabilization measures are required if site is left open for 7 days or more and work has temporarily halted. Stabilization measures shall be per the Stormwater Pollution and Prevention Plan (SWPPP), prepared by the Erosion and Sediment Control Professional under this contract, and cost shall be deemed included in Section 7.13B Maintenance of Site of NYCDOT STANDARD HIGHWAY SPECIFICATIONS for the overall contract.
 10. Once permanent stabilization of the bioswale area has occurred, temporary sediment and erosion control measures may be removed. Any areas disturbed by the removal of these measures shall be returned as closely as possible to original condition.

Bioswale Sequence of Construction

1. Once all erosion control measures have been installed and the contributing watershed has been stabilized, perform general clearing and grubbing of the bioswale site.
2. Perform bioswale excavation so as to minimize compaction of the subsoil beneath the cell.
3. Heavy equipment shall be prohibited within the bioswale following excavation of the final 24 inches of soil and subsequent installation of soil media.
4. Excavation of the final 12 inches of the bioswale basin shall be scheduled when the soil is not saturated and such that the gravel

DIVISION VII - DETAILED SPECIFICATIONS –
CONTRACT HWQ411B

drainage layer can be installed before rain is forecast. A schedule for excavation and installation of the gravel drainage layer shall be submitted and approved by the engineer prior to beginning work.

5. Final 12 inches of bioswale basin shall be excavated by raking the surface with excavator bucket teeth to minimize compaction and soil surface sealing.
6. Install 2 foot thick open graded stone base.
7. Prepare and test soil media per construction specifications prior to installation. Soil analysis shall be submitted to engineer prior to placement in bioswale cell.
8. Place soil media above open graded stone layer, in lifts of 6-8 inches. Heavy equipment is restricted to the perimeter of the bioswale and shall not be used within the cell.
9. Grade soil media by hand or with low ground pressure (LGP) equipment. Minimal compaction may be applied with bucket of bulldozer or backhoe.
10. Upon completion of final grading, employ permanent seeding within the limits of disturbance as per the contract dwgs and specifications. All erosion control measures shall remain in place until the entire site has been stabilized.

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 execution 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.

DIVISION VII - DETAILED SPECIFICATIONS -
CONTRACT HWQ411B

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. Delivery

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:

DIVISION VII - DETAILED SPECIFICATIONS -
CONTRACT HWQ411B

- 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. Product Handling

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.

DIVISION VII - DETAILED SPECIFICATIONS –
CONTRACT HWQ411B

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 other than mechanical or electrical equipment 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.

DIVISION VII - DETAILED SPECIFICATIONS –
CONTRACT HWQ411B

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. Cleaning Materials and Methods

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. The Contractor shall only use cleaning methods approved by the Engineer.

C. Payment for Final Cleaning

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 1920.120.

7.15 NO SEPARATE PAYMENT

DIVISION VII - DETAILED SPECIFICATIONS –
CONTRACT HWQ411B

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 (NO TEXT)

7.17 DETAILED WORK DESCRIPTION OF GREEN INFRASTRUCTURE
BIOSWALE

Hawtree Street Bioswales

Two adjacent swales shall be constructed to capture stormwater runoff from a 1,000-ft section of Hawtree Street, from Bristol Avenue to Cohancy Street, a drainage area of approximately 1.14 ac. The north bioswale extends 550 ft from Bristol Avenue to south of Huron Street, and totals 0.20 ac. The south bioswale continues 450 ft, from south of Huron Street to Cohancy Street, and totals 0.17 ac. A 25-ft concrete corridor shall be installed between the bioswales to provide pedestrian access to the nearby North Conduit Avenue subway entrance. BMP construction shall include, but is not limited to, the installation of the infiltration bioswale and appurtenant structures, such as sidewalk curb cut diversions, underdrain piping and cleanouts, overflow structures and connections to the City drainage system.

This BMP would provide storage and infiltration of stormwater runoff in an area with a combined sewer system. The BMP would provide aesthetic benefits in addition to water quality improvements.

All work shall be completed in accordance with the Green Infrastructure specifications in Addendum 1. For items not included in that document, the additional specifications in this addendum shall be applied.

Specification Section

Specific Provisions

7.09 - Licensed Surveyor for Engineer's Use

Structures and Misc. Equipment

7.101 - Work Included

7.129 - Stormwater Culvert

DIVISION VII - DETAILED SPECIFICATIONS –
CONTRACT HWQ411B

Landscaping and Restoration

- 7.400 - Work Included
- 7.401 - Seeding
- 7.404A- Restoration Specialist (Construction Monitor)
- 7.404B- Erosion and Sediment Control Licensed/Certified
Professional

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DIVISION VII - DETAILED SPECIFICATIONS -
CONTRACT HWQ411B

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:

<u>Section No.</u>	<u>Title</u>
7.129	Concrete Structures

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DIVISION VII - DETAILED SPECIFICATIONS -
CONTRACT HWQ411B

7.129 STORMWATER CULVERT

A. Work Included

The Contractor shall install, test and place in satisfactory operation all Stormwater Culverts as shown on the Contract Drawings and specified herein.

B. General Requirements

1. Stormwater Culverts shall comply with the requirements of NYCDOT Standard Highway Specifications, Sections 4.13 and 4.14.

2. Submittals

Submittals shall comply with the requirements of NYCDOT Standard Highway Specifications, Sections 1.06.13 and 1.06.13.

C. Measurement and Payment

The quantity to be measured for payment under this Section shall be per cubic foot of Stormwater Culvert installed as directed by the Engineer.

The Contract price for each Stormwater Culvert shall be as indicated on the Bid Schedule of Prices Item No. BMP-7.129-SC. The bid price shall include all work and equipment necessary to complete this item in accordance with the plans and specifications and to the satisfaction of the Engineer. Cast-in-place or precast culverts are acceptable. The Stormwater Culvert unit price shall include but not be limited to, concrete culvert, concrete culvert cover, reinforcement, excavation, backfilling, geotextile, sheeting and bracing. The concrete apron shall be paid under item GI-2.03. The subbase of the trench shall be paid for under item 6.67. The stone sump is not included in the bid price of the culvert.

<u>Item</u>	<u>Description</u>
BMP-7.129-SC	Stormwater Culvert

DIVISION VII - DETAILED SPECIFICATIONS -
CONTRACT HWQ411B

LANDSCAPING AND RESTORATION WORK

7.400 WORK INCLUDED

Under landscaping and restoration work, the Contractor shall provide labor, materials, tools and equipment necessary to complete the execution of the work in complete accordance with the Specifications and all Contract Drawings. The work shall include items of work specified under the following sections.

<u>Section Number</u>	<u>Title</u>
7.401	Seeding
7.404A	Restoration Specialist (Construction Monitor)
7.404B	Erosion and Sediment Control Licensed/Certified Professional

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DIVISION VII - DETAILED SPECIFICATIONS –
CONTRACT HWQ411B

7.401 SEEDINGA. Description of Work Included

Under these items, the Contractor shall furnish all labor, materials, equipment and services necessary for the proper execution of all landscaping work, as specified herein and as shown on the Contract Drawings, including all incidental and appurtenant work required for a complete job.

B. General Requirements1. Reference Standards

- a. American Nursery and Landscape Association (American National Standards Institute), American Standard for Nursery Stock (ANSI Z60.1, latest edition)

C. Quality Assurance

1. Source Quality Control:

- a. All seed shall be interagency certified under the auspices of a State Seed Improvement Cooperative and must bear their seals of certification on bag. Permanent seed shall be 75% Pure Live Seed minimum.

D. Submittals

The General Contractor shall submit the following information (as listed in 1. through 4.) for approval within ten working days following the date in the Notice to Commence Work:

1. List of all materials and certificates specified within this Item. The General Contractor shall submit the Manufacturer's Literature prior to construction. Manufacturer's literature for all materials furnished shall be submitted with samples of same.
2. The Contractor is required to perform a separate germination test on the seed mixes to be used on this project prior to submitting the seed mix and supplier. The results of the germination test shall be included in with the information submitted to the Engineer for review and acceptance. The Contractor is advised that these tests can run two-months or more and should be prepared to have these tests completed in sufficient time for the next seeding season.

DIVISION VII - DETAILED SPECIFICATIONS –
CONTRACT HWQ411B

Seed shall conform to all applicable state and federal regulations and to test provisions of the Association of Official Seed Analysts. There shall be no exceptions.

E. Product Delivery, Storage and Handling

1. Delivery of Materials:

- a. Packaged Materials. Deliver packaged materials in unopened bags or containers, each bearing the name, warranty, and trademark of the producer and the composition, analysis and the weight of the material.
- b. Seed shall be clean and fresh and delivered to the site in the original, unopened bags showing the net weight, composition of mix, suppliers name and guarantee of analysis. Seed shall be delivered and stored in original unopened packages, kept dry, and not opened until needed for use. Damaged or faulty packages shall not be used and will be rejected. Seed shall have been harvested for planting in the current growing season, and shall have been packed within the last 9 months.

F. Material

1. Seed mixture shall be as specified in the Contract Drawings unless otherwise directed by the Engineer.

G. Installation

1. Seed materials shall be inspected by the Engineer upon arrival at the job site and prior to planting. Any materials not in compliance with specifications shall not be accepted and shall be removed from the job site immediately.
2. All seed materials shall be protected from drying out and from wind damage during delivery.
3. All areas indicated as upland areas (Zone B) on the Contract Drawings shall be seeded, as well as all areas which are disturbed and not planted shall be seeded.
4. Seedbed Preparation – Scarify all compacted areas and remove all debris and obstacles such as rocks and stumps.

DIVISION VII - DETAILED SPECIFICATIONS –
CONTRACT HWQ411B

5. Do not broadcast seed by mechanical application when the wind velocity is such as to prevent uniform seed distribution.
6. Seed at a rate of 10 pounds per acre along with 10 pounds per acre of cover/nurse crop. The nurse crop may consist of annual ryegrass.
7. Time of Seeding – Permanent seeding shall be done within 15 days of final construction activities. Optimum seeding times are in the spring from March 15 – May 15 and in fall from September 15 – October 15. If construction is completed during mid-summer, seeding may be done if watering will be provided. After October 15 and up to March 15, mulch should be applied until the permanent seeding can be done during the recommended seeding dates.
8. Method of Seeding – Seed shall be broadcast by hand or mechanically using a drop-hopper. The seed shall then be sown to depths of 0-0.25" using an All-Terrain Vehicle (ATV) pulling a weighted drag of the same width as the ATV, with bolts inserted every 4-6" along its width in order to open up furrows in the soil of up to 0.25" in depth. The ATV should drag the seeded area a minimum of four (4) times.
9. Following the seeding operation, 10-10-10 fast release fertilizer shall be broadcast at a rate of 400 lbs/acre throughout the seeded area by hand or mechanically using a cyclone broadcaster. Seed shall be watered as recommended by the seed manufacturer to achieve specified growth coverage. Fertilizer shall not be applied in bioswale planting zones.
10. Mulching straw of oat or wheat stalks shall be applied at a rate of 2 tons per acre (100-200 bales/acre). Hay is not acceptable due to its high weed content.
11. Acceptable seeding will be 85% coverage of the open area with the seeded species. Any area not meeting this requirement shall be reseeded with the original seed mix.

H.

Maintenance

DIVISION VII - DETAILED SPECIFICATIONS –
CONTRACT HWQ411B

1. The maintenance period shall extend from start of planting, and be continuous until planting is accepted, in accordance with Addendum No. 1 Section GI-5.09.

I. Measurement and Payment

The quantity to be measured for payment under this section shall be the total area seeded areas furnished, planted and maintained. The contract price per square foot of seeding shall be as Item No. BMP-7.401-I.

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DIVISION VII - DETAILED SPECIFICATIONS –
CONTRACT HWQ411B

7.404A RESTORATION SPECIALIST (CONSTRUCTION MONITOR)

A. Description of Work

The Contractor is advised that all restoration work in the project area shall require the supervisory expertise of a Restoration Specialist. The Restoration Specialist shall supervise all restoration work performed by the Contractor and his/her Subcontractors for the duration of the project, in accordance with the plans, specifications and directions of the Engineer. The Restoration Specialist shall also be responsible for overseeing the implementation of the project's soil erosion control plan. Furthermore, the Restoration Specialist shall be responsible for overseeing all installation of plant material and seeding. The Restoration Specialist shall be responsible for preparing a restoration plan for any city property disturbed by sanitary or storm sewer construction. The Restoration Specialist shall report to the NYCDDC on-site representatives, its agents, or the Engineer. The qualifications of the Restoration Specialist shall be approved by the NYCDDC and on-site prior to the start of any work.

B. Qualifications

The Restoration Specialist utilized to perform the work required must have previous experience in work of this nature and in completing the necessary submittals required under this Contract. The Restoration Specialist shall be a Registered Landscape Architect or have equivalent professional experience. Prior to the start of work, the Contractor shall be required to submit the names and resumes of at least three prospective candidates to the Engineer. The Engineer shall approve the qualifications of the prospective candidates or alternatively ask for more choices, if the Engineer deems the candidates to be not qualified.

C. Site Monitoring

The Restoration Specialist shall monitor the Contractor's in-place erosion and sediment control devices, including, but not limited to, construction (limiting) fences, siltation fences, staked straw bales, etc., and shall notify the Contractor when maintenance or repair of these devices is necessary. The Restoration Specialist shall monitor related/adjacent construction to insure that these activities do not adversely impact restoration activities or the success of the restoration work.

D. Restoration Supervision

The Restoration Specialist shall supervise all aspects of the BMP installation including Wildlife Control and removal, sediment removal

DIVISION VII - DETAILED SPECIFICATIONS -
CONTRACT HWQ411B

work, plant and sod salvage, and perimeter restoration work. The Restoration Specialist shall oversee all landscaping activities including installation of plant material related to the BMP installation.

E. Design and Design Review

The Restoration Specialist shall prepare, design and review design work as needed during construction. This work shall include but not be limited to the following:

- a. research and prepare design revision/modification drawings,
- b. research and prepare revisions/modifications to detailed specifications,
- c. prepare supplemental field sketches,
- d. review and critique design modification drawings and supplemental drawings.

The Restoration Specialist shall undertake this work when directed by the NYCDDC representative on site, its agent, or the Engineer.

F. Photo Documentation

The Restoration Specialist shall keep a digital photograph log of the BMP and BMP-related portion of the project. The photo log will follow the progress of the project, in a clear and understandable progression, and shall incorporate before, in progress and completed photographs of BMP's and natural area restorations within the project. Fixed photopoints shall be used at each site to ensure that before and after photographs are taken from the same location and angle. The photo log will be utilized by NYCDDC for required reports, etc.

The Restoration Specialist shall use a digital camera with a minimum resolution of 4.1 megapixels for use during all phases of the project for photo-documentation purposes. The Restoration Specialist shall assemble the completed photo log onto CD's and transmit the complete photo log to the Engineer.

G. Monitoring Reports

The Restoration Specialist shall prepare and submit a Monitoring Report to the NYCDDC representative, its agent, or the Engineer following the completion of all planting and associated restoration activities. The

DIVISION VII - DETAILED SPECIFICATIONS –
CONTRACT HWQ411B

Restoration Specialist shall continue to submit an annual Monitoring Report until the guarantee period(s) for the plant material has expired. Six (6) copies of each report submittal shall be required.

The Restoration Specialist shall examine, monitor and report on the various components of the restoration and shall incorporate color photographs, color photocopies, graphs, etc., as appropriate. All information shall be reported in a concise format. The Monitoring Report shall:

- report on all construction activities related to landscaping and soil and erosion control,
- report the conditions of the vegetation planted within this Contract,
- quantify survival and cover rates and compare to permit requirements,
- recommend replacement species,
- report observed impacts to existing vegetation,
- report success rates in controlling erosion and sedimentation,
- report voluntary recruitment,
- present recommendations,
- give general commentary for increasing the success of future restoration projects.

H. Permit Adherence

The Restoration Specialist shall act as the Construction Monitor as per the requirements of the NYSDEC permit. The Restoration Specialist shall ensure all construction activities adhere to the requirements of the NYSDEC permit.

I. BMP As-Built Plans and Information

The Contractor shall be responsible for providing to the Restoration Specialist an as-built survey of all BMP areas as an electronic file. The Restoration Specialist shall verify the Contractor's information and include his/her landscape information and any other additional planting or

DIVISION VII - DETAILED SPECIFICATIONS –
CONTRACT HWQ411B

natural features. See the BMP As-Built section under the Special Provision section, specification section 7.414 for details and requirements for the survey(s).

J. Measurement and Payment

The quantity to be measured for payment under this section shall be the total number of hours necessary for the supervision of all restoration work within this Contract, site monitoring, design and diagram review, photo documentation, preparation of monitoring reports and completion of the as-built plans in accordance with the plans, specifications and direction of the Engineer, performed prior to the date of Substantial Completion.

Payment to the Restoration Specialist for all required work, including work performed both during active construction and after the date of Substantial Completion through the end of the three year Maintenance and Guarantee Period, shall be made during the period of active construction up to and including the date of Substantial Completion. There will be no transfer of contract monies during the Maintenance and Guarantee Period.

As the post-construction site monitoring, monitoring report preparation, and other related work must be undertaken and prepared during the three-year Maintenance and Guarantee Period, payment for this work shall be made by the Contractor to the Restoration Specialist prior to the Maintenance Guarantee Period.

For supplying all labor, materials and equipment necessary for Restoration Specialist, the Contractor shall receive a unit price bid.

The contract price per unit for Restoration Specialist shall be as indicated on the BID SCHEDULE OF PRICES Item No. BMP-7.404-A. The unit price bid shall include the costs for all labor, materials, equipment and incidental expenses necessary or required to complete the work in accordance with the plans and specifications to the satisfaction of the NYCDDC representative, its agent, or Engineer.

No separate or additional payment will be made for work performed in accordance with the requirements of this section during the Maintenance and Guarantee Period specified for the Landscaping work. In addition, said work shall be considered a part of the Maintenance and Guarantee and subject to the provisions thereof should the Contractor fail to complete this work as specified.

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DIVISION VII - DETAILED SPECIFICATIONS –
CONTRACT HWQ411B

7.404B EROSION AND SEDIMENT CONTROL LICENSED/CERTIFIED PROFESSIONAL

A. Description of Work

The Contractor is advised to retain the services of an independent Licensed/Certified professional with practical experience in the principles and practices of erosion and sediment control and Stormwater Management to prepare and certify a site specific Stormwater Pollution Prevention Plan (SWPPP) in compliance with the New York State Department of Environmental Conservation (NYSDEC) State Pollutants Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activities GP-0-10-001, issued pursuant to Article 17, Titles 7, 8, and Article 70 of the Environmental Conservation Law (ECL) . The Certified Professional shall be approved by NYCDDC and be present on-site prior to the start of any work.

Within thirty (30) days after the contract is registered, The Contractor shall submit a complete SWPPP and Notice of Intent (NOI) to the NYCDDC Infrastructure –Engineering Support Unit for review and comments. The Contractor through his Licensed/Certified Professional shall make all necessary revisions required and resubmit the SWPPP and the NOI for acceptance and signature. Work shall not begin until a permit identification number is issued by the NYSDEC, and an initial inspection is conducted by the Licensed/Certified Professional certifying that the appropriate control measures specified in the SWPPP have been adequately implemented to the satisfaction of the Resident Engineer and the Project Manager of the Engineering Support Unit.

B. Qualifications

The Licensed/Certified Professional employed to perform the required work must have previous experience in work of this nature and in completing the necessary submittals required under this Contract. The Certified Professional shall be a Professional Engineer or a Landscape Architect licensed to practice in New York State, or a Soil and Water Conservation Society Certified Professional in Erosion and Sediment Control (CPESC). Prior to the start of work, the Contractor is required to submit the names and resumes of at least three (3) prospective candidates to the NYCDDC for approval. The NYCDDC shall make a selection or alternatively ask for more choices, if they deem the candidates to be unqualified.

C. Site Monitoring, Inspection and Reports

DIVISION VII - DETAILED SPECIFICATIONS –
CONTRACT HWQ411B

The Certified Professional shall monitor the Contractor's in-place erosion and sediment control devices, including, but not limited to: Reinforced Silt Fence, Staked Straw Bales, Stabilized Construction Entrance, Storm Drain Inlet Protection Measure, and site dewatering measures, and shall notify the Contractor when maintenance or repair of these devices is necessary.

Following the start of construction activities, site inspections shall be conducted by the Certified Professional at least once a week and within 24 hours of rainfall events of 0.5 inches or greater. For construction sites where soils disturbance is greater than five (5) acres at one time, the Certified Professional shall conduct at least two (2) site inspections every seven (7) calendar days and within twenty-four (24) hours of the end of each rainfall event of 0.5 inches or greater. The two inspections shall be separated by a minimum of two (2) full calendar days. Subsequent to each inspection, the Certified Professional shall prepare an inspection report and submit the original to the Resident Engineer and one copy to the Infrastructure-Engineering Support Unit. At a minimum, the inspection report shall include, but not limited to, the following information:

1. Date and Time of inspection;
2. Name and Title of person performing the inspection;
3. A description of the weather and soil conditions (e.g dry, wet, saturated) at the time of the inspection;
4. A description of the condition of runoff at all points of discharge from the construction site. This shall include identification of any discharges of sediment from the construction site;
5. Record of any evidence of soil erosion on the site, potential for pollutants entering the drainage systems, problems at discharge points and signs of soil and mud transport from the site to the public road at the limits of the project;
6. Identification of all erosion and sediment control practices that need repair or maintenance;
7. Identification of all erosion and sediment practices that were not installed properly or are not functioning as designed and need to be reinstalled or replaced;
8. Description and sketch of areas that are disturbed at the time of the inspection and areas that have been stabilized (temporary and/or final) since the last inspection;
9. Corrective actions that must be taken to install, repair, replace or maintain erosion and sediment control practices; and to correct deficiencies identified with the construction of post-construction stormwater management practices;
10. Digital photographs, with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions. The Qualified Inspector shall attach paper color

DIVISION VII - DETAILED SPECIFICATIONS –
CONTRACT HWQ411B

copies of the digital photographs to the inspection report. He shall also take digital photographs with date stamp, that clearly show the conditions of the practice(s) after the corrective actions has been completed;

11. Within one business day of the completion of an inspection, the Qualified Inspector shall notify the Contractor and the Resident Engineer of any corrective actions that need to be taken. The Contractor shall begin implementing the corrective actions within one business day of this notification; and
12. All the inspection reports shall be signed by the Licensed Professional.

The Contractor shall retain a signed copy of the General Permit GP-0-10-001, NOI, SWPPP, signed MS4 SWPPP Acceptance form, NOI Acknowledgment Letter and all original inspection reports required by this general permit at the construction site in a prominent place for public viewing from the date of initiation of construction activities to the date of final stabilization and the Notice of Termination (NOT) has been submitted to the NYSDEC. These documents must be made available to the permitting authority upon request. Prior to starting construction, the Contractor shall certify in the site logbook that the SWPPP was prepared in accordance with the requirements of the permit and it meets all federal, state and local erosion and sediment control requirements.

In addition, the Contractor and Subcontractors shall identify at least one person who is an employee of the company that will be responsible for a day to day implementation of the SWPPP. The name and telephone number of this person should be listed in the SWPPP. This person shall be known as the Trained Contractor and shall have received a DEC-endorsed four (4) hours of Erosion and Sediment Control training. After receiving the initial training, the Trained Contractor shall attend a four (4) hours training every three (3) years. The Contractor shall ensure that at least one Trained Contractor is on site on a daily basis when soil disturbance activities are being performed.

Performing implementation of a SWPPP on a permitted construction project without a Trained Contractor on site daily is a violation of Part III.A.6 of the SPDES General Permit. Stormwater controls must be maintained in good operating condition until all disturbed soils are permanently stabilized. Control devices in need of repair should be repaired promptly after identification.

Prior to filing of the Notice of Termination (NOT), or at the end of the permit term, the Contractor shall have the Licensed Professional perform a final site inspection. The Licensed Professional shall certify that the site

DIVISION VII - DETAILED SPECIFICATIONS –
CONTRACT HWQ411B

has undergone final stabilization using either vegetative or structural stabilization methods and that all temporary erosion and sediment controls (such as silt fencing) not needed for long term erosion control have been removed. Subsequently, the Contractor shall submit a complete NOT to the Engineering Support Unit to terminate the permit coverage.

Additionally, the Licensed Professional must identify all permanent Stormwater management structures that have been constructed, and provide the owner(s) of such structures with a manual describing the operation and maintenance practices that will be necessary in order for the structures to function as designed after the site has been stabilized.

The Licensed Professional must also certify that the permanent structures have been constructed as described in the SWPPP.

D. Contractor's Liability.

The Contractor shall be liable for any discharge that either causes or contributes to a violation of water quality standards as contained in Parts 700 through 705 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York. Should any storm water runoff from the site violate the water quality standards, the Contractor will be directed to take immediate steps, at his own expense, to rectify the situation and prevent any further sediment from entering the storm sewer system.

In the event that pollutants are discharged to the storm water system due to the Contractor's negligence, the Resident Engineer will direct the Contractor to cease any or all construction activities contributing to the release of these pollutants. The Contractor shall be held responsible, at his own cost, for any and all necessary actions to remedy the damage.

Furthermore, failure of the Contractor and Sub-contractor(s) to strictly adhere to any permit requirements shall constitute a permit violation that could result in substantial criminal, civil, and administrative penalties.

It is the Contractor's responsibility to pay all the SPDES permit fees which shall consist of the yearly regulatory fee, the initial authorization fee per acre of land disturbed and per acre of future impervious area. The Contractor shall be liable for all penalties incurred due to his failure to pay these fees on time.

E. Measurement and Payment

The quantity to be measured for payment under this section shall be the total number of days necessary to prepare the required reports to secure the permits; conduct the inspection and supervision of all erosion and

DIVISION VII - DETAILED SPECIFICATIONS –
CONTRACT HWQ411B

sediment control works within this Contract, site monitoring, photo documentation, and preparation of monitoring reports in accordance with the plans, specifications and direction of the resident engineer, performed prior to the date of substantial completion.

The Contractor shall receive a unit price bid for supplying all labor, materials and equipment required by the Certified Professional.

The contract price per unit for the Licensed/Certified Professional shall be as indicated on the Bid Schedule of Price for Item No. 7.404-B. The unit price bid shall include, but not be limited to, the cost of furnishing all the labor, materials, fees, permits and testing required to prepare the SWPPP, provide and construct all erosion and sediment control devices in accordance with the approved SWPPP; inspect and monitor the work; comply with NYSDEC permitting requirements and all necessary incidentals to complete the work all in accordance with the specifications and the directions of the Engineer.

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END OF ADDENUM NO. 4
(This addendum consists of thirty-six (36) pages)

THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE

JULY 17, 2013

ADDENDUM NO. 5

PROJECT ID: HWQ411B

RECONSTRUCTION OF ALBERT ROAD AREA
INCLUDING SEWER, WATERMAIN, STREET LIGHTING,
AND TRAFFIC SIGNAL WORK

TOGETHER WITH ALL WORK INCIDENTAL THERETO

BOROUGH OF QUEENS
CITY OF NEW YORK

SPECIFICATIONS FOR
HANDLING, TRANSPORTATION AND DISPOSAL
OF NONHAZARDOUS AND POTENTIALLY HAZARDOUS
CONTAMINATED MATERIALS

This Addendum is issued for the purpose of amending the requirements of the Contract Documents and hereby made part of said Contract Documents to the same extent as if it was originally included herein.

Table of Contents

ITEM 8.01 C1	<u>HANDLING, TRANSPORTING AND DISPOSAL OF NON-HAZARDOUS CONTAMINATED SOILS</u>	A5-1
ITEM 8.01 C2	<u>SAMPLING AND TESTING OF CONTAMINATED/POTENTIALLY HAZARDOUS SOILS FOR DISPOSAL PARAMETERS</u>	A5-7
ITEM 8.01 H	<u>HANDLING, TRANSPORTING AND DISPOSAL OF HAZARDOUS SOILS</u>	A5-9
ITEM 8.01 S	<u>HEALTH AND SAFETY</u>	A5-15
ITEM 8.01 W1	<u>REMOVAL, TREATMENT AND DISCHARGE/DISPOSAL OF CONTAMINATED WATER</u>	A5-20
ITEM 8.01 W2	<u>SAMPLING AND TESTING OF CONTAMINATED WATER</u>	A5-27

- Attachments**
1. New York City Department of Environmental Protection Limitations for Effluent to Storm-Sanitary or Combined Sewers Parameters
 2. Applicable Regulations
 3. Definitions
 4. Limited Subsurface Corridor Investigation Report

ITEM 8.01 C1 HANDLING, TRANSPORTING AND DISPOSAL OF NON-HAZARDOUS CONTAMINATED SOILS

8.01 C1.1 WORK TO INCLUDE

General: This work shall consist of the handling, transportation and disposal of non-hazardous contaminated soils. The materials covered by this specification are soils that are contaminated with petroleum or chemical products but cannot be classified as hazardous waste. For the purpose of this specification, soil shall be defined as any material excavated below the pavement and base for pavement.

Non-hazardous contaminated soils are defined as soils exhibiting one or more of the following characteristics:

- ◆ Elevated Photo-Ionization Detector (PID) readings, subsequently confirmed by lab analysis
- ◆ Visual evidence of contamination
- ◆ Petroleum and/or chemical odors

Non-hazardous contaminated soils must be stockpiled at an off-site approved location or secured on-site by the Contractor, meeting all required Federal, State and Local stipulations. Sampling and laboratory analysis must be conducted to determine if the soils are hazardous, unless the alternative procedure as defined under subsection 8.01 C1.1 A.5 has been agreed upon by treatment facilities. Contaminated soils determined to be non-hazardous shall be handled in accordance with the specifications herein for Item 8.01 C1. Contaminated soils determined to be hazardous shall be handled in accordance with the specifications for Item 8.01 H – Handling, Transporting and Disposal of Hazardous Soils.

The Contractor shall retain the services of an independent Environmental Consultant, as specified under Item 8.01 S – Health and Safety, to oversee the work required under this Item.

Non-hazardous soils shall be delivered to the disposal or treatment facility within thirty (30) calendar days after excavation.

The Contractor shall conduct sampling and analysis of the impacted soils as specified under Item 8.01 C2 – Sampling and Testing of Contaminated/Potentially Hazardous Soils for Disposal Parameters. The laboratory results shall be forwarded to DDC Program Administration, Engineering Support Services (ESS) for review to determine if the soils will be handled and disposed of as contaminated regulated soils or hazardous waste. No other soils shall be sampled or tested without the DDC's approval or direction.

The Contractor shall ensure that all operations associated with the handling, sampling, loading, transportation, and disposal of non-hazardous contaminated soils are in compliance with all applicable Federal, State, and City statutes and regulations.

The Contractor shall document the excavation, handling, transportation and disposal of non-hazardous contaminated soils. The Contractor shall supply all equipment, material and labor required to conduct the specified work of this Item.

A. Material Handling Plan: Within forty-five (45) calendar days after award of Contract, the Contractor shall submit to the Program Administration, ESS for review, a Material Handling Plan (MHP). The MHP must be approved by the Program Administration, ESS, prior to the Contractor's commencement of work. The MHP shall, at a minimum, consist of:

1. The Contractor's procedures for identifying non-hazardous contaminated soils during excavation, including the specific model and manufacturer of intended organic vapor

- monitoring equipment and calibration procedures to be used. It should also include the training and experience of the personnel who will operate the equipment.
2. The Contractor's procedures for safely handling non-hazardous contaminated soils. The procedures must include personnel safety and health as well as environmental protection considerations.
 3. Name, address, New York State Department of Health's (DOH) Environmental Laboratories Accreditation Program (ELAP) status and telephone number of the proposed laboratory for analysis of representative soil samples. The ELAP for the intended analysis must approve the laboratory.
 4. Identification of the Contractor's proposed waste transporter(s). This information shall include:
 - a. Name and Waste Transporter Permit Number
 - b. Address
 - c. Name of responsible contact for the hauler
 - d. Telephone number for the contact
 - e. Any and all necessary permit authorizations for each type of waste transported
 - f. Previous experience in performing the type of work specified herein
 5. All staging/stockpiling areas (if stockpiling areas are intended and available), or alternate procedures that will be used. Alternate procedures may include, but are not limited to, agreements from the intended disposal or treatment facilities to accept boring data and/or analytical data previously obtained during the site characterization so that materials may be directly loaded into vehicles for shipment to the disposal facility.
 6. A backup facility should the staging/stockpile areas become unavailable, insufficient in area or not be present by some other unforeseen difficulty.
 7. Identification of the Contractor's two proposed Treatment Storage or Disposal (TSD) facilities for non-hazardous contaminated soils (primary and back-up) for final disposal of the soils. The primary TSD shall be an approved soil recycling/treatment facility. The backup facility may be a recycling/treatment facility or a New York State Department of Environmental Conservation (DEC) approved lined landfill or other facility approved by DEC to accept this material. The information required for each facility shall include:
 - a. Facility name and the State identification number
 - (1) Facility location
 - (2) Name of responsible contact for the facility
 - (3) Telephone number for contact
 - (4) Signed letter of agreement to accept waste as specified in this contract
 - (5) Unit of measure utilized at facility for costing purposes
 - b. A listing of all permits, licenses, letters of approval, and other authorizations to operate, which are currently held and valid for the proposed facility.

- c. A listing of all permits, licenses, letters of approval, and other authorizations to operate which have been applied for by the proposed facility but not yet granted or issued.
 - d. The Contractor shall specify and describe the disposal/containment unit(s) that the proposed facility will use to manage the waste. The Contractor shall identify the capacity available in the units and the capacity reserved for the subject waste.
 - e. The Contractor shall provide the date of the proposed facility's last compliance inspection.
 - f. A list of all active (unresolved) compliance orders (or agreements), enforcement notices, or notices of violations issued to the proposed facility shall be provided. The source and nature of the cause of violation shall be stated, if known.
8. Description of all sampling and field/laboratory analyses that will be needed to obtain disposal facility approval.

8.01 C1.2 MATERIALS

- A. Containers shall be as required in the United State Department of Transportation (DOT) regulations.
- B. Polyethylene to be placed under (20 mil. thickness minimum) and over (10 mil. thickness minimum) soil piles.
- C. The Contractor shall assure that the waste hauler's appropriate choice of vehicles and operating practices shall prevent spillage or leakage of contaminated material from occurring en route.
- D. The Contractor shall provide, install and maintain any temporary loading facilities on site as required until completion of material handling activities. The location and design of any facilities shall be included in the MHP and be approved by the Program Administration, ESS.

8.01 C1.3 CONSTRUCTION DETAILS

A. Material Handling

1. Immediately after excavation of non-hazardous contaminated soil the Contractor shall:
 - a. Load material directly onto trucks/tankers/roll offs for disposal off site; or
 - b. If interim stockpiling is required, place on a minimum of 20 mil. or equivalent plastic ground cloth and cover by minimum of 10 mil. polyethylene sheeting or equivalent to protect against leaching or runoff of contaminants into groundwater or stormwater. Weight or secure the sheeting by appropriate means and seal seams as approved by the DDC to prevent tearing or removal by weather. Grade surrounding surface to provide for positive drainage away from pile. Stockpile shall not exceed 100 cubic yards.
2. Institute appropriate procedures and security measures to ensure the protection of site personnel and the public from contaminated materials as described in the approved MHP and Item 8.01 S - Health and Safety.
3. Any soil encountered that appears to contain unknown contaminants (based on visual, odor, or other observation), or that vary substantially from the material originally

identified must be segregated in stockpiles and the independent Environmental Consultant promptly notified. Construct stockpiles to the same requirements as stated in subsection A.1.b above.

4. Provide any dewatering that is necessary to complete the work. Contaminated water shall be disposed of in accordance with Item 8.01 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 Administration, ESS shall review and approve waste profiles before transportation to the TSD facility.**

2. Hauling

- a. The Contractor shall coordinate manifesting, placarding of shipments, and vehicle decontamination. All quantities shall also be measured and recorded upon arrival at the disposal or treatment facility. If any deviation between the two records occurs, the matter is to be reported immediately to the DDC and to be resolved by the Contractor to the satisfaction of the DDC.

- b. The Contractor shall be held responsible, at its own cost for any and all actions necessary to remedy situations involving material spilled in transit or mud and dust tracked off-site.
 - c. The Contractor shall ensure that trucks are protected against contamination by properly covering and lining them with compatible material (such as polyethylene) or by decontaminating them prior to and between acceptances of loads.
 - d. The Contractor shall be responsible for inspecting the access routes for road conditions, overhead clearance, and weight restrictions.
 - e. The Contractor shall only use the transporter(s) identified in the MHP for the performance of work. Any use of substitute or additional transporters must have previous written approval from the Program Administration, ESS at no additional cost to the City.
 - f. The Contractor shall develop, document, and implement a policy for accident prevention.
 - g. The Contractor shall not combine contaminated materials from other projects with material from this project.
 - h. No material shall be transported until approved by the DDC.
3. Off-Site Disposal
- a. The Contractor shall use only the facility(ies) identified in the MPH for the performance of the work. Substitutions or additions shall not be permitted without prior written approval from the Program Administration, ESS, and if approved shall be at no extra cost to the City.
 - b. The Contractor shall be responsible for acceptance of the materials at an approved facility, for ensuring that the facility is properly permitted to accept the stated materials, and that the facility provides the stated treatment and/or disposal services.
 - c. The DDC reserves the right to contact and visit the disposal or treatment facility and regulatory agencies to verify the agreement to accept the stated materials and to verify any other information provided.
 - d. In the event that the identified and approved facility ceases to accept the stated materials or the facility ceases operations, it is the Contractor's responsibility to locate an alternate approved and permitted facility(ies) for accepting materials. The alternate facility(ies) must be approved in writing by the DDC in the same manner and with the same requirements as for the original facility(ies). This shall be done at no extra cost or delay to the City.
 - e. The Contractor shall obtain manifest forms, and complete the shipment manifest records required by the appropriate regulatory agencies for verifying the material and quantity of each load in unit of volume and weight. Copies of each manifest shall be submitted to the DDC within four (4) business days following shipment, and within three (3) business days after notification of receipt of the facility. Any manifest discrepancies shall be reported immediately to the DDC and be resolved by the Contractor to the satisfaction of the DDC.
4. Equipment and Vehicle Decontamination
- a. The Contractor shall design and construct a portable decontamination station to be

used to decontaminate equipment and vehicles exiting from the exclusion zone. The cost for this work will be paid under Item 8.01 S - Health and Safety.

- b. Water generated during the decontamination process shall be disposed of in accordance with Item 8.01 W1 – Removal, Treatment and Discharge/Disposal of Contaminated Water.

8.01 C1.4 METHOD OF MEASUREMENT

Quantities for non-hazardous contaminated soils shall be measured in tons. The tonnage will be determined by off-site truck scales, as per Subsection 8.01 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, plant, equipment, and insurance for excavation, handling, transportation, disposal, documentation, fees, permits, loading, stockpiling, hauling, and any other incidentals necessary to complete all the work as specified herein for handling, transporting, and disposal of non-hazardous contaminated soil.
- B. Final disposal of hazardous soil shall be paid for under Item 8.01 H – Handling, Transporting and Disposal of Hazardous Soils. Disposal of decontamination water shall be paid for under Item 8.01 W1 – Removal, Treatment and Discharge/Disposal of Contaminated Water.
- C. Backfill will be paid for under its respective item as specified in the contract document.
- D. The independent Environmental Consultant shall be paid under Item 8.01 S – Health and Safety.

Payment will be made under:

<u>ITEM NUMBER</u>	<u>ITEM</u>	<u>PAYMENT UNIT</u>
8.01 C1	Handling, Transporting, and Disposal of Non-Hazardous Contaminated Soil	Tons

ITEM 8.01 C2 SAMPLING AND TESTING OF CONTAMINATED/ POTENTIALLY HAZARDOUS SOIL FOR DISPOSAL PARAMETERS**8.01 C2.1 WORK TO INCLUDE****A. Description**

The work shall consist of collecting and analyzing representative soil samples for parameters typically requested by the disposal facilities.

B. Sampling and Laboratory Analysis

1. At least thirty (30) days prior to the commencement of work, the Contractor's independent Environmental Consultant must submit a Soil Sampling Plan/Field Sampling Plan (SSP/FSP) to the Program Administration, Engineering Support Services (ESS) for review and approval. The plan shall include the name, address, DOH's ELAP status, and telephone numbers of the proposed laboratory. The plan shall also include training and experience of the personnel who will collect the samples.
2. The Contractor shall sample and analyze representative samples of the contaminated/potentially hazardous soils. For stockpiled soils, the Contractor shall collect and analyze one (1) composite sample per 100 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 rush four (4) calendar days turn around time and analytical results must be submitted to Program Administration, ESS within five (5) calendar days after sample collection.
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, plant, equipment, and insurance necessary for sampling, handling, transporting, testing, documentation, fees, permits and any other incidentals necessary to complete the work as specified herein for sampling and testing of contaminated/potentially hazardous soil.

Payment will be made under:

ITEM NUMBER	ITEM	PAYMENT UNIT
8.01 C2	Sampling and Testing of Contaminated/ Potentially Hazardous Soil for Disposal Parameters	Set

ITEM 8.01 H HANDLING, TRANSPORTING, AND DISPOSAL OF HAZARDOUS SOILS

8.01 H.1 WORK TO INCLUDE

General: This work shall consist of the handling, transportation and disposal of soils or materials that are listed as hazardous wastes or exhibit any of the characteristics of a hazardous waste, namely ignitability, corrosivity, reactivity, and toxicity, as defined in 6 NYCRR Part 371, Section 371.3 and 40 CFR Section 261. For the purpose of this specification, soils shall be defined as any materials excavated below the pavement and base for pavement.

Contaminated soils determined to be hazardous under Item 8.01 C2 shall be handled, transported, and disposed of under Item 8.01 H in accordance with the specifications herein.

The independent Environmental Consultant retained by the Contractor, as specified under Item 8.01 S – Health and Safety, shall conduct sampling and analysis of above soils to determine which soils are hazardous.

All work under Item 8.01 H shall be performed under the direct supervision of the Contractor's Environmental Consultant, as approved by the Program Administration, Engineering Support Services (ESS).

The Contractor shall ensure that all operations associated with the handling, sampling, loading, transportation, and disposal of hazardous materials are in compliance with the applicable Federal, State, and Local statutes and regulations.

The Contractor shall document the excavation, handling, sampling, and testing, transportation and disposal of hazardous soils. The City shall be listed in the disposal documents as the waste generator.

The Contractor shall supply all equipment, material and labor required to conduct the specified work of this section.

The Contractor shall ensure that all operations associated with the handling, sampling, loading, transportation and disposal of hazardous soils are conducted in a manner to protect site personnel, the public and the environment, in accordance with all applicable Federal, State, and Local laws and regulations.

The Contractor shall decontaminate all equipment prior to its removal from the exclusion zone and/or following contact with hazardous materials, as detailed in Item 8.01 S - Health and Safety. Water generated during the decontamination process shall be disposed of under Item 8.01 W1 – Removal, Treatment and Discharge/Disposal of Contaminated Water.

A. Material Handling Plan: Within forty-five (45) calendar days after award of Contract, the Contractor shall submit to the Program Administration, ESS for review, a Material Handling Plan (MHP). The MHP must be approved by the Program Administration, ESS, prior to the Contractor's commencement of work. The MHP shall, at a minimum, consist of:

1. The Contractor's procedures for identifying contaminated/potentially hazardous soils during excavation, including instrumentation and calibration procedures to be used.
2. The Contractor's procedures for safely handling hazardous soils or soils which have not yet been tested but are believed to be potentially hazardous.
3. Identification of the Contractor's proposed waste transporter(s). This information shall include:
 - a. Name and waste transporter permit number

- b. Address
 - c. Name of responsible contact for the hauler
 - d. Telephone number for the contact
 - e. Any and all necessary permit authorizations for each type of waste transported
 - f. Previous experience in performing the type of work specified herein
4. All staging/stockpiling areas (if stockpiling areas are intended and available), or alternate procedures that will be used. Alternate procedures could include, but are not limited to, agreements from the intended disposal or treatment facilities to accept boring data and/or analytical data previously obtained during the site characterization so that materials may be directly loaded into vehicles for shipment to the disposal facility or the use of off-site stockpiling locations approved by the DEC.
 5. A backup facility, should the staging/stockpile areas become unavailable, insufficient in area or not be present by some other unforeseen difficulty.
 6. Identification of the Contractor's two proposed United State Environmental Protection Agency (EPA) or DEC approved RCRA TSD facilities for hazardous soils.
 7. The Contractor shall submit the following information prior to any transportation of soils regarding the temporary and final off-site TSD or facilities where it is proposing to take hazardous soils. The expense of furnishing all information will be included in the Contractor's bid price:
 - a. General Information
 - (1) Facility name and the EPA identification number
 - (2) Facility location
 - (3) Name of responsible contact for the facility
 - (4) Telephone number for contact
 - (5) Signed letter of agreement to accept waste as specified in this contract
 - (6) Signed letter of agreement with a TSD for disposal of waste that may not be land-disposed
 - (7) Unit of measure utilized at each facility for costing purposes
 - b. A listing of all permits, licenses, letters of approval, and other authorizations to operate, which are currently held and valid for the proposed facility as they pertain to receipt and management of wastes derived from this Contract.
 - c. A listing of all permits, licenses, letters of approval, and other authorizations to operate which have been applied for by the proposed facility.
 - d. The Contractor shall specify and describe the disposal/containment unit(s) that the proposed facility will use to manage the waste. The Contractor shall identify the capacity available in the units and the capacity reserved for the subject waste.
 - e. The Contractor shall provide the date of the proposed facility(ies) last compliance inspection under RCRA.

- f. A list of all active (unresolved) compliance orders, agreements, enforcement notices or notices of violations issued to the proposed facility shall be approved. The source and nature of the cause of violation shall be stated, if known.
8. Description of all sampling and analyses that will be needed to obtain disposal facility approval.

8.01 H.2 MATERIALS

- A. Containers shall be watertight as required in the DOT regulations and must meet all applicable regulations including but not limited to those in Attachment 2.
- B. Polyethylene (20 mil. thickness minimum) to be placed under and (10 mil. thickness minimum) over soil piles. If soils are placed in drums, polyethylene must be placed over the drums.

8.01 H1.3 CONSTRUCTION DETAILS

A. Material Handling

1. The Contractor shall institute procedures to protect site personnel and the public from the non-hazardous and hazardous materials as described in Section 8.01 S - Health and Safety.
2. The Contractor shall handle hazardous soil as approved in the MHP.
3. Stockpiled materials at the temporary TSD facility shall be handled according to the facility requirements but at a minimum: shall be drummed or placed on and covered with polyethylene to protect against erosion and leaching into surrounding soils, the stockpile area shall be graded for positive drainage away from the pile, and shall be labeled while being held for sampling prior to permanent disposal.
4. Provide any dewatering that is necessary to complete the work. Water shall be disposed of in accordance with Item 8.01 W1 – Removal, Treatment and Discharge/Disposal of Contaminated Water.

B. Off-Site Transportation and Disposal

1. The Contractor shall furnish all labor, equipment and supplies required to transport hazardous materials from the work area to the off-site TSD facility(ies) and to acquire any other items and services required for transporting hazardous materials for storage and/or disposal at an approved off-site facility.
2. Weight Measurement
 - a. The Contractor shall submit the name and location of the facility where an off-site scale is located. The Contractor shall also submit a plan to the DDC for review outlining procedures on controlling trucks leaving the work site and on-route to the off-site scale. The Contractor shall be responsible for tracking all materials/vehicles from the site to the off-site scale.
 - b. The Contractor shall provide to the DDC certified tare and gross weight slips for each load received at the accepted facility which shall be attached to each returned manifest.

3. General

- a. Manifests: The Contractor shall organize and maintain the material shipment records/manifests required by law.
- b. The Contractor shall coordinate the schedule for truck arrival and material deliveries at the job site to meet the approved project schedule. The schedule shall be compatible with the availability of equipment and personnel for material handling at the job site.
- c. The Contractor shall inspect all vehicles leaving the project site to ensure that hazardous soils adhering to the wheels or under carriage are removed prior to the vehicle leaving the site.
- d. The Contractor shall obtain letters of commitment from the waste haulers and the TSD facility to haul and accept shipments. The letter shall indicate agreement to handle and accept the specified estimated quantities and types of material during the time period specified in the project schedule and any time extension as deemed as necessary.

4. Hauling

- a. The Contractor shall not deliver waste to any facility other than the TSD facility(ies) listed on the shipping manifest.
- b. The Contractor shall coordinate manifesting, placarding, of shipments, and vehicle decontamination. All quantities shall also be measured and recorded upon arrival at the TSD facility. If any deviation between the two records occurs, the matter is to be reported immediately to the DDC and to be resolved by the Contractor to the satisfaction of the DDC.
- c. The Contractor shall be held responsible, at its own expense, for any and all actions necessary to remedy situations involving material spilled in transit or mud and dust tracked off-site.
- d. The Contractor shall ensure that trucks are protected against contamination by properly covering and lining them with compatible material (such as polyethylene) or by decontaminating them prior to any use other than hauling hazardous materials.
- e. The Contractor shall be responsible for inspecting the access routes for road conditions, overhead clearance, and weight restrictions.
- f. The Contractor shall only use the transporter(s) identified in the MHP for the performance of work. Only a transporter with a current Part 364 Waste Transporter Permit from the DEC may transport this material. Any use of substitute or additional transporters must have previous written approval from the DDC at no additional cost to the City.
- g. The Contractor shall develop, document, and implement a policy for accident prevention.
- h. The Contractor shall not combine hazardous materials from other projects with material from this project.
- i. **The Contractor shall obtain for the City an EPA hazardous waste generator identification number and a representative of Program Administration, ESS will review and sign the manifest as the generator.**

- j. No materials shall be transported until approved by the DDC.
- 5. Off-Site Disposal
 - a. The Contractor shall be responsible for acceptance of the materials at an approved TSD facility, for ensuring that the facility is properly permitted to accept the stated materials, and that the facility provides the stated storage and/or disposal services.
 - b. In the event that the identified and approved facility ceases to accept the stated materials or the facility ceases operations, it is the Contractor's responsibility to locate an alternate approved and permitted facility(ies) for accepting materials. The Contractor is responsible for making the necessary arrangements to utilize the facility(ies), and the alternate facility(ies) must be approved in writing by the DDC in the same manner and with the same requirements as for the original facility(ies). This shall be done with no extra cost or delay to the City.
 - c. The Contractor shall submit all results and weights to the DDC.
 - d. **The Contractor is responsible to pay all fees associated with the generation and disposal of all excavated hazardous waste. These fees include, but are not limited to, the New York State Department of Finance and Taxation (DFT) quarterly fees for hazardous waste and the New York State DEC annual hazardous waste regulatory fee program. The Contractor shall submit a copy of proof of payment to the DDC and Program Administration, ESS.**

6. Equipment and Vehicle Decontamination

The Contractor shall design and construct a portable decontamination station to be used to decontaminate equipment and vehicles exiting from the exclusion zone. The cost for this work shall be paid under Item 8.01 S - Health and Safety. Disposal of decontamination liquids is described under Item 8.01 W1 - Removal, Treatment and Discharge/Disposal of Contaminated Water.

7. Record Keeping

The Contractor shall obtain manifest forms, and complete the shipment manifest records required by the appropriate regulatory agencies for verifying the material and quantity of each load in unit of volume and weight. Copies of each manifest shall be submitted to the DDC within four (4) business days following shipment, and within three (3) business days after notification of receipt of the facility. Any manifest discrepancies shall be reported immediately to the DDC and be resolved by the Contractor to the satisfaction of the DDC.

8.01 H.4 METHOD MEASUREMENT

Quantities for hazardous soil shall be measured in tons satisfactorily delivered to the treatment, storage or disposal facility. The tonnage will be determined by off-site truck scales, as per subsection 8.01 H1.3.B.2, that are capable of generating load tickets.

8.01 H.5 PRICE TO COVER

- A. The unit price bid per ton for Item 8.01 H shall include the cost of furnishing all labor, materials, plant, equipment, and insurance for excavation, handling, transportation, disposal, documentation, permits, fees, taxes, stockpiling, hauling, and any other incidentals necessary to

complete the work as specified herein for handling, transporting and disposal of hazardous soils.

- B. Final disposal of non-hazardous materials shall be paid for under Item 8.01 C1 – Handling, Transporting and Disposal of Non-Hazardous Soils. Disposal of decontamination water shall be paid under Item 8.01 W1 – Removal, Treatment and Discharge/Disposal of Contaminated Water.
- C The independent Environmental Consultant shall be paid under Item 8.01 S – Health and Safety.
- D. Backfill will be paid for under its respective item.

Payment will be made under:

<u>ITEM NUMBER</u>	<u>ITEM</u>	<u>PAYMENT UNIT</u>
8.01 H	Handling, Transporting, and Disposal of Hazardous Soils	Tons

ITEM 8.01 S HEALTH AND SAFETY**8.01 S.1 WORK TO INCLUDE**Health and Safety Requirements**A. Scope of Work**

It is the Contractor's responsibility to stage and conduct his work in a safe manner. The Contractor shall implement a Health and Safety Plan (HASP) for contaminated/hazardous soil intrusive activities as set forth in Occupational Safety and Health Administration (OSHA) Standards 1910.120 and 1926.650-652. The Contractor shall ensure that all workers have at a minimum hazard awareness training. The Contractor shall segregate contaminated work area in secured exclusion zones. These zones shall limit access to Contractor personnel specifically trained to enter the work area. The exclusion zone shall be set up to secure the area from the public and untrained personnel. The project health and safety program shall apply to all construction personnel including persons entering the work area. In addition, the Contractor shall protect the public from on-site hazards, including subsurface contaminants associated with on-site activities. The HASP shall be signed off by a Certified Industrial Hygienist and reviewed by Program Administration, Engineering Support Services (ESS).

Work shall include, but not be limited to:

1. Implementation of a baseline medical program.
2. Providing safety equipment and protective clothing for site personnel, including maintenance of equipment on a daily basis; replacement of disposable equipment as required; decontamination of clothing, equipment and personnel; and providing all other health and safety measures.
3. Providing, installing, operating and maintaining on-site emergency medical first aid equipment as specified in this section for which payment is not provided under other pay items in this Contract.
4. Providing, installing, operating, maintaining and decommissioning all equipment and personnel decontamination facilities specified within this section, including, but not limited to, the decontamination pad, decontamination water supply, decontamination water collection equipment and all other items and services required for the implementation of the health and safety requirements for which pay items are not provided elsewhere in this Contract.
5. Provide the minimum health and safety requirements for excavation activities within the limits of this Contract.
6. Implement and enforce a HASP: The HASP as presented in these specifications is dynamic with provisions for change to reflect new information, new practices or procedures, changing site environmental conditions or other situations which may affect site workers and the public. The HASP will also address measures for community protection, accident prevention, personnel protection, emergency response/contingency planning, air monitoring, odor control and hazardous chemicals expected on site. Providing a Confined Space Entry Program as defined in the Occupational Safety and Health Act, Confined Space Entry Standard, 29 CFR 1910.146.

B. Environmental Consulting Services

The Contractor shall retain an independent Environmental Consultant to obtain all permits and perform all field screening, air monitoring, community air monitoring, soil sampling, and health and safety services. The independent Environmental Consultant shall at a minimum provide documentation to the Program Administration, ESS demonstrating the minimum requirements as set forth below:

1. The independent Environmental Consultant project supervisor on site and other designated key personnel shall have a minimum of three (3) years experience in the environmental field dealing with issues associated with contaminated soils. Such experience shall include oversight on environmental, specifically volatile organic compound and dust monitoring services as a routine part of its daily operations.
2. The independent Environmental Consultant must be experienced in work of this nature, size, and complexity and must have previous experience in working with the DEC.
3. The independent Environmental Consultant shall furnish a project listing identifying the location, nature of services provided, owner, owner's contact, contact's telephone number, project duration and value for at least five (5) projects within the last three (3) years.
4. If conditions within the exclusion zone are deemed hazardous, then the Contractor and its independent Environmental Consultant shall ensure that all personnel working within identified exclusion zones and/or involved (direct contact) with the handling, storage or transport of hazardous and contaminated materials shall have completed a minimum of forty (40) hours of Health and Safety Training on Hazardous Waste Sites in accordance with 29 CFR 1910.120(e). The training program shall be conducted by a qualified safety instructor. If conditions in the exclusion zone are deemed to be non-hazardous, the independent Environmental Consultant shall provide site specific training.
5. The Contractor shall ensure that on-site management and supervisors directly responsible for or who supervise employees engaged in hazardous waste operations shall receive the training specified in above and at least eight (8) additional hours of specialized training on managing such operations at the time of job assignment.

C. Submittals

1. The Contractor shall submit, within forty-five (45) calendar days after the contract award, a written HASP as specified herein, to Program Administration, ESS for review and comment. The Contractor shall make all necessary revisions required by Program Administration, ESS and resubmit the HASP to the Program Administration, ESS for acceptance. Start-up work for the project will not be permitted until written acceptance has been issued by the Program Administration, ESS.
2. Daily safety logs shall be maintained by the Contractor and shall be submitted to the DDC either on request or on completion of the work. Training logs shall be maintained by the Contractor and submitted to the DDC either on request or on completion of the work. Daily logs on air monitoring during excavation activities shall be prepared and maintained by the Contractor and submitted to the DDC either on request or upon completion of the work.
3. A closeout report shall be submitted by the Contractor to the DDC upon completion of the work within the defined exclusion zones. This report shall summarize the daily safety and monitoring logs and provides an overview of the Contractor's performance

regarding environmental and safety issues. The report shall carefully document all areas where contamination has been found including pictures, addresses of locations, and potential sources.

4. Medical Surveillance Examinations: The Contractor shall submit to the DDC the name, office address and telephone number of the medical consultant utilized. Evidence of baseline medical examinations together with the evidence of the ability to wear National Institute for Occupational Safety and Health (NIOSH) approved respirators (as specified in American National Standards Institute (ANSI) Z88.6) shall be provided to the DDC for all construction personnel who are to enter the exclusion zones.
5. Accident Reports: All accidents, spills, or other health and safety incidents shall be reported to the DDC.

D. Health and Safety Plan

The HASP shall comply with OSHA regulations 29 CFR 1910.120/1926.65. This document shall at a minimum contain the following:

1. Description of work to be performed
2. Site description
3. Key personnel
4. Worker training procedures
5. Work practices and segregation of work area
6. Hazardous substance evaluation
7. Hazard assessment
8. Personal and community air monitoring procedures and action levels
9. Personal protective equipment
10. Decontamination procedures
11. Safety rules
12. Emergency procedures
13. Spill control, dust control, vapor/odor suppression procedures
14. Identification of the nearest hospital and route
15. Confined space procedures
16. Excavation safety procedures

8.01 S.2 MEASUREMENT

Health and Safety Requirements

- A. 25% of the lump sum price will be paid when the following items are implemented or mobilized:

- Medical surveillance program
- Health and safety training
- Health and safety plan
- Environmental and personnel monitoring
- Instrumentation
- Spill control
- Dust control
- Personnel and equipment decontamination facilities
- Personnel protective clothing
- Communications
- Mobilization

- B. 50% will be paid in proportional monthly amounts over the period of work.
- C. 25% will be paid when the operation is demobilized and removed from the project site.

8.01 S.3 PRICE TO COVER

Health and Safety Requirements

The lump sum price bid for the health and safety requirements shall include all labor, materials, equipment, and insurance necessary to complete the work in accordance with these specifications. The price bid shall include, but not be limited to, the following:

- A. Providing training, safety personnel, air monitoring and medical examinations as specified.
- B. Providing safety equipment and protective clothing for site personnel, including maintenance of equipment on a daily basis; replacement of disposable equipment as required; decontamination of clothing, equipment and personnel; and all other health and safety activities or costs not paid for under other pay items in this Contract.
- C. Providing, installing, operating and maintaining on-site emergency medical and first aid equipment. This includes all furnishings, equipment, supplies and maintenance of all medical equipment, and all other health and safety items and services for which payment is not provided under other pay items in this Contract.
- D. Providing, installing, operating, maintaining, and decommissioning all personnel and equipment decontamination facilities, including decontamination pad, decontamination water supply, and all other items and services required for the implementation of the health and safety requirements for which pay items are not provided elsewhere in this Contract. Vehicle decontamination pads shall be included in the price of this item. Disposal of decontamination fluid shall be paid for under Item 8.01 W1 – Removal, Treatment and Discharge/Disposal of Contaminated Water.
- E. Spill Control
 - 1. Payment shall account for furnishing, installing, and maintaining all spill control equipment and facilities. Payment will include equipment and personnel to perform emergency measures required to contain any spillage and to remove spilled materials and soils or liquids that become contaminated due to spillage during work within the exclusion zones and handling of excavated soils and liquids from these areas. This collected spill material will be properly disposed of.
 - 2. Payment under this item shall not include testing, handling, transportation or disposal of petroleum-contaminated/potentially hazardous soils excavated during construction. The price for this work will be paid for under Items 8.01 C1 – Handling, Transporting and Disposal of Non-Hazardous Contaminated Soils, 8.01 C2 – Sampling and Testing of Contaminated/Potentially Hazardous Soil for Disposal Parameters or 8.01 H – Handling, Transporting and Disposal of Hazardous Soils, as appropriate.
- F. Dust Control

Payment shall account for furnishing, installing, and maintaining dust control equipment and facilities to be used whenever applicable dust levels are exceeded. Payment will include all necessary labor, equipment, clean water, foam, and all other materials required by the Dust Control Plan. The DOH Community Air Monitoring Plan (CAMP) may be used as guidance.

G. Vapor/Odor Suppression

Payment shall account for furnishing, installing and maintaining vapor/odor control equipment and facilities to be used whenever organic vapor monitoring or the presence of odors indicates that vapor suppression is required to protect workers or the public. Payment will include all necessary labor, equipment, clean water, foam and all other materials required by the Vapor/Odor Suppression Plan.

H. Mobilization/Demobilization

1. Mobilization

Payment shall include but not be limited to:

- a. All work required to furnish, install and maintain all signs, fencing, support zone facilities, parking areas and all temporary utilities;
- b. All work required to furnish, install, and maintain an office space with phone and utilities for health and safety personnel;
- c. All work required for complete preparation of lay down area for roll-off containers, including sampling, and any required fencing;
- d. All direct invoiced cost from bonding companies and government agencies for permits and costs of insurance; and
- e. All other items and services required for mobilization and site preparation.

2. Demobilization

Payment shall include but not be limited to: All work required to sample the area; remove from the site all equipment, temporary utilities and supporting facilities; performance of necessary decontamination and repairs; disposal of disposable equipment and protective gear and other items and services required for complete demobilization.

Payment will be made under:

<u>ITEM NUMBER</u>	<u>ITEM</u>	<u>PAYMENT UNIT</u>
8.01 S	Health and Safety	Lump Sum

**ITEM 8.01 W1 REMOVAL, TREATMENT AND DISCHARGE/DISPOSAL OF
CONTAMINATED WATER****8.01 W1.1 WORK TO INCLUDE**

General: This work shall consist of the proper removal and disposal of all contaminated groundwater and decontamination water generated during construction operations. The Contractor shall be solely responsible for the proper disposal or discharge of all contaminated water generated at the job site. The Contractor will have the option of treating water on-site for discharge to the combined sanitary/storm sewer system or removing contaminated water for off-site disposal. The Contractor shall be responsible to choose a method compatible to the construction work and shall be compensated on a per day basis regardless of method employed. The Contractor will be compensated for only those days where the system is in full operation.

The Contractor shall retain a dewatering/water treatment Specialist (hereinafter the "Specialist") and laboratory as specified under Item 8.01 W2 – Sampling and Testing of Contaminated Water, to conduct any testing that may be required for disposal of impacted water.

The dewatering/water treatment Specialist is responsible to obtain all permits; perform all water sampling, testing; and provide ancillary services related to dewatering and water treatment. The Specialist shall at a minimum provide documentation to the Program Administration, Engineering Support Services (ESS) demonstrating the minimum requirements as set forth below:

1. The Specialist shall demonstrate that it has, at a minimum, three (3) years experience in the design of dewatering plans. The Specialist should demonstrate expertise dealing with issues associated with contaminated water. During that three (3) year period, the Specialist shall demonstrate that it provided dewatering and water treatment systems as a routine part of its daily operations.
2. The Specialist must be experienced in work of this nature, size, and complexity and must have previous experience in working with the DEC.
3. The Specialist shall furnish a project listing identifying the location, nature of services provided, owner, owner's contact, contact's telephone number, project duration and value for at least five (5) projects within the last three (3) years of a similar nature, size, and complexity to this one.
4. If conditions within the exclusion zone are deemed hazardous, then the Contractor and its independent Environmental Consultant shall ensure that all personnel working within identified exclusion zones and/or involved (direct contact) with the handling, storage or transport of hazardous and contaminated material shall have completed a minimum of forty (40) hours of Health and Safety Training on Hazardous Waste Sites in accordance with 29 CFR 1910.120(e). The training program shall be conducted by a qualified safety instructor. If conditions in the exclusion zone are deemed to be non-hazardous, the Specialist shall be responsible to provide site-specific training to its employees and other affected personnel.
5. The Contractor shall ensure that on-site management and supervisors directly responsible for or who supervise employees engaged in hazardous waste operations shall receive the training specified in above and at least eight (8) additional hours of specialized training on managing such operations at the time of job assignment.

The Contractor shall document all operations associated with the handling, sampling and disposal of contaminated water, and ensure that they are in compliance with applicable Federal, State and Local statutes and regulations.

The Contractor shall supply all labor, equipment, transport, plant, material, treatment, and other incidentals required to conduct the specified work of this section.

If water will be disposed of into the combined sanitary/storm sewer system, the Contractor shall ensure the Specialist treats the water to comply with the New York City Department of Environmental Protection (DEP) Sanitary/Combined and Storm Sewer Effluent Limit concentrations prior to discharge. The Contractor is responsible for providing settling or filtering tanks and any other apparatus required by DEP. Alternatively, the Contractor can provide a plan for transport and disposal at an off-site waste disposal facility.

Within forty-five (45) calendar days after award of Contract, the Contractor shall submit to the Program Administration, ESS for review, a Water Handling Plan (WHP). The WHP must be approved by the Program Administration, ESS, prior to the Contractor's commencement of work. The minimum requirements for the WHP are specified herein Item 8.01W 1.2, for each type of disposal (disposal into the combined sanitary/storm sewer or off-site disposal). The Contractor shall maintain a complete, up to date copy of the WHP on the job site at all times.

8.01 W1.2 CONSTRUCTION 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

loading, certificates of recycling or destruction and other applicable documentation.

- (3) **Disposal of treatment media shall not be considered as a separate pay item; instead it shall be considered as incidental work thereto and included in the unit price bid.**

B. Off-Site Disposal

1. Regulations: The Contractor shall conform to all applicable Federal, State and Local regulations pertaining to the transportation, storage and disposal of any hazardous and/or non-hazardous materials as listed in Attachment 2.
2. The following shall be submitted to the DDC prior to initiating any off-site disposal:
 - a.
 - (1) Name and waste transporter permit number
 - (2) Address
 - (3) Name of responsible contact for the hauler
 - (4) Any and all necessary permit authorizations for each type of waste transported
 - (5) Previous experience in performing the type of work specified herein
 - b. General information for each proposed treatment/disposal facility and at least one backup treatment/disposal facility
 - (1) Facility name and EPA identification number
 - (2) Facility location
 - (3) Name of responsible contact for the facility
 - (4) Telephone number for contact
 - (5) Unit of measure utilized at facility for costing purposes
 - c. A listing of all permits, licenses, letters of approval and other authorizations to operate, which are currently held and valid for the proposed facility as they pertain to receipt and management of the wastes derived from this Contract.
 - d. A listing of all permits, licenses, letters of approval and other authorizations to operate which have been applied for by the proposed facility but not yet granted or issued. Provide dates of application(s) submitted. Planned submittals shall also be noted.
 - e. The Contractor shall specify and describe the disposal/containment unit(s) that the proposed facility will use to manage the waste and provide dates of construction and beginning of use, if applicable. Drawings may be provided. The Contractor shall identify the capacity available in the units and the capacity reserved for the subject waste.
 - f. The Contractor shall provide the date of the proposed facility's last compliance inspection.

- g. A list of all active (unresolved) compliance orders, agreements, enforcement notices or notices of violations issued to the proposed facility shall be submitted. The source and nature of the cause of violation shall be stated, if known. If groundwater contamination is noted, details of the facility's groundwater monitoring program shall be provided.
- h. Description of all sampling and field/laboratory analyses that will be needed to obtain disposal facility approval.

3. Materials

All vessels for temporary storage and transport to an off-site disposal facility shall be as required in DOT regulations.

4. Execution

a. General

- (1) The Contractor shall organize and maintain the material shipment records/manifests required by Federal, State and Local law. The Contractor shall include all bills of lading, certificates of destruction, recycling or treatment and other applicable documents.
- (2) The Contractor shall coordinate the schedule for truck arrival and material deliveries at the job site to meet the approved project schedule. The schedule shall be compatible with the availability of equipment and personnel for material handling at the job site.
- (3) The Contractor shall inspect all vehicles leaving the project site to ensure that contaminated liquids are not spilling and are contained for transport.
- (4) The Contractor shall obtain letters of commitment from the waste haulers and the treatment, disposal or recovery facility to haul and accept shipment. The letter shall indicate agreement to handle and accept the specified estimated quantities and types of material during the time period specified in the project schedule and any time extension as deemed as necessary.
- (5) The Contractor shall verify the volume of each shipment of water from the site.
- (6) The Contractor is responsible for sampling and testing of water for off-site disposal. The quality of the data is the Contractor's responsibility. Any sampling and testing shall be conducted and paid in accordance with Item 8.01 W2 – Sampling and Testing of Contaminated Water.
- (7) The Contractor shall be responsible for any additional analyses required by the TSD facility, and for the acceptance of the water at an approved TSD facility.

b. Hauling

- (1) The Contractor shall not deliver waste to any facility other than the TSD facility(ies) listed on the shipping manifest.

- (2) The Contractor shall coordinate manifesting, placarding of shipments, and vehicle decontamination. All quantities shall also be measured and recorded upon arrival at the TSD facility(ies). If any deviation between the two records occurs, the matter is to be reported immediately to the DDC and shall be resolved by the Contractor to the satisfaction of the DDC.
- (3) The Contractor shall be held responsible for any and all actions necessary to remedy situations involving material spilled in transit or mud and dust tracked off-site. This cleanup shall be accomplished at the Contractor's expense.
- (4) The Contractor shall be responsible for inspecting the access routes for road conditions, overhead clearance and weight restrictions.
- (5) The Contractor shall only use the transporter(s) identified in the WHP for the performance of work. Only a transporter with a current Part 364 Waste Transporter Permit from DEC may transport this material. Any use of substitute or additional transporters must have previous written approval from the DDC at no additional cost to the City.
- (6) The Contractor shall develop, document, and implement a policy for accident prevention.
- (7) The Contractor shall not combine waste materials from other projects with material from this project.
- (8) The Contractor shall obtain for the City a hazardous waste generator identification number and will sign the manifest as the generator, if necessary.
- (9) No material shall be transported until approved by the DDC.

c. Disposal Facilities

- (1) The Contractor shall use only the TSD facility(ies) identified in the WHP for the performance of the work. Substitutions or additions shall not be permitted without prior written approval from the Program Administration, ESS, and, if approved, shall be at no extra cost to the City.
- (2) The Contractor shall be responsible for acceptance of the material at an approved TSD facility, for ensuring that the facility is properly permitted to accept the stated material, and that the facility provides the stated storage and/or disposal services.
- (3) The DDC reserves the right to contact and visit the disposal facility and regulatory agencies to verify the agreement to accept the stated material and to verify any other information provided. This does not in any way relieve the Contractor of his responsibilities under this Contract.
- (4) In the event that the identified and approved facility ceases to accept the stated materials or the facility ceases operations, it is the Contractor's responsibility to locate an alternate approved and permitted facility(ies) for accepting materials. The Contractor is responsible for making the necessary arrangements to utilize the facility(ies), and the alternate facility(ies) must be

approved in writing by the DDC in the same manner and with the same requirements as for the original facility(ies). This shall be done with no extra cost or delay to the City.

d. Equipment and Vehicle Decontamination

- (1) The Contractor shall design and construct a portable decontamination station to be used to decontaminate equipment and vehicles exiting the exclusion zone. The cost for this work shall be paid under Item 8.01 S – Health and Safety.

8.01 W1.3 METHOD OF MEASUREMENT

The quantity for on-site treatment and discharge or off-site disposal shall be on a per day basis.

8.01 W1.4 PRICE TO COVER

- A. The per day price bid for Item 8.01 W1 shall include the cost of furnishing all labor, materials, plant, equipment, and insurance for handling, transportation, disposal, documentation, permits, hauling, mobilization and demobilization, and any other incidentals thereto to complete the work.
- B. The Contractor will not be paid for water that is within the DEP Sewer Discharge Limits.

Payment will be made under:

<u>ITEM NUMBER</u>	<u>ITEM</u>	<u>PAYMENT UNIT</u>
8.01 W1	Removal, Treatment and Disposal/Discharge of Contaminated Water	Day

ITEM 8.01 W2 SAMPLING AND TESTING OF CONTAMINATED WATER**8.01 W2.1 WORK TO INCLUDE****A. Description**

The work shall consist of sampling and testing of potentially contaminated groundwater, surface runoff within the excavated area and all contaminated water generated during the decontamination process.

B. Sampling and Testing

1. The Contractor is responsible, at a minimum, for sampling and testing of contaminated water for the DEP Sanitary/Combined and Storm Sewer Effluent Limit concentrations as listed in Attachment 1. The quality of the data is the Contractor's responsibility. Any additional testing required by the Federal, State and/or disposal facilities shall be included in the bid price of this Item.
2. All sampling and testing shall be conducted by a person trained in sampling protocols using accepted standard practices and/or the DEC sampling guidelines and protocols.
3. All sample containers shall be marked with legible sample labels which shall indicate the project name, sample location and/or container, the sample number, the date and time of sampling, preservatives utilized, how the sample was chilled to 4 degrees Celsius, and other information that may be useful in determining the character of the sample.
4. Chain-of-custody shall be tracked from laboratory issuance of sample containers through receipt of the samples.
5. The Contractor shall maintain a bound sample log book. The Contractor shall provide the DDC access to it at all times and shall turn it over to the DDC in good condition at the completion of the work. The following information, as a minimum, shall be recorded to the log:
 - a. Sample identification number
 - b. Sample location
 - c. Field observation
 - d. Sample type
 - e. Analyses
 - f. Date/time of collection
 - g. Collector's name
 - h. Sample procedures and equipment used
 - i. Date sent to laboratory/name of laboratory
6. Only dedicated sampling equipment may be used to collect these samples. All equipment involved in field sampling must be decontaminated before being brought to the site, and must be properly disposed of after use.

7. Samples shall be submitted to the Contractor's laboratory within the holding times for the parameters analyzed.
8. All analyses must be done by a laboratory that has received approval from the DOH's ELAP for the methods to be done. The Contractor must specify the laboratory in the WHP.
9. Analytical results for water discharged to the sewer and for off-site disposal must be submitted to the DDC no later than five (5) days after sample collection.
10. The City reserves the right to direct the Contractor to conduct alternative sampling in lieu of the parameters described above, if the situation warrants. The substitute sampling parameters shall be of equal or lesser monetary value than those described above, as determined by industry laboratory pricing standards.

8.01 W2.2 METHOD OF MEASUREMENT

Quantities for samples shall be measured as the number of sets of samples that are tested for the DEP Sanitary/Combined and Storm Sewer Effluent Limit concentrations. A set shall be defined as one (1) representative sample analyzed for the full range of DEP parameters as specified in attachment 1.

8.01 W2.3 PRICE TO COVER

The unit price bid per set for Item 8.01 W2 shall include the cost of furnishing all labor, materials, plant, equipment, and insurance for handling, transport, sampling, testing, documentation, permits, other incidentals necessary to complete the work of sampling and testing of contaminated water. Any additional costs incurred by the Contractor for sampling and testing of contaminated water shall be included in the bid price of this Item.

Payment will be made under:

<u>ITEM NUMBER</u>	<u>ITEM</u>	<u>PAYMENT UNIT</u>
8.01 W2	Sampling and Testing of Contaminated Water	Set

ATTACHMENT 1

**New York City Department of Environmental Protection
Limitations for Discharge To Storm, Sanitary/Combined Sewer**

**NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTEWATER TREATMENT**

Limitations for effluent to storm, sanitary or combined sewers

Parameter	Daily Limit	Units	Sample Type	Monthly Limit
Oil & Grease	15	mg/l	Instantaneous	
Total Petroleum Hydrocarbons	50	mg/l	Instantaneous	
pH Range (Storm sewer)	6.5-8.5	SU's	Instantaneous	
(Sanitary sewer)	5-11			
Benzene	134	ppb	Instantaneous	57
Ethyl benzene	380	ppb	Instantaneous	142
Toluene	74	ppb	Instantaneous	28
Xylenes Total	74	ppb	Instantaneous	28
Temperature	< 150	°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	
Flash Point	> 140	°F	Instantaneous	
Total Suspended Solids	350	ppm	Instantaneous	
PCB's Total*	1	ppb	Composite	
Perc (Tetrachloroethylene)	20	ppb	Instantaneous	
MTBE (Methyl-Tert-Butyl-Ether)	10	ppb	Instantaneous	10
Naphthalene	47	ppb	Instantaneous	19

* Analysis for PCB's are requested only if both conditions listed below are met:

- 1) If proposed discharge > 10,000 gpd
- 2) If duration of discharge > 10 days

Analysis for PCB's must be conducted by USEPA Method 608 only with MDL = 65ppt

ATTACHMENT 2

Applicable Regulations

Applicable regulations include, but are not limited to:

1. 49 CFR 100 to 179 - DOT Hazardous Materials Transport and Manifest System Requirements
2. New York State Department of Environmental Conservation (DEC), Spills Technology and Remediation Series (STARS) Memo #1
3. 6 NYCRR 360-1 DEC Solid Waste Management Facilities
4. 6 NYCRR 364- Waste Transporter permits
5. Local restrictions on transportation of waste/debris
6. 40 CFR 260 to 272 - Hazardous Waste Management (RCRA)
7. 6 NYCRR 371 - Identification and Listing of Hazardous Wastes
8. 6 NYCRR 372 - Hazardous Waste Manifest System and Related Standards for Generators, Transporters and Facilities
9. 6 NYCRR 373-1 - Hazardous Waste Treatment, Storage and Disposal Facility Permitting Requirements
10. 6 NYCRR 376 - Land Disposal Restrictions
11. Posted weight limitations on roads or bridges
12. Transportation Skills Programs, Inc. 1985 - Hazardous Materials and Waste Shipping Papers and Manifests
13. Other local restrictions on transportation of waste/debris
14. Occupational Safety and Health Administration (OSHA), Standards and Regulations, 29 CFR 1910 (General Industry)
15. OSHA 29 CFR 1910.120 Hazardous Waste Operations and Emergency Response
16. OSHA Safety and Health Standards 29 CFR 1926 (Construction Industry)
17. OSHA 29 CFR 1910.146 Confined Space Entry Standard
18. Standard Operating Safety Guidelines, EPA Office of Emergency and Remedial Response Publication, 9285.1-03
19. NIOSH / OSHA / USCG / EPA Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities (1986)
20. U.S. Department of Health and Human Services (DHHS) "NIOSH Sampling and Analytical Methods," DHHS (NIOSH) Publication 84-100
21. ANSI, Practice for Respiratory Protection, Z88.2 (1980)
22. ANSI, Emergency Eyewash and Shower Equipment, Z41.1 (1983)
23. ANSI, Protective Footwear, Z358.1 (1981)
24. ANSI, Physical Qualifications for Respirator Use, Z88.6 (1984)
25. ANSI, Practice for Occupational and Educational Eye and Face Protection, Z87.1 (1968)
26. Water Pollution Control Federation "Manual of Practice No. 1, Safety in Wastewater Works"

27. NFPA No. 327 "Standard Procedures for Cleaning and Safeguarding Small Tanks and Containers"
28. Occupational Safety and Health Act Confined Space Entry Standard 29 CFR 1910.146.87
29. Department of Transportation 49 CFR 100 through 179
30. Department of Transportation 49 CFR 387 (46 FR 30974, 47073)
31. Environmental Protection Agency 40 CFR 136 (41 FR 52779)
32. Environmental Protection Agency 40 CFR 262 and 761
33. Resource Conservation and Recovery Act (RCRA)
34. Any transporter of hazardous or non-hazardous materials shall be licensed in the State of New York and all other states traversed in accordance with all applicable regulations.

ATTACHMENT 3

Definitions

Contaminated Groundwater and Decontamination Fluids: Groundwater within the excavation trench or decontamination water that contains regulated compounds above the DEP 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.

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.

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.

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.

Toxicity Characteristic Leaching Procedure: A laboratory testing method used to determine the concentrations of certain substances in a material that has the ability to leach from the material. These concentrations are used to determine if the material exhibits toxicity levels characteristic of a hazardous waste.

ATTACHMENT 4
LIMITED SUBSURFACE CORRIDOR INVESTIGATION

LIMITED SUBSURFACE CORRIDER INVESTIGATION

For

RECONSTRUCTION OF ALBERT ROAD AREA
BOROUGH OF QUEENS, SOUTH OZONE PARK,
QUEENS, NEW YORK

DDC PROJECT NO. HWQ411B
DDC TASK ID No. 4554
CONTRACT REGISTRATION NO. 20050026031

Prepared for:



City of New York Department of Design and Construction
Bureau of Environmental and Geotechnical Services
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FINAL

April, 2007

Table of Contents

EXECUTIVE SUMMARY	i
1.0 INTRODUCTION	1
1.1 Background Information.....	1
1.2 Scope of Work.....	1
2.0 CORRIDOR INFORMATION	3
2.1 Corridor Location, Description and Use.....	3
2.2 Description of Surrounding Properties	4
2.3 Corridor and Regional Topographic Setting.....	4
2.4 Geology and Hydrogeology of Queens	4
2.5 Local Hydrogeology.....	5
2.6 Summary of Previous Environmental Investigations.....	5
3.0 CORRIDOR EVALUATION	7
3.1 Summary of Soil and Groundwater Quality Investigation.....	7
3.1.1 Soil Investigation	7
3.1.2 Groundwater Investigation	8
3.2 Field Observations	9
3.3 Laboratory Analytical Results for Soil Sample	9
3.3.1 Volatile Organic Compounds (VOCs)-Boring Grab Samples.....	10
3.3.2. Semi-volatile Organic Compounds (SVOCs)-Boring Composite Grab Samples	11
3.3.3 Target Analyte List (TAL) Metals-Boring Composite Grab Samples.....	11
3.3.4 Polychlorinated Biphenyls-Boring Composite Grab Samples	11
3.3.5 Waste Classification Parameters-Site-Wide Composite Samples	11
3.3.6 NYCDEP Parameters-Groundwater Samples.....	12
4.0 CONCLUSIONS AND RECOMMENDATIONS	13
5.0 STATEMENT OF LIMITATIONS.....	16

Figures	1	Site Location Map
	2.	Topographic Corridor Location Map
	3.1 - 3.16	Boring Location Maps

Tables	1	Environmental Boring Data Summary (Two Pages)
	2	Volatile Organic Compounds (VOCs) Analytical Results/Soils
	3	Semi-volatile Organic Compounds (SVOCs) Analytical Results/Soils
	4	Target Analyte List (TAL) Metals Analytical Results/Soils
	5	PCB Results/Soils

- 6-1 Waste Classification Results-Site Composite, TCL List
- 6-2 Waste Classification Results- Site Composite, Pesticides
- 6-3 Waste Classification Results-Site Composite, Additional Parameters
- 7 Groundwater Analytical Result

- Appendices**
- A** Geologic Boring Logs
 - B** Laboratory Analytical Results

EXECUTIVE SUMMARY

At the request of the City of New York Department of Design and Construction (DDC), Bureau of Environmental and Geotechnical Services (BEGS), Parsons Brinckerhoff Quade & Douglas, Inc. (PB) performed a Limited Subsurface Corridor Investigation (LSCI) for the proposed Albert Road Area Reconstruction project. The area is bounded by Cross Bay Boulevard to the west, Linden Boulevard to the North and Albert Road to the South. The area is bounded to the east by (listed from north to south) Hawtree Street, Centerville Street, Eckford Avenue, and Cohancy Street. The entire corridor is approximately 60 blocks long and two blocks wide. This area will herein after be referred to as the "Site".

This LSCI was performed in March 2007 in accordance with the DDC approved December 2006 Work Plan prepared by PB to determine if the area's environmental conditions have impacted the subsurface soil and/or groundwater and if these conditions could potentially impact the proposed construction activities. The work plan was developed to further evaluate high and moderate environmental concerns that were identified at the Site in the Corridor Assessment Report (CAR) developed by PB in December 2006. The CAR included an investigation at the Site to document current land uses, a review of fire insurance maps to document historical use, and a review of the state and Federal government regulatory databases to identify sites on or adjoining the Corridor that constitute a potential environmental concern. Boring locations were selected based on the CAR and a site visit by PB on October 24, 2006 with a follow-up visit in January 29, 2007.

The investigation consisted of:

- Reviewing the construction drawings and CAR for scoping the Subsurface Investigation and preparation of a Work Plan.
- Clearing of boring locations for utilities by hand clearing to approximately five feet below grade (fbg).
- Advancement of 26 soil borings (SB-1 to SB-26) in the overburden using direct-push, Geoprobe™ drilling equipment, to a maximum depth of 20-30 fbg and field screening soil samples through visual, olfactory indicators and Photo-Ionization Detector (PID) readings.
- Collection of one grab soil sample from each of the borings from an interval of 10-15 feet below grade for laboratory analysis for volatile organic compounds (VOCs)

- Collection of a boring column composite soil sample from each sampling interval of the soil boring for laboratory analysis of Base Neutrals/Acid Extractables (BNA) Semi-Volatile Organic Compounds (SVOCs), Target Analyte List (TAL) metals, and polychlorinated biphenyls (PCBs).
- Compositing of soils samples from the borings (compositing performed in the laboratory) into three site-wide composite samples and analysis for waste classification parameters including full list Toxicity Characteristic Leaching Procedure (TCLP), RCRA Characteristics (Ignitability, Reactivity, Corrosivity), PCBs, total pesticides, and Total Petroleum Hydrocarbon Compound (TPHC) Diesel Range Organics / Gasoline Range Organics (DRO/GRO).
- Collection of groundwater samples via the Geoprobe™ hydraulic sampling system method from three borings and submission of samples for laboratory analysis of parameters included in the New York City Department of Environmental Protection (NYCDEP) Limitations for Effluent to Sanitary or Combined Sewers.
- The presentation of a written report with schematic drawings depicting the boring locations and significant site features.

In order to evaluate the subsurface soil and groundwater quality, laboratory analytical results were compared with regulatory standards identified in the following documents:

- New York State Department of Environmental Conservation (NYSDEC) Technical and Administrative Guidance Memorandum 4046 (TAGM 4046), Recommended Soil Cleanup Objectives (RSCO).
- NYSDEC Spill Technology and Remediation Series (STARS) Memo #1, Petroleum-Contaminated Soil Guidance Policy
- Characteristics of Hazardous Waste published in the United States Environmental Protection Agency (USEPA) Resource Conservation and Recovery Act (RCRA) and NYSDEC Part 371
- NYCDEP Bureau of Wastewater Treatment Limitations for Effluent to Storm Sewers and Effluent to Sanitary or Combined Sewers

Based on the results of the field investigation and a review of the analytical results compared to the above referenced regulatory criteria, the following conclusions are presented:

- VOCs were not detected at concentrations exceeding NYSDEC TAGM 4046, NYSDEC STARS #1 Human Health Regulatory Guidance or the NYSDEC STARS #1 TCLP Alternative Regulatory Guidance in the 26 grab soil samples. Acetone and methylene chloride were detected at low levels

in each of the grab samples. These compounds are typically associated with laboratory contamination and are not considered representative of the Site's natural soil conditions.

- PID readings ranged from zero parts per million (ppm) to 179 ppm. No visual impacts were noted and olfactory odors were noted in two borings (SB-11 and SB-25)
- SVOCs were not detected above laboratory detection limits in the composite soil samples collected from 23 of the 26 borings although Tentatively Identified Compounds (TICs) were detected in all 26 soil borings. SVOC results exceed the STARS TCLP Alternative Guidance Values in boring SB-9 (benzo(a)anthracene, chrysene and benzo(b) fluoranthene, and benzo(a) pyrene); boring SB-23 (benzo(b) flouranthene); and boring SB-24 (benzo(a)anthracene, chrysene, benzo(b)fluoranthene, and benzo(k)fluoranthene). No conclusion can be drawn regarding groundwater protection via the TCLP analytical method. These concentrations are relatively low and not reproduced anywhere else throughout the Corridor. The presence of these SVOCs can likely be attributable to typical urban background conditions and not a petroleum release.
- TAL metals were detected in all of the soil boring composite samples. Iron exceeds the TAGM RSCO in all 26 soil samples. In 19 of the soil composite samples at least one of five additional metals (beryllium, chromium, copper, nickel, and/or zinc) were detected at concentrations that exceed NYSDEC TAGM 4046 guidance levels. In addition, zinc exceeds the Eastern USA Soil Typical Background concentrations in SB-23. The TAGM guidance document allows for higher soil concentrations of beryllium, chromium, copper, iron, nickel, and zinc if site background concentrations are shown to be naturally elevated. Since these samples are representative of the Site's overall subsurface soil conditions, the low levels of metals detected consistently in these samples is likely representative of natural background conditions. In addition, there is no known source for these metals within the Site boundaries.
- PCBs were not detected in any of the composite soil samples above the TAGM RSCO guidelines. In borings SB-1 and SB-5 two compounds were detected below the cleanup objectives.
- TCLP metals were not detected above the EPA Toxicity Characterization Limits in any of the site-wide composite samples collected for waste classification. DROs were detected above 1,000 ppm in each composite sample. A typical acceptance level at a disposal facility is 30,000 ppm. The other waste classification parameters were not detected in the site-wide composite samples including TCLP VOCs, SVOCs, pesticides, herbicides, and PCBs.

- Groundwater was encountered in boring locations SB-7 and SB-8 at approximately 29 fbg and in SB-22 at approximately 16 fbg. The analytical results of groundwater samples collected from these borings indicate that groundwater may not be acceptable for discharge into sanitary/combined sewers without pretreatment. Total Suspended Solids (TSS) were detected in each sample above the NYCDEP limit (350 ppm) at concentrations ranging from 2,400 to 4,500 milligrams per liter (mg/l). Tetrachloroethene was also detected at or slightly above the NYCDEP Limit 20 parts per billion (ppb) in water samples collected from borings SB-7 and SB-8. All other parameters analyzed were detected at concentrations below the NYCDEP permit limitations.

Based on the results of the field investigation and a review of the analytical results compared to the above regulatory criteria, the following recommendations are made:

- 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), the NYSDOH and any other applicable regulations. The HASP should identify the possible locations and risks associated with the potential contaminants that may be encountered during the excavation activities, and the administrative and engineering controls that will be utilized to mitigate concerns.
- The Contract documents should identify provisions and a contingency for managing, handling, transporting and disposing of non-hazardous metals and SVOC impacted soil. The Contractor should be required to submit a Material Handling Plan (MHP), to identify the specific protocol and procedures that will be utilized to manage the waste in accordance with applicable regulations.
- Since this investigation is limited in scope and VOC and SVOC compounds may be encountered during reconstruction, PB recommends that concentrations of organic vapors in the work area along the Corridor should be monitored with a PID during soil excavation activities.
- PB does not believe the presence of metals at the concentrations detected in these samples presents a significant risk to human health and/or the environment and no additional investigation and/or remediation is warranted. However, since metals exceed both applicable regulatory guidance (TAGM 4046), and in one boring exceed Average Eastern United States Background concentration ranges, PB recommends that dust control procedures should be in place during excavation activities to minimize the creation and dispersion of fugitive airborne dust. The Contractor shall implement strict dust control measures to protect the workers and the downwind community from potential airborne contaminants released as a direct result of construction activities. The dust control procedures should

be in accordance with the NYSDOH generic Community Air Monitoring Plan (CAMP) of the NYSDEC Draft Division of Environmental Remediation (DER)-10, published December 25, 2002.

- In addition, because zinc concentrations in SB-23 exceeds both applicable regulatory guidance (TAGM 4046) as well as the Average Eastern United States Background concentration ranges and DROs were detected above 1,000 ppm in each composite sample, it is recommended that soil excavated from this area should not be reused and may be properly disposed of at an approved off-site facility.
- Construction dewatering discharges that will be directed to the sanitary sewer or combined system may require primary pretreatment to remove TSS and/or secondary treatment to remove VOCs such as tetrachloroethene. In addition, any construction dewatering discharges into a storm sewer must be completed under the appropriate NYSDEC Storm Water Pollution Prevention Plan (SWPPP) and State Pollutant Discharge Elimination System (SPDES) General Permit for Storm Water Discharges from Construction Activity (GP-02-01). Additional sampling and laboratory analysis may be required to satisfy NYSDEC requirements prior to discharge into storm sewers.

1.0 INTRODUCTION

1.1 Background Information

At the request of the City of New York Department of Design and Construction (DDC), Bureau of Environmental and Geotechnical Services (BEGS), Parsons Brinckerhoff Quade & Douglas, Inc. (PB) performed a Limited Subsurface Corridor Investigation (LSCI) for the proposed Albert Road Area Reconstruction project (Figure 1). The area is bounded by Cross Bay Boulevard to the west, Linden Boulevard to the North and Albert Road to the South. The area is bounded to the east by (listed from north to south) Hawtree Street, Centerville Street, Eckford Avenue, and Cohancy Street (Figure 2). The entire corridor is approximately 60 blocks long and two blocks wide. This area will herein after be referred to as the "Site".

Proposed construction activities at this Site will include soil excavation, which in-turn, will require that soils at the Corridor be characterized to identify material handling requirements (i.e. use of protective equipment) and for material reuse, handling and/or waste disposal requirements.

This LSCI was performed from March 12th to March 16th, 2007 in accordance with the January 2007 work plan prepared by PB to determine if the area's environmental conditions have impacted the subsurface soil and/or groundwater and if these conditions could potentially impact the proposed construction activities. The work plan was developed to further evaluate high and moderate environmental concerns that were identified at the Site in the Corridor Assessment Report (CAR) developed by PB in December 2006.

1.2 Scope of Work

PB Project Scientist Mr. Boris Feldman conducted the LSCI fieldwork between March 12th and March 16th, 2007. Zebra Environmental Corp. (Zebra) performed the utility clearing and Geoprobe™ activities.

Boring locations were selected based on the CAR and a site visit by PB on October 24, 2006 and in January 2007. The locations are listed below and shown in Figures 3.1 to 3.16.

- B-1: 98-25 Linden Blvd. (Oz Auto Body Shop)
- B-2: 98-31 Linden Blvd (Vacant Lot)
- B-3: Intersection of Linden Blvd. and Centerville Street (Centerville Unit Substation)
- B-4: 94-20 Linden Blvd. (Super Suds Laundromat and Dry Cleaners)
- B-5: 134-01 Cross Bay Blvd. (Hess Gas Station)
- B-6/B-7: 137-02 Cross Bay Blvd. (Cross Bay Express Service)
- B-8/B-9: 135-45 Cross Bay Blvd. (Sunoco Fueling Station)
- B-10: 135-43 Hawtree Street (NYC Transit System Station)

- B-11: 137-32 Centerville Street (Bay Auto Center)
- B-12: 135-36 Centerville Street (Vacant Lot)
- B-13: 150-25 Centerville Street (Parm Trading Company)
- B-14: 150-41 Cohancy Street (Sony's Collision Auto Body Shop)
- B-15: 98-18 Albert Road (John's Garage Auto Repair Shop)
- B-16: 97-24 Albert Road (Residential Apartments)
- B-17: 155-22: Tahoe Street (Warehouse with associated offices)
- B-18: 94-30 Albert Road (Robert Mecabe Construction)
- B-19: Between 9316 and 9400 Albert Road (Residential)
- B-20: 96-18 Albert Road (Residential)
- B-21/B-22: 10001 North Conduit Avenue (Closed Auto Repair Shop)
- B-23: 137-23 Cross Bay Blvd. (Cross Bay Motor Inn)
- B-24: 149-02 94th Street; Corner of Albert Road (Apartment Buildings)
- B-25: 137-20 Cross Bay Blvd. (Dairy Mill)
- B-26: 96-01 Albert Road (Centerville Playground)

In addition, three composite soil samples were collected and consisted of three samples each. Composite sample No. 1 was collected from the soil boring B-5 (Hess Gas Station), B-23 (Cross Bay Motor Inn) and B-24 (Apartment Buildings). Composite sample No. 2 was collected from B-10 (NYC Transit System Station), B-11 (Bay Auto Center) and B-12 (Vacant Lot) and composite sample No. 3 was collected from B-9 (Sunoco Fueling Station), B-16 (Residential Apartments) and B-12 (Vacant Lot).

The investigation consisted of:

- Reviewing the construction drawings and CAR for scoping the Subsurface Investigation and preparation of a Work Plan.
- Clearing of boring locations for utilities by hand clearing to approximately five feet below grade (fbg).
- Advancement of 26 soil borings (SB-1 to SB-26) in the overburden using direct-push, Geoprobe™ drilling equipment, to a maximum depth of 20-30 fbg and field screening soil samples through visual, olfactory indicators and Photo-Ionization Detector (PID) readings.
- Collection of one grab soil sample from each of the borings from an interval of 10-15 fbg for laboratory analysis for volatile organic compounds (VOCs)
- Collection of a boring column composite soil sample from each sampling interval of the soil boring for laboratory analysis of Base Neutrals/Acid Extractables (BNA) Semi-Volatile Organic Compounds (SVOCs), Target Analyte List (TAL) metals, and polychlorinated biphenyls (PCBs).

- Compositing of soils samples from the borings (compositing performed in the laboratory) into three site-wide composite samples and analysis for waste classification parameters including full list Toxicity Characteristic Leaching Procedure (TCLP), RCRA Characteristics (Ignitability, Reactivity, Corrosivity), PCBs, total pesticides, and Total Petroleum Hydrocarbon Compound (TPHC) Diesel Range Organics / Gasoline Range Organics (DRO/GRO).
- Collection of groundwater samples via the Geoprobe™ hydraulic sampling system method from three borings and submission of samples for laboratory analysis of parameters included in the New York City Department of Environmental Protection (NYCDEP) Limitations for Effluent to Sanitary or Combined Sewers.
- The presentation of a written report with schematic drawings depicting the boring locations and significant site features.

2.0 CORRIDOR INFORMATION

2.1 Corridor Location, Description and Use

The Corridor is located in the South Ozone Park section of the Borough of Queens, Queens County, New York. The Corridor is approximately 60 blocks long and two blocks wide (350 feet) at its longest and widest points. The Corridor consists of a right-of-way (ROW) developed with a paved roadway, sidewalks, and existing infrastructure systems in the following project area:

- Linden Boulevard between Cross Bay Boulevard and Centreville Street;
- Pitkin Avenue between Cross Bay Boulevard and Centreville Street;
- 149th Avenue between Cross Bay Boulevard and Centreville Street;
- 135th Road;
- 135th Drive;
- Bristol Avenue;
- Albert Road between Cross Bay Boulevard and North Conduit Avenue;
- 94th Street between Linden Boulevard and Albert Road;
- 95th Street between Linden Boulevard and Albert Road;
- 95th Street between 150th Road and Albert Road;
- 96th Street between Linden Boulevard and Albert Road;
- 96th Place between Linden Boulevard and 149th Avenue;
- 97th Street between Linden Boulevard and Centreville Street;

- Raleigh Street, Tahoe Street, 99th Place;
- Eckford Avenue between Centreville Street and North Conduit Avenue; and
- Huron Street, 150th Road.

Valves, inlets, manholes, meters, and vents are visible in roadway and sidewalk areas throughout the Corridor and indicate the presence of multiple buried utilities including natural gas, electrical, water and sewer lines. Property usage within the Corridor includes mixed commercial/retail with some residential and institutional uses.

A total of 13 New York City Metropolitan Transportation Authority (NYC MTA) bus stops were identified within the Corridor. The stops are served by the Q11 bus routes along Pitkin Avenue between Cross Bay Boulevard and Centreville Street, Centreville Street between Eckford Avenue and Bristol Avenue, Eckford Avenue between 99th Place and Tahoe Street, Cohancy Street and North Conduit Avenue, and Albert Road between 99th Place and Centreville Street.

2.2 Description of Surrounding Properties

The Corridor lies within an area that is generally residential and commercial/retail uses. Some specific properties include gasoline stations, auto repair shops, food stores, restaurants, a park and vacant lots. Property usage in the general surrounding area includes residential and commercial establishments.

2.3 Corridor and Regional Topographic Setting

PB reviewed the United States Geologic Survey (USGS), *Jamaica, NY* Quadrangle, 7.5-minute Topographic Quadrangle Map (1995) and determined that the land elevation along the corridor ranges between approximately 10 to 50 feet above mean sea level (msl). The Corridor is located at a topographically high point at the northeastern boundary of the Corridor and at a topographically low point at the southern boundary.

2.4 Geology and Hydrogeology of Queens

Physiographically, Queens County is part of the Long Island Hydrogeologic System. In a roughly north-south cross section, the geology can be characterized as a wedge-shaped layer of Cretaceous and Pleistocene age unconsolidated sediments, thickening to the south-southeast.

The thickness of the unconsolidated sequence ranges from zero to approximately 1,300 feet below ground surface from north to south. Several impermeable clay layers are also present creating a system of three distinct aquifers. Potable water is primarily withdrawn from the deepest of these aquifers in southeastern

Kings and Queens Counties. Groundwater is the sole source of drinking water for Nassau and Suffolk Counties and is used to supplement surface water supplies in portions of Queens County.

Metamorphic bedrock beneath the unconsolidated sequence is of Precambrian and Paleozoic age. The overlying Cretaceous age sediments make up the aquifer-bearing Raritan and Magothy Formations. The uppermost unconsolidated units consist of Pleistocene age glacial till and moraine deposits which are located in the northern portions of the Queens and Kings Counties, and glaciofluvial sediments derived from the melt-water of the retreating glaciers which are located in the southern portion of the two counties. Collectively, these deposits constitute the Upper Glacial Aquifer.

The unconfined Upper Glacial Aquifer is the uppermost aquifer in the Long Island system. The depth to the water table varies but generally follows topography. In areas of higher topography associated with the Harbor Hill Glacial Moraine deposits, depth to the water table is as much as 100 feet below ground surface. Closer to sea level, groundwater can occur at depths of five to 10 feet or less. Generally, groundwater flows from higher to lower elevations with localized variations related to water bodies, recharge basins, and pumping wells. The Harbor Hill Glacial Moraine, which trends east-west through central Kings and Queens Counties, acts as the north/south groundwater divide.

2.5 Local Hydrogeology

Groundwater migration is likely influenced by adjacent and on-site building foundations and footings. However, based upon the surface elevation at the Site, groundwater elevation ranges would be approximately 10-40 feet below ground surface. Groundwater is assumed to flow to the south and southeast away from the Corridor and is consistent with the general topographic gradient, towards the Shellbank Basin.

2.6 Summary of Previous Environmental Investigations

The information included in the December, 2006 CAR prepared by PB for the project area, was utilized in determining the work plan for the Corridor. Based on modifying information, the CAR recommended that further investigations, including the advancement of soil borings and collection of soil and groundwater samples for laboratory analysis, be conducted within the Corridor. The CAR was used as a reference document and some of the recommendations were modified or determined to be unnecessary. A summary of environmental concerns at the locations deemed appropriate for investigation as part of this LSCI are included below:

Following any modifying information, this assessment has identified three sites that present a “High” potential for environmental impact. The following “High” risk sites were recommended for additional investigation consisting of site-specific subsurface testing under the direction of the NYCDDC BEGS:

HIGH RISK SITES

1. Commercial/store – 137-02 Cross Bay Boulevard
2. Sunoco Fueling Station and Auto Service – 135-45 Cross Bay Boulevard
3. Closed Auto Repair Shop – 100-01 North Conduit Avenue

Following any modifying information, this assessment identified 20 sites that present a “Moderate” risk potential for environmental impact. The following “Moderate” risk sites were recommended for monitoring and/or additional investigation (site-specific subsurface testing) under the direction of the NYCDDC BEGS:

MODERATE RISK SITES

1. Oz Auto Body Shop – 98-25 Linden Boulevard
2. Vacant lot – 98-31 Linden Boulevard
3. Centreville Unit Substation – Linden Boulevard and Centreville Street
4. Super Suds Laundromat and Dry Cleaners – 94-20 Linden Boulevard
5. Hess Fueling Station – 134-01 Cross Bay Boulevard
6. NYC Transit System – 135-43 Hawtree Street
7. Vacant lot – 135-36 Centreville Street
8. Parm Trading Company - 150-25 Centreville Street
9. Sony’s Collision – 150-41 Cohancy Street
10. John’s Garage Auto Repair Shop – 98-18 Albert Road
11. Residential apartments - 97-24 Albert Road
12. Warehouse - 150-22 Tahoe Street
13. Robert Mecabe Construction – 94-30 Albert Road
14. Residential - Between 93-16 and 94-00 Albert Road
15. Residential - 96-18 Albert Road
16. Bay Auto Center – 137-32 Centreville Street
17. Cross Bay Motor Inn - 137-23 Cross Bay Boulevard
18. Apartment Building - 149-02 94th Street

City of New York Department of Design and Construction
Albert Road Area Limited Subsurface Corridor Investigation, South Ozone Park, Queens, NY – LSCI

19. Commercial Buildings - 137-20 Cross Bay Boulevard
20. Centreville Playground - 96-01 Albert Road

3.0 CORRIDOR EVALUATION

3.1 Summary of Soil and Groundwater Quality Investigation

3.1.1 Soil Investigation

PB provided oversight for the advancement of 26 soil borings in areas with moderate risk sites and high risk sites, including: characterization of soils in each boring, the collection of grab and boring column composite samples; collection of groundwater samples from three borings (B-7, B-8 and B-22) using the Geoprobe™ hydraulic sampling system. The boring locations are depicted in Figures 3.1 through 3.16. A summary of the field investigation, including the locations and details of the soil borings, is provided in Table 1.

After hand clearing to five fbg, each of the borings was completed to an approximate depth of 20 fbg. Soil borings were completed using a hydraulic direct push sampling rig (i.e., Geoprobe™). A description of the soils retained in each Geoprobe™ or split-spoon sampler was completed and is included in Geologic Boring Logs in Appendix A.

Trowels, bowls, hand augers, coring devices, and other down hole Geoprobe™ sampling or drilling equipment were decontaminated by scrubbing with a non-phosphate detergent (i.e., Alconox) solution and rinsing with distilled water prior the collection of each sample. Drilling equipment was steam cleaned or manually scrubbed with Alconox between soil borings to minimize the possibility of cross-contamination between drilling locations.

Soil samples were collected continuously from grade to a depth of 20 fbg in five foot intervals. Soil samples were field screened for instrument response with a PID equipped with a 10.6 electron volt (eV) lamp. The PID screening procedure consisted of collecting the soil in a plastic zip-locked bag, allowing the soil to reach ambient temperature, and then inserting the PID probe into open space within the bag to observe a head space reading. The PID field screening procedure was used only as an on-site, direct read indication of the presence or absence of VOCs in soil, not to quantify or precisely measure VOC concentrations. The samples were also examined for visual evidence (staining, discoloration) and olfactory indications (odors) of contamination.

Soil samples that were selected for laboratory analysis were transferred from the zip-lock bags into laboratory-supplied sample jars and properly labeled. The samples were stored with ice in a cooler to preserve the samples at a temperature of less than 4 degrees Celsius (°C) prior to and during shipment.

Chain-of-custody documentation shall be prepared and will accompany the samples from collection through analysis. Samples were submitted to and analyzed by a New York State Department of Health (NYSDOH) certified laboratory.

One grab soil sample from each of the borings was collected from an interval of 10-15 fbg for laboratory analysis for VOCs. A boring column composite sample was also collected from each sampling interval from the ground surface to soil/water interface (if applicable) or boring termination depth. The composite sample was analyzed for BNA SVOCs by EPA Method 8270, TAL Metals by EPA Method 6010/7000 and PCBs.

Three site-wide composite samples were performed in the laboratory from previously submitted soil samples. Each site-wide composite sample includes a composite of three different boring column composite samples: Comp-1 (SB-5, -23, and -24), Comp-2 (SB-10, -11, and -12), and Comp-3 (SB-9, -21, and -16). The site-wide composite samples were analyzed for full TCLP, RCRA Characteristics (Ignitability, Reactivity, and Corrosivity), PCBs, total pesticides, and TPHC - DRO/GRO.

Upon completion, the borings were back-filled with drill cuttings and sealed with cement grout to grade and completed at the surface with asphalt and/or concrete to match the surrounding pavement (as necessary). Any excess soil/drill cuttings were drummed and removed from the Site at the end of field operations.

3.1.2 Groundwater Investigation

The groundwater sample from SB-7 was collected from the soil boring located in front of a commercial store located at 137-02 Cross Bay Boulevard since there have been a number of documented spills in this area. The groundwater sample from SB-8 was collected from the soil boring located in front of the Sunoco Fueling Station and Auto Service Shop at 135-45 Cross Bay Boulevard because there are known fuel oil spills in this area. The groundwater sample from SB-22 was collected from the soil boring located in front of the closed auto repair shop located at 10001 North Conduit Avenue in an area where auto repairs have occurred in the past. This sample was collected to identify any groundwater contamination from this area as well as any other possible contamination migrating from the main part of the corridor southward in the direction of the groundwater flow.

The groundwater samples were analyzed for parameters put forth by the NYCDEP for Effluent to Sanitary or Combined Sewers. This analysis includes TAL Metals by EPA Method 6010/7470 (Cr VI by 7196A), Oil and Grease (Non Polar Material) by EPA Method 1664, Total Suspended Solids (TSS) by EPA Method 160.2, Flash Point by EPA Method 1010, pH by EPA Method 150.1, PCBs by EPA Method 608

(parts per trillion), selected VOCs by EPA Method 8260, Carbonaceous Biochemical Oxygen Demand (CBOD) by EPA Method 5210 and Total Nitrogen (various methods).

Groundwater samples were collected using a Geoprobe™ hydraulic sampling system by advancing hollow steel probe rods fitted with a stainless steel discrete interval groundwater sampling tool. This sampling tool, consisting of a stainless steel outer sleeve fitted with an inner stainless steel wire mesh screen, was advanced to the desired sampling depth. The outer sleeve was then opened, exposing the wire screen that allows groundwater to infiltrate into the sample collection chamber. The groundwater sample was then collected using dedicated polyethylene tubing fitted with a check valve. The tubing was advanced within the probe rods into the sample collection chamber.

3.2 Field Observations

Zebra Corporation had notified the pre-dig “One Call” service and utilities in the area were appropriately marked out with spray paint prior to commencing any intrusive investigations. In addition, the appropriate sidewalk drilling permits were filed and received from the New York State Department of Transportation (NYSDOT). Fieldwork was conducted over four consecutive days between March 12th and March 15th, 2006.

The descriptions of the borings are summarized in Table 1 and a full description is provided on the boring logs in Appendix A. In summary, the PID field readings from soils samples were low ranging from non-detect (ND) to 179 parts per million (ppm). Only in boring B-11 was a petroleum odor in the soils detected. The soils are generally characterized as medium sands. The groundwater table was present at less than 20 fbg in B-17 and B-22 and at 29 fbg in B-7 and B-8.

3.3 Laboratory Analytical Results for Soil Samples

The selected samples were submitted to ChemTech Laboratories, a NYSDOH approved laboratory. The analytical results of the soil samples were compared to the following documents published by the NYSDEC for soils:

- The NYSDEC Technical and Administrative Guidance Memorandum 4046 (TAGM) dated 1994 provides the Recommended Soil Cleanup Objectives (RSCOs) and the Eastern United States Average Background Concentrations (USABCs) for heavy metals in soils.
- New York City Department of Environmental Protection (NYCDEP) Bureau of Wastewater Treatment Limitations for Effluent to Storm Sewers and Effluent to Sanitary or Combined Sewers

- The NYSDEC Spill Technology and Remediation Series (STARS) Memo #1 provides guidance for the handling, disposal and/or reuse of non-hazardous petroleum-contaminated soils.
- Characteristics of Hazardous Waste published in the United States Environmental Protection Agency (USEPA) Resource Conservation and Recovery Act (RCRA) and NYSDEC Part 371

In addition to the TAGM RSCOs, the analytical results were compared to two separate guidance values described in the STARS document. The guidance values are described in the following bulleted points.

- **TCLP Alternative Guidance Values** - This value is provided to help determine if a given soil sample will meet the groundwater protection criteria, and can be used to evaluate a concentration of a contaminant without having to use the expensive TCLP Extraction Procedure. If a sample falls at or below the TCLP Alternative Guidance Value, then the sample is considered to have satisfied groundwater protection by the TCLP Extraction Procedure. If the sample contaminant concentration exceeds the TCLP Alternative Guidance Value, then no conclusion can be drawn regarding groundwater protection.
- **Human Health Guidance Values** - These standards are an essential requirement of both treatment and reuse of petroleum-contaminated soil. If the contaminant concentrations in the soil are less than or equal to the Human Health Guidance Values, then the soil is considered safe for human health concerns. These human health guidance values are based on the following:
 - Levels that correspond to excess lifetime cancer risks of one in a million for Class A (proved human carcinogens) and Class B (probable human carcinogens), or one in one hundred thousand for Class C (possible human carcinogens).
 - Levels for systemic toxicants, calculated from Reference Doses. Reference Doses are an estimate of the daily exposure an individual (including sensitive individuals) can experience without appreciable risk of health effects during a lifetime. An average scenario of exposure in which children ages one to six (who exhibit the greatest tendency to ingest soil) is assumed. An intake rate of 0.2 grams/day for a five-year exposure period for a 16-kg child is assumed.

3.3.1 Volatile Organic Compounds (VOCs)-Boring Grab Samples

VOCs were not detected at concentrations exceeding NYSDEC TAGM 4046, NYSDEC STARS #1 Human Health Regulatory Guidance or the NYSDEC STARS #1 TCLP Alternative Regulatory Guidance in the 26 grab soil samples. Acetone and methylene chloride were detected at low levels in each of the grab

samples. These compounds are typically associated with laboratory contamination and are not considered representative of the Site's natural soil conditions. Table 2 summarizes the results for VOCs in the grab soil composite samples.

3.3.2 Semi-volatile Organic Compounds (SVOCs) - Boring Composite Samples

SVOCs were not detected above laboratory detection limits in the composite soil samples collected from 23 of the 26 borings although Tentatively Identified Compounds (TICs) were detected in all 26 soil borings. SVOC results exceed the STARS TCLP Alternative Guidance Values in boring SB-9 (benzo(a)anthracene, chrysene and benzo(b) fluoranthene, and benzo(a) pyrene); in boring SB-23 (benzo(b) flouranthene); and in boring SB24 (benzo(a)anthracene, chrysene, benzo(b)fluoranthene, and benzo(k)fluoranthene). No conclusion can be drawn regarding groundwater protection via the TCLP analytical method. These concentrations are relatively low and not reproduced anywhere else throughout the Corridor. The presence of these SVOCs can likely be attributable to typical urban background conditions and not a petroleum release. Table 3 summarizes the results for SVOCs in the boring composite samples.

3.3.3 Target Analyte List Metals- Boring Composite Samples

In each of the 26 boring column composite samples, iron exceeds the TAGM RSCO. In 19 of the soil boring composite samples at least one of five additional metals (beryllium, chromium, copper, nickel, and/or zinc) were detected at concentrations exceeding NYSDEC TAGM 4046 guidance levels. In addition, zinc exceeds the Eastern USA Soil Typical Background concentrations in SB-23. The TAGM guidance document allows for higher soil concentrations of beryllium, chromium, copper, iron, nickel, and zinc if site background concentrations are shown to be naturally elevated. Since these samples are representative of the Site's overall subsurface soil conditions, the low levels of metals detected consistently in these samples is likely representative of natural background conditions. In addition and there is no known source for these metals within the Site boundaries.

3.3.4 Polychlorinated Biphenyls-Boring Composite Samples

The samples did not exhibit concentrations of any PCB above the TAGM RSCOs guidelines. In borings SB-1 and SB-5 two compounds were detected but below the cleanup objectives. PCB results for the composite soil samples are summarized in Table 5.

3.3.5 Waste Classification Parameters-Site-Wide Soil Composite Samples

TCLP metals were detected below the EPA Toxicity Characterization Limits in each of the site-wide composite samples for waste classification. The other waste classification parameters were not detected in the site-wide composite samples including TCLP VOCs, SVOCs, pesticides, herbicides, and PCBs. DROs were detected above 1000 ppm in each composite sample. Waste classification results are summarized in tables 6-1 to 6-3.

3.3.6 NYCDEP Parameters -Groundwater Samples

Groundwater was encountered in boring locations SB-7 and SB-8 at approximately 29 fbg and in SB-22 at approximately 16 fbg. The analytical results of groundwater samples collected from these borings indicate that groundwater may not be acceptable for discharge into sanitary/combined sewers without pretreatment. Total suspended solids (TSS) were detected in each sample above the NYCDEP limit (350 ppm) at concentrations ranging from 2,400 to 4,500 ppm. Tetrachloroethene was also detected at or slightly above the NYCDEP Limit 20 parts per billion (ppb) in borings SB-7 and SB-8. All other parameters analyzed were detected at concentrations below the NYCDEP permit limitations.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the field investigation and a review of the analytical results compared to the above referenced regulatory criteria, the following conclusions are presented:

- VOCs were not detected at concentrations exceeding NYSDEC TAGM 4046, NYSDEC STARS #1 Human Health Regulatory Guidance or the NYSDEC STARS #1 TCLP Alternative Regulatory Guidance in the 26 grab soil samples. Acetone and methylene chloride were detected at low levels in each of the grab samples. These compounds are typically associated with laboratory contamination and are not considered representative of the Site's natural soil conditions.
- PID readings ranged from zero parts per million (ppm) to 179 ppm. No visual impacts were noted and olfactory odors were noted in two borings (SB-11 and SB-25)
- SVOCs were not detected above laboratory detection limits in the composite soil samples collected from 23 of the 26 borings although TICs were detected in all 26 soil borings. SVOC results exceed the STARS TCLP Alternative Guidance Values in boring SB-9 (benzo(a)anthracene, chrysene and benzo(b) fluoranthene, and benzo(a) pyrene); boring SB-23 (benzo(b) flouranthene); and boring SB-24 (benzo(a)anthracene, chrysene, benzo(b)fluoranthene, and benzo(k)fluoranthene). No conclusion can be drawn regarding groundwater protection via the TCLP analytical method. These concentrations are relatively low and not reproduced anywhere else throughout the Corridor. The presence of these SVOCs can likely be attributable to typical urban background conditions and not a petroleum release.
- TAL metals were detected in all of the soil boring composite samples. Iron exceeds the TAGM RSCO in all 26 soil samples. In 19 of the soil boring composite samples at least one of five additional metals (beryllium, chromium, copper, nickel, and/or zinc) were detected at concentrations that exceed NYSDEC TAGM 4046 guidance levels. In addition, zinc exceeds the Eastern USA Soil Typical Background concentration in SB-23. The TAGM guidance document allows for higher soil concentrations of beryllium, chromium, copper, iron, nickel, and zinc if site background concentrations are shown to be naturally elevated. Since these samples are representative of the Site's overall subsurface soil conditions, the low levels of metals detected consistently in these samples is likely representative of natural background conditions. In addition, there is no known source for these metals within the Site boundaries.
- PCBs were not detected in any of the composite soil samples above the TAGM RSCO guidelines. In borings SB-1 and SB-5 two compounds were detected below the cleanup objectives.

- TCLP metals (arsenic, barium, cadmium, and selenium) were not detected above the EPA Toxicity Characterization Limits in any of the site-wide composite samples for waste classification. DROs were detected above 1,000 ppm in each composite sample. A typical acceptance concentration at a disposal facility is 30,000 ppm. The other waste classification parameters were not detected in the site-wide composite samples including TCLP VOCs, SVOCs, pesticides, herbicides, and PCBs.
- Groundwater was encountered in boring locations SB-7 and SB-8 at approximately 29 fbg and in SB-22 at approximately 16 fbg. The analytical results of groundwater samples collected from these borings indicate that groundwater may not be acceptable for discharge into sanitary/combined sewers without pretreatment. Total Suspended Solids (TSS) were detected in each sample above the NYCDEP limit (350 ppm) at concentrations ranging from 2,400 to 4,500 mg/l. Tetrachloroethene was also detected at or slightly above the NYCDEP Limit 20 parts per billion (ppb) in water samples collected from borings SB-7 and SB-8. All other parameters analyzed were detected at concentrations below the NYCDEP permit limitations.

Based on the results of the field investigation and a review of the analytical results compared to the above regulatory criteria, the following recommendations are made:

- 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), the NYSDOH and any other applicable regulations. The HASP should identify the possible locations and risks associated with the potential contaminants that may be encountered during the excavation activities, and the administrative and engineering controls that will be utilized to mitigate concerns.
- The Contract documents should identify provisions and a contingency for managing, handling, transporting and disposing of non-hazardous metals and SVOC impacted soil. The Contractor should be required to submit a Material Handling Plan (MHP), to identify the specific protocol and procedures that will be utilized to manage the waste in accordance with applicable regulations.
- Since this investigation is limited in scope and VOC and SVOC compounds may be encountered during reconstruction, PB recommends that concentrations of organic vapors in the work area along the Corridor should be monitored with a PID during soil excavation activities.
- PB does not believe the presence of metals at the concentrations detected in these samples presents a significant risk to human health and/or the environment and no additional investigation and/or

remediation is warranted. However, since metals exceed both applicable regulatory guidance (TAGM 4046), and in one boring exceed Average Eastern United States Background concentration ranges, PB recommends that dust control procedures should be in place during excavation activities to minimize the creation and dispersion of fugitive airborne dust. The Contractor shall implement strict dust control measures to protect the workers and the downwind community from potential airborne contaminants released as a direct result of construction activities. The dust control procedures should be in accordance with the NYSDOH generic Community Air Monitoring Plan (CAMP) of the NYSDEC Draft Division of Environmental Remediation (DER)-10, published December 25, 2002.

- In addition, because zinc concentrations in SB-23 exceeds both applicable regulatory guidance (TAGM 4046) as well as the Average Eastern United States Background concentration ranges and DROs were detected above 1000 ppm in each composite sample, it is recommended that soil excavated from this area should not be reused and may be properly disposed of at an approved off-site facility.
- Construction dewatering discharges that will be directed to the sanitary sewer or combined system may require primary pretreatment to remove TSS and/or secondary treatment to remove VOCs such as tetrachloroethene. In addition, any construction dewatering discharges into a storm sewer must be completed under the appropriate NYSDEC Storm Water Pollution Prevention Plan (SWPPP) and State Pollutant Discharge Elimination System (SPDES) General Permit for Storm Water Discharges from Construction Activity (GP-02-01). Additional sampling and laboratory analysis may be required to satisfy NYSDEC requirements prior to discharge into storm sewers.

5.0 STATEMENT OF LIMITATIONS

The data presented and the opinions expressed in this report are qualified as stated in the attachment to this section of the report.

Prepared by:

Kevin Heaphy, P.E.
Principal Engineer

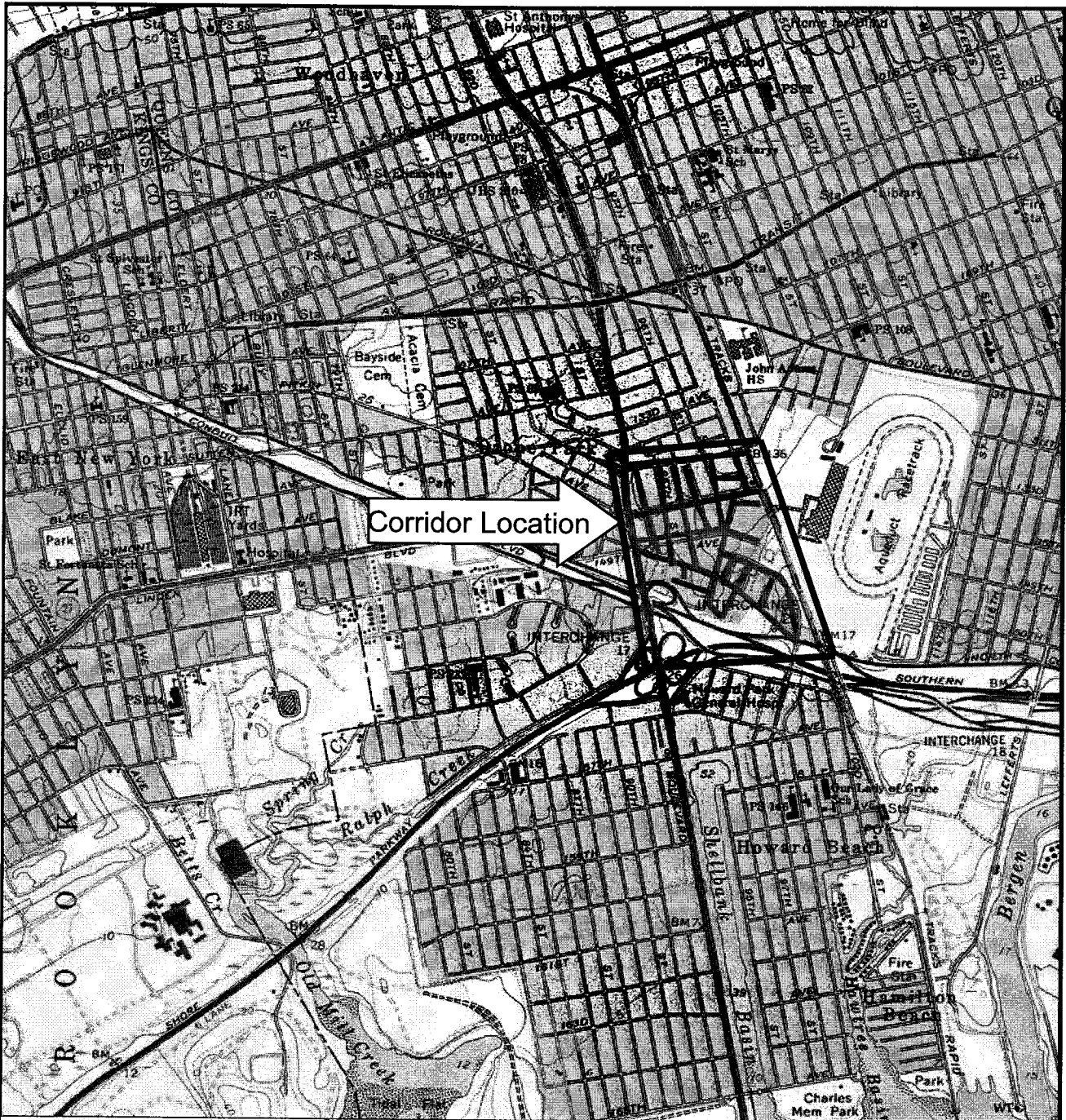
Susan Bianchetti, CPG
Senior Hydrogeologist
QA/QC

STATEMENT OF LIMITATIONS

The data presented and the opinions expressed in this report are qualified as follows:

1. 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.
2. PB 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.
3. In preparing this report, PB 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, PB has not attempted to verify the accuracy or completeness of any such information.
4. 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.
5. Because of the limitations stated above, the findings, observations, and conclusions expressed by PB 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.
6. 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.

FIGURES

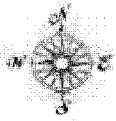


Map created with TOPO!® ©2003 National Geographic (www.nationalgeographic.com/topo)

FIGURE 1 – TOPOGRAPHIC CORRIDOR LOCATION MAP

SITE NAME: Reconstruction of Albert Road Area
BOROUGH, STATE: South Ozone Park, New York
PB PROJECT NO.: 37061A-67A
DDC Contract NO.: 20050026031
DDC JOB NUMBER.: HWQ411B
DDC WOL NO.: 4554-PBQD-1-4377
SCALE: See Figure

USGS Topographic Map 7.5 Minute Series,
 Jamaica, NY Quadrangle



Environmental FirstSearch
 .25 Mile Radius from Area
 Single Map:

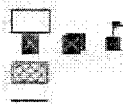
Environmental
FIRSTSEARCH

Recon ALBERT ROAD, QUEENS NY 11697



Source: 2002 U.S. Census TIGER Files

- Area Polygon
- Identified Site, Multiple Sites, Receptor
- NPL, Brownfield, Solid Waste Landfill (SWL) or Hazardous Waste
- Railroads



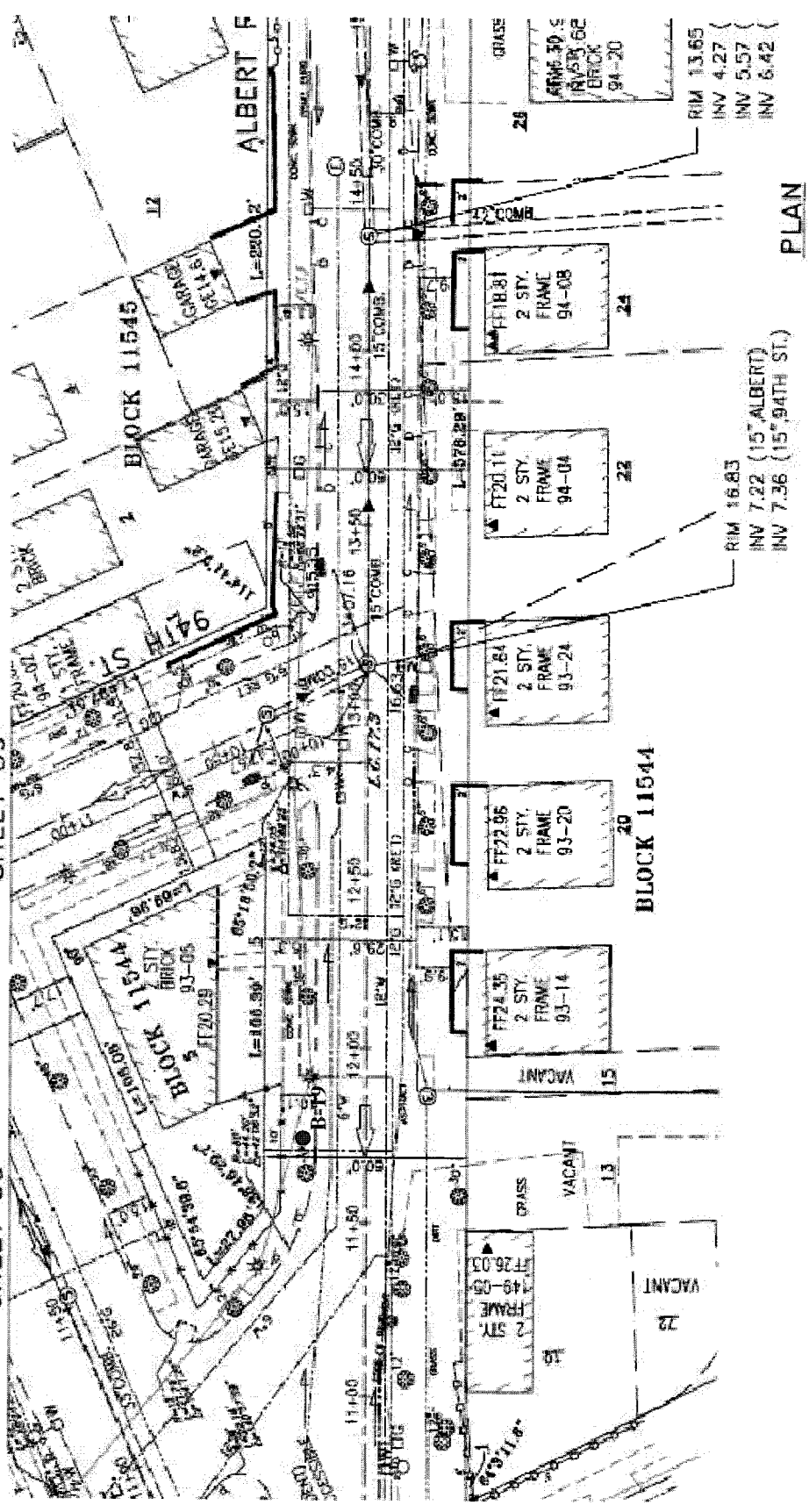
**FIGURE 2 – ENVIRONMENTAL FIRSTSEARCH
 CORRIDOR LOCATION MAP**

PB PROJECT NO.: 37061A-67B.2
 DDC Contract NO.: 20050026031
 DDC JOB NUMBER.: HWQ411B
 DDC WOL NO.: 4554-PBQD-1-4377
 SCALE: NTS



SHEET 39

SHEET 39





NEW YORK CITY DEPARTMENT OF
DESIGN + CONSTRUCTION

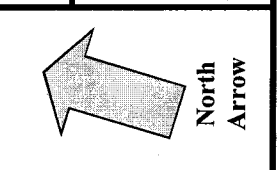


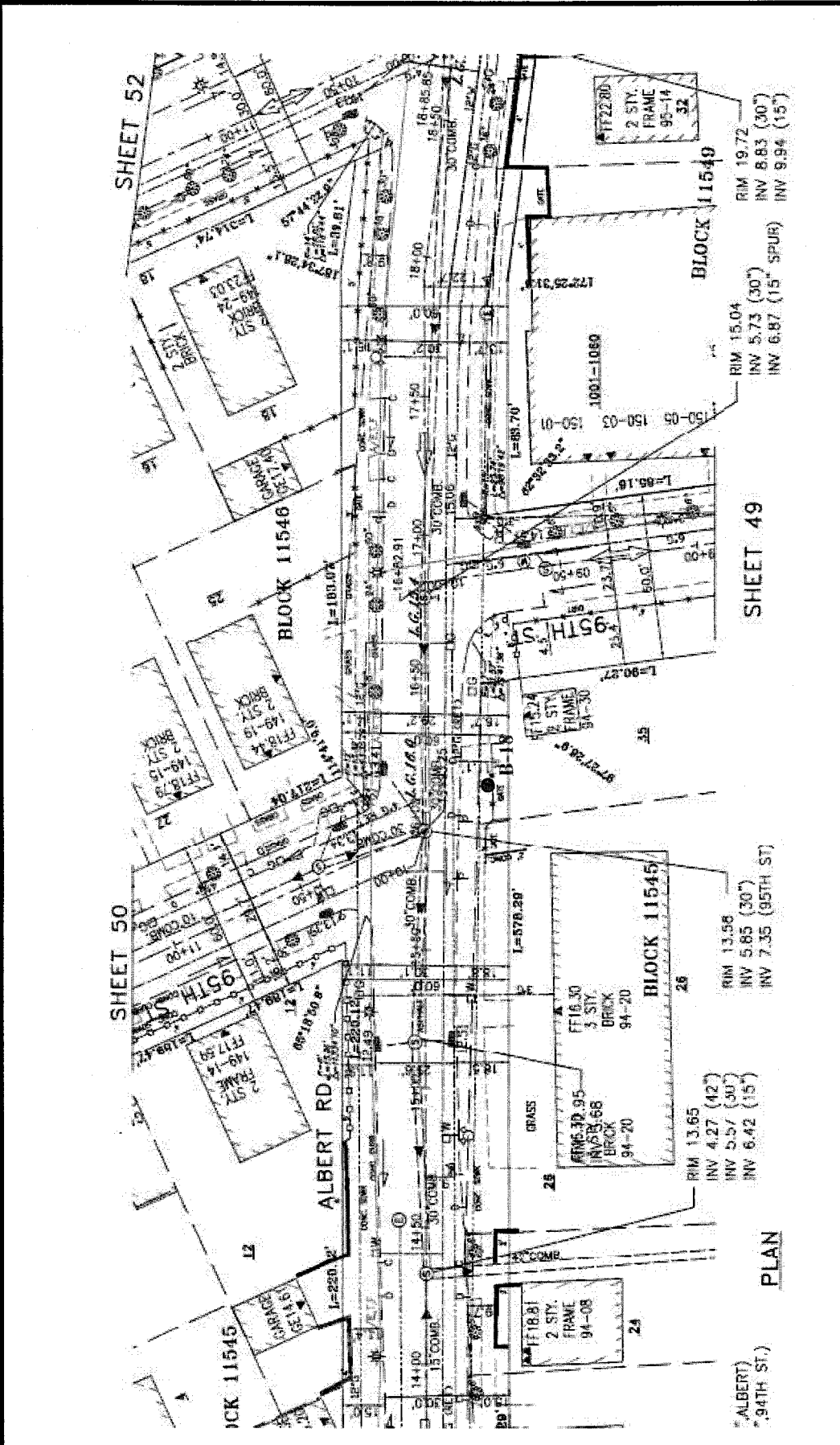




FIGURE - 3-1 BORING LOCATION MAP

SITE NAME: Reconstruction of Albert Road Area
 BOROUGH, STATE: Queens, New York
 PB PROJECT NO.: 37061A - 67B
 DDC Project No.: HWQ411B
 SCALE: 1" = Approximately 45'

LEGEND

	Soil Boring Location
	Soil Boring/Groundwater



  <small>NEW YORK CITY DEPARTMENT OF DESIGN + CONSTRUCTION</small>	<p>FIGURE - 3-2 BORING LOCATION MAP</p> <p>SITE NAME: Reconstruction of Albert Road Area BOROUGH, STATE: Queens, New York PB PROJECT NO.: 37/061A - 67B DDC Project No.: HWQ411B SCALE: 1" = Approximately 45'</p>	<p>LEGEND</p> <ul style="list-style-type: none"> ● Soil Boring Location ⊙ Soil Boring/Groundwater
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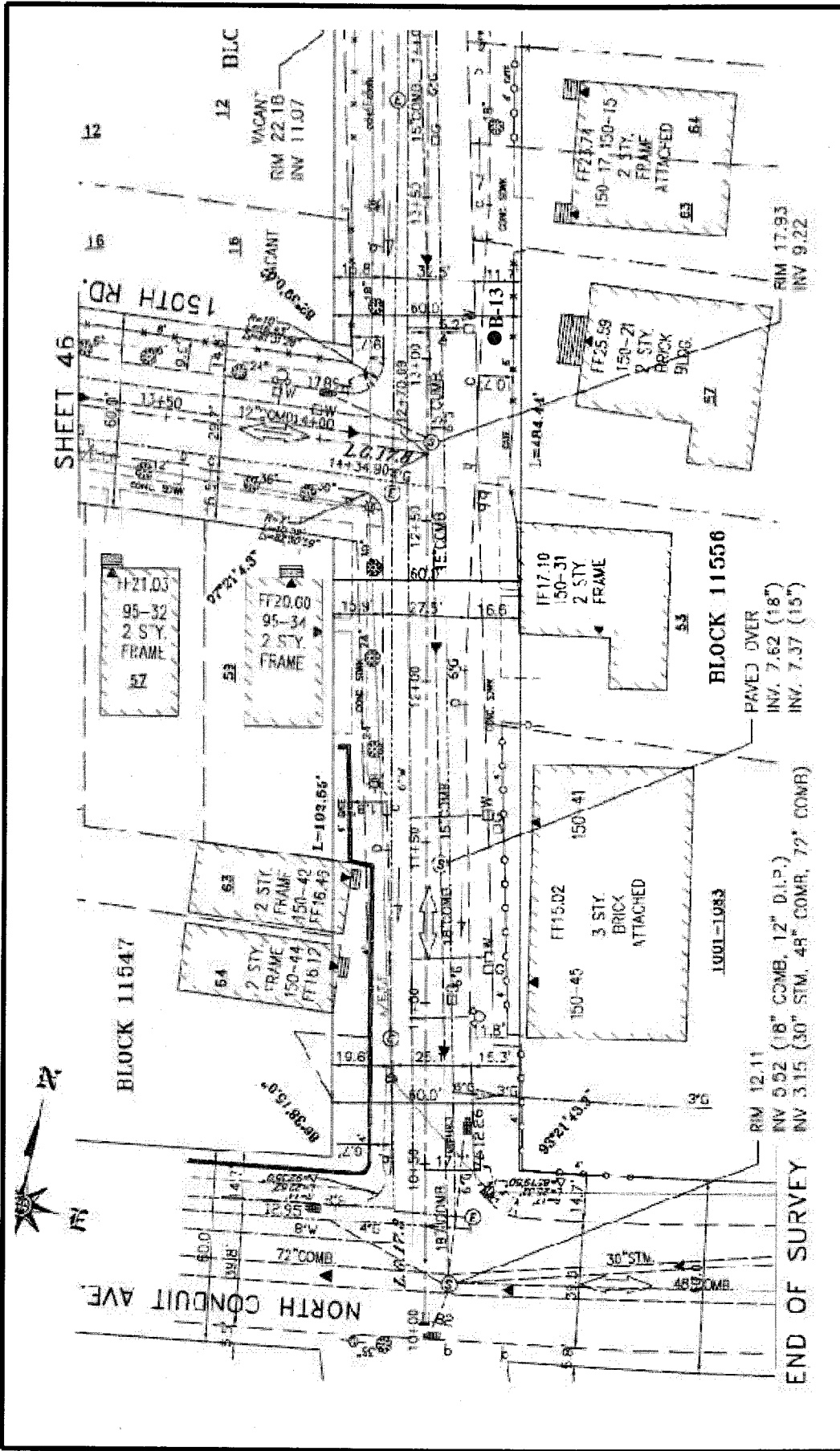


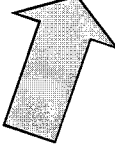




FIGURE - 3-3 BORING LOCATION MAP

SITE NAME: Reconstruction of Albert Road Area
BOROUGH, STATE: Queens, New York
PB PROJECT NO.: 37061A - 67B
DDC Project No.: HWQ411B
SCALE: 1" = Approximately 45'

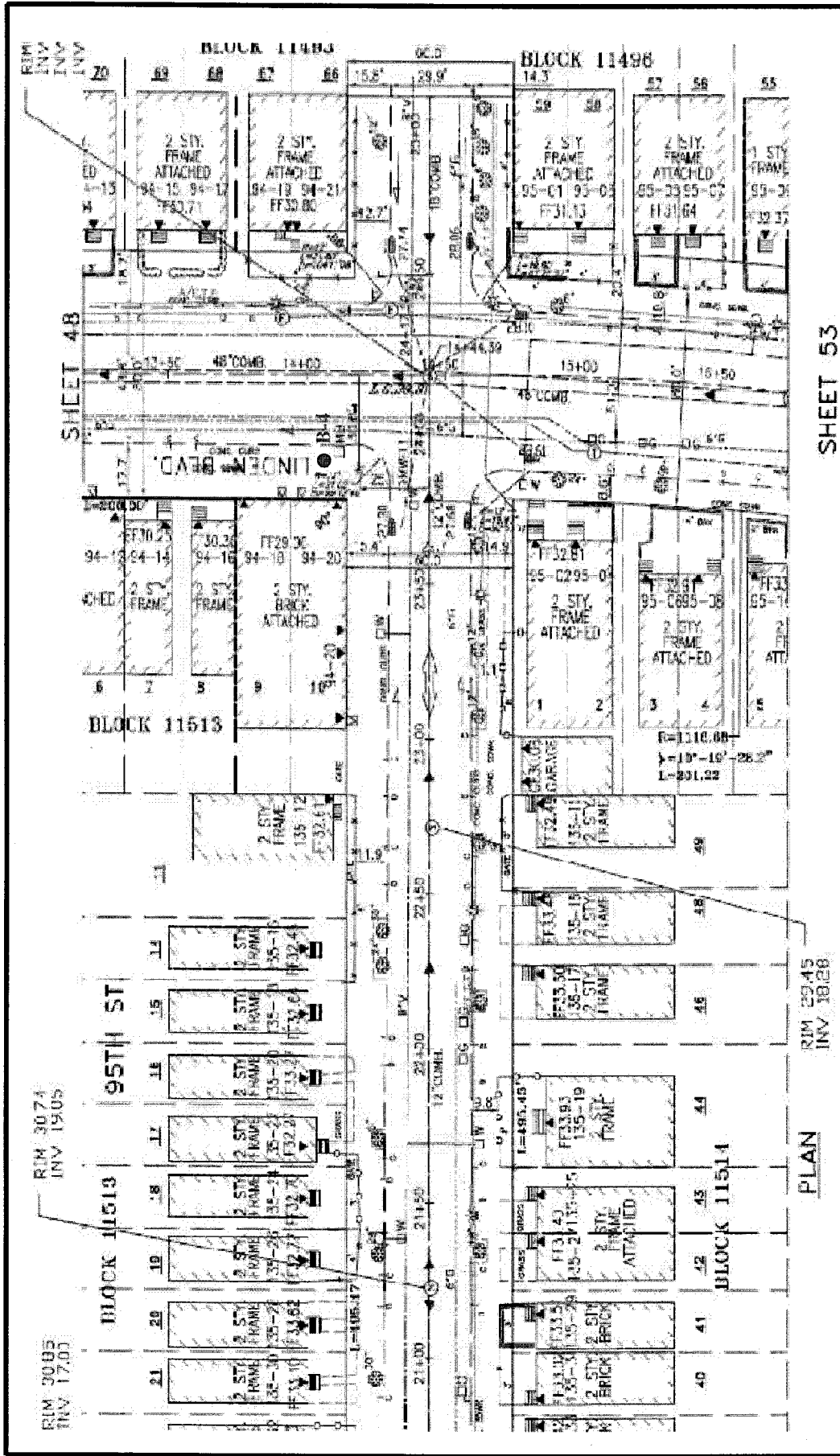
LEGEND





-  Soil Boring Location
-  Soil Boring/Groundwater

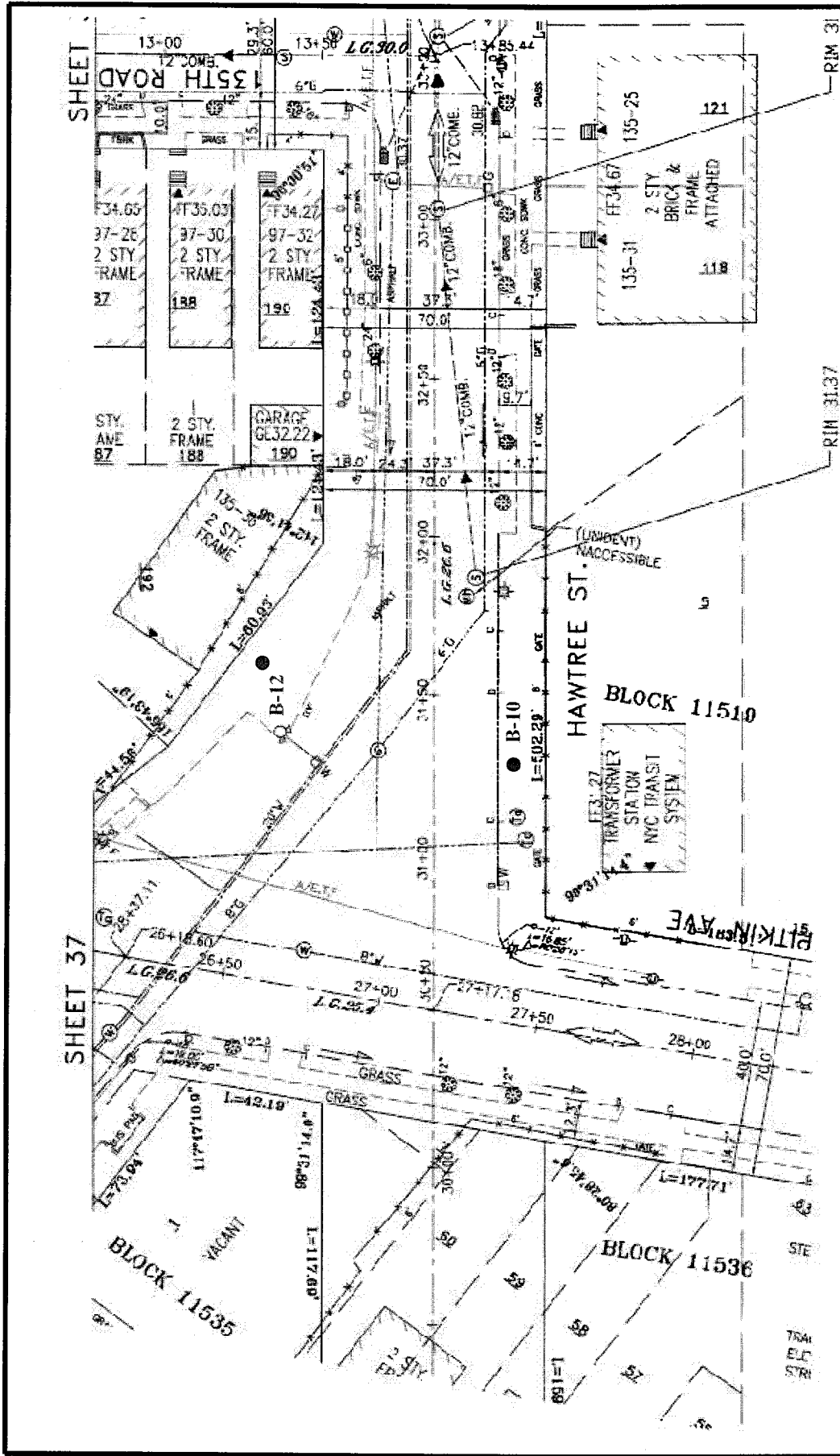
 North Arrow

NEW YORK CITY DEPARTMENT OF
DESIGN + CONSTRUCTION



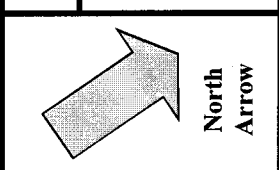
  NEW YORK CITY DEPARTMENT OF DESIGN + CONSTRUCTION	<p>FIGURE - 3-4 BORING LOCATION MAP</p> <p> SITE NAME: Reconstruction of Albert Road Area BOROUGH, STATE: Queens, New York PB PROJECT NO.: 37061A - 67B DDC Project No.: HWQ411B SCALE: 1" = Approximately 45' </p>	<p>LEGEND</p> <ul style="list-style-type: none">  Soil Boring Location  Soil Boring/Groundwater
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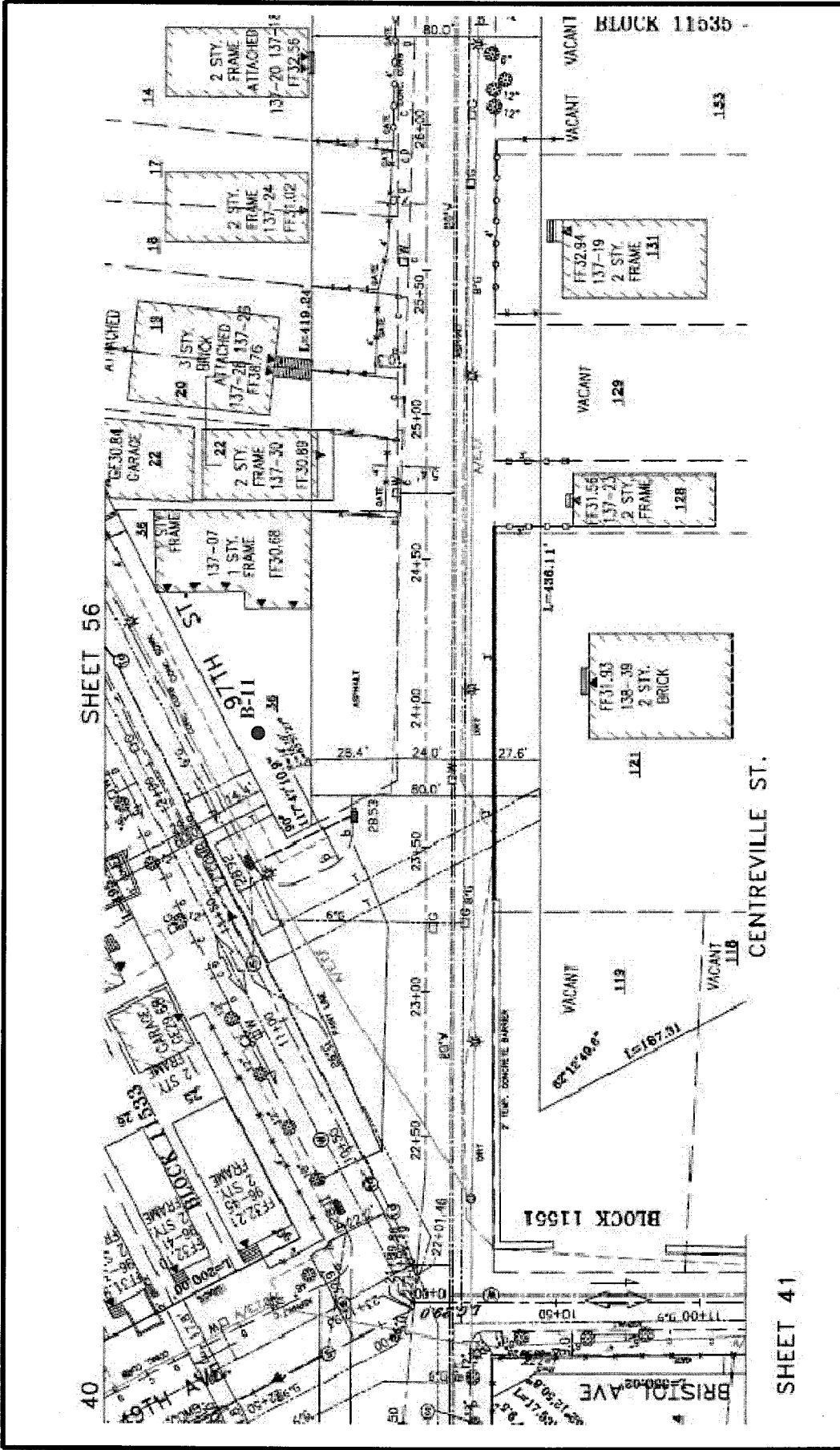
LEGEND	
●	Soil Boring Location
⊙	Soil Boring/Groundwater

FIGURE - 3-5 BORING LOCATION MAP

SITE NAME: Reconstruction of Albert Road Area
 BOROUGH, STATE: Queens, New York
 PB PROJECT NO.: 37061A - 67B
 DDC Project No.: HWQ411B
 SCALE: 1" = Approximately 45'



NEW YORK CITY DEPARTMENT OF
DESIGN + CONSTRUCTION

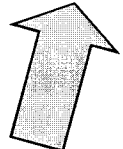


SHEET 56

SHEET 41



NEW YORK CITY DEPARTMENT OF DESIGN + CONSTRUCTION



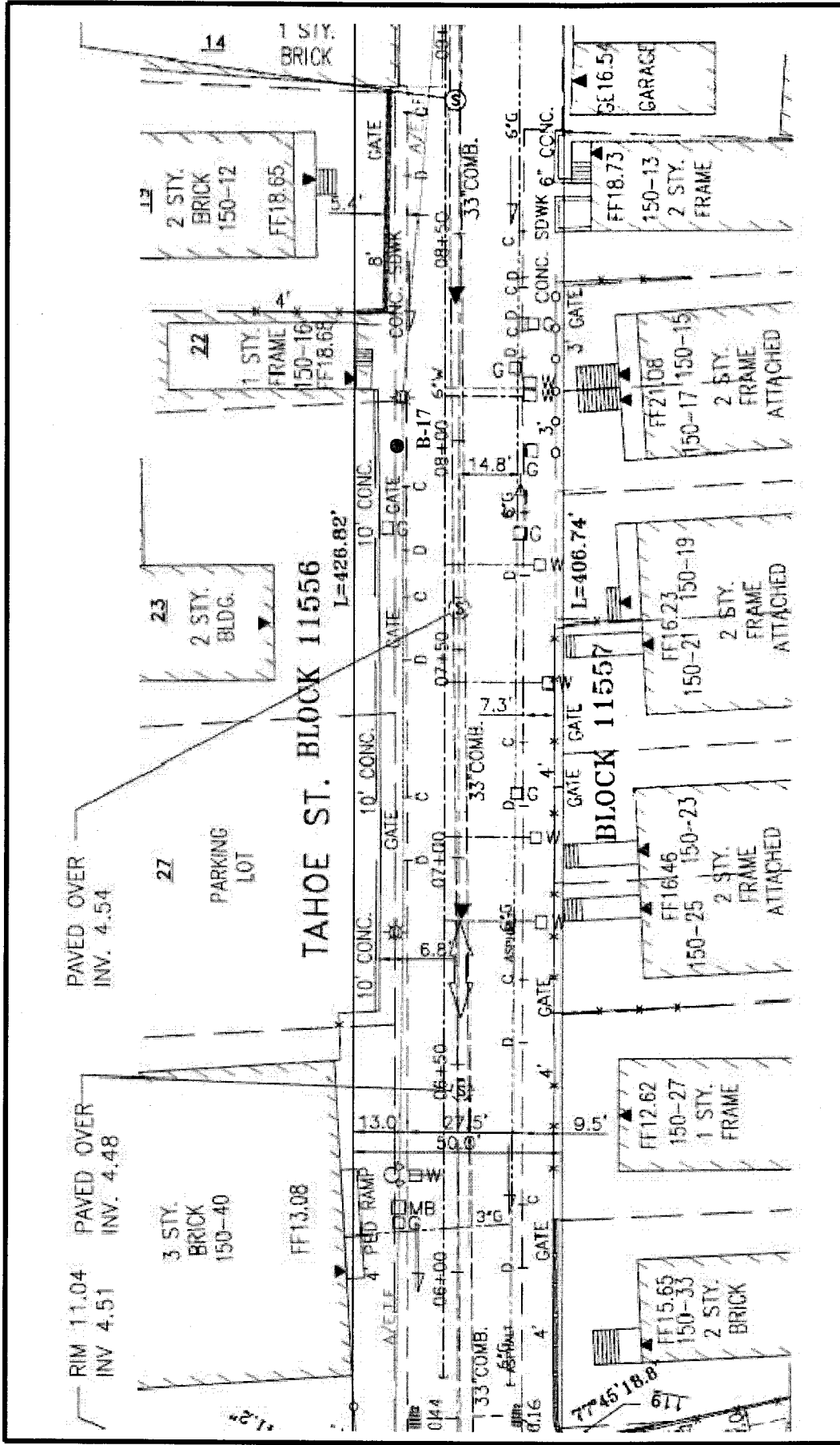
North Arrow

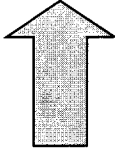


FIGURE - 3-6 BORING LOCATION MAP

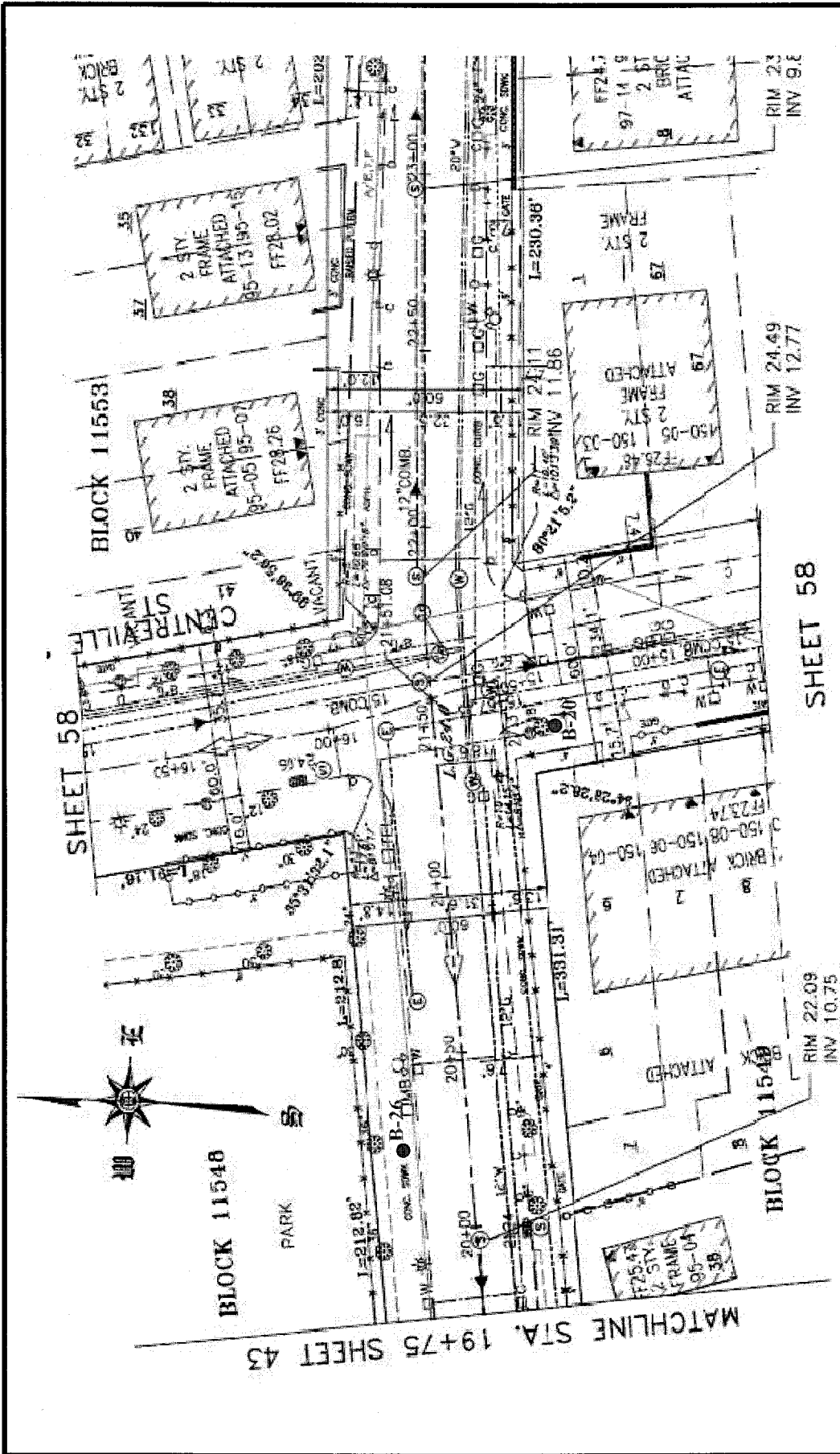
SITE NAME: Reconstruction of Albert Road Area
 BOROUGH, STATE: Queens, New York
 PB PROJECT NO.: 37061A - 67B
 DDC Project No.: HWQ411B
 SCALE: 1" = Approximately 45'



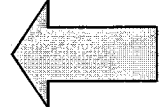
LEGEND

- Soil Boring Location
- ⊗ Soil Boring/Groundwater



<p>LEGEND</p> <ul style="list-style-type: none"> ● Soil Boring Location ⊙ Soil Boring/Groundwater 	<p>FIGURE - 3-7 BORING LOCATION MAP</p> <p>SITE NAME: Reconstruction of Albert Road Area BOROUGH, STATE: Queens, New York PB PROJECT NO.: 37061A - 67B DDC Project No.: HWQ411B SCALE: 1" = Approximately 45'</p>
 <p>North Arrow</p>	  <p>NEW YORK CITY DEPARTMENT OF DESIGN + CONSTRUCTION</p>



  NEW YORK CITY DEPARTMENT OF DESIGN + CONSTRUCTION	 North Arrow	FIGURE - 3-8 BORING LOCATION MAP	LEGEND
SITE NAME: Reconstruction of Albert Road Area BOROUGH, STATE: Queens, New York PB PROJECT NO.: 37061A - 67B DDC Project No.: HWQ411B SCALE: 1" = Approximately 45'		● Soil Boring Location ⊙ Soil Boring/Groundwater	

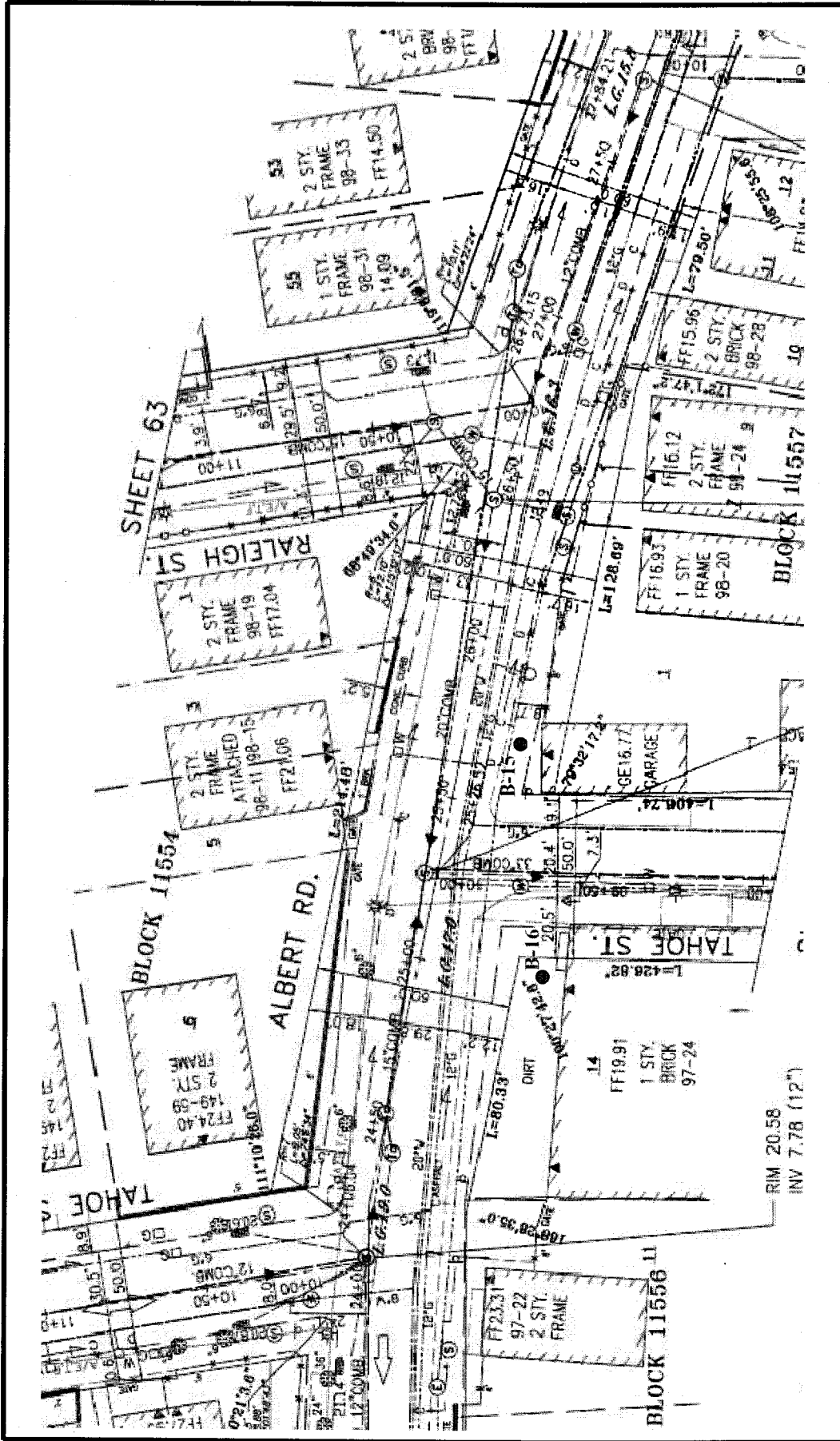


FIGURE - 3-9 BORING LOCATION MAP

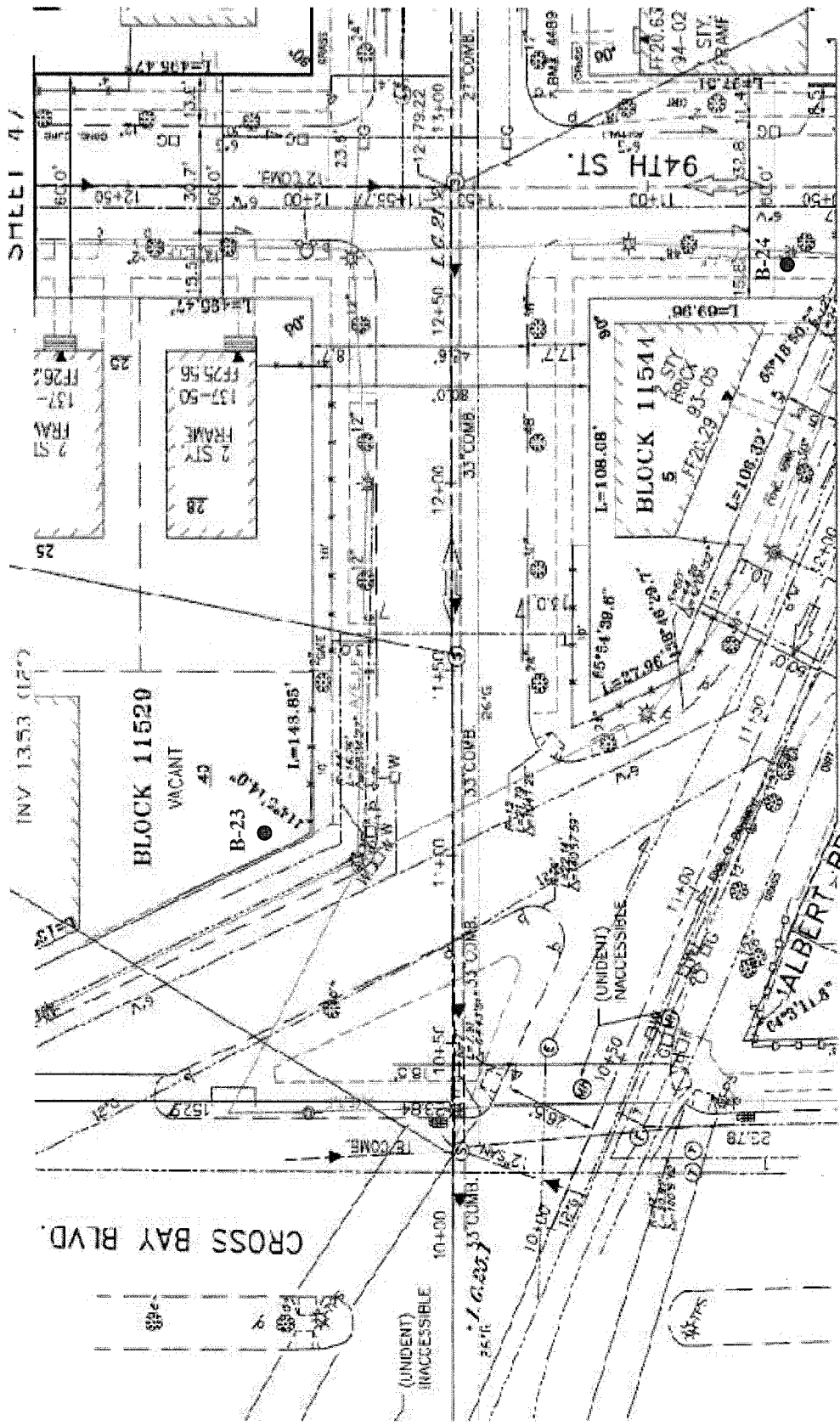
SITE NAME: Reconstruction of Albert Road Area
BOROUGH, STATE: Queens, New York
PB PROJECT NO.: 37061A - 67B
DDC Project No.: HWQ411B
SCALE: 1" = Approximately 45'

North
Arrow

NEW YORK CITY DEPARTMENT OF
DESIGN + CONSTRUCTION

LEGEND

- Soil Boring Location
- ⊙ Soil Boring/Groundwater



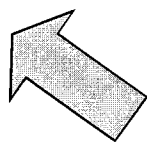
SHEET 4/

FIGURE - 3-10 BORING LOCATION MAP

LEGEND

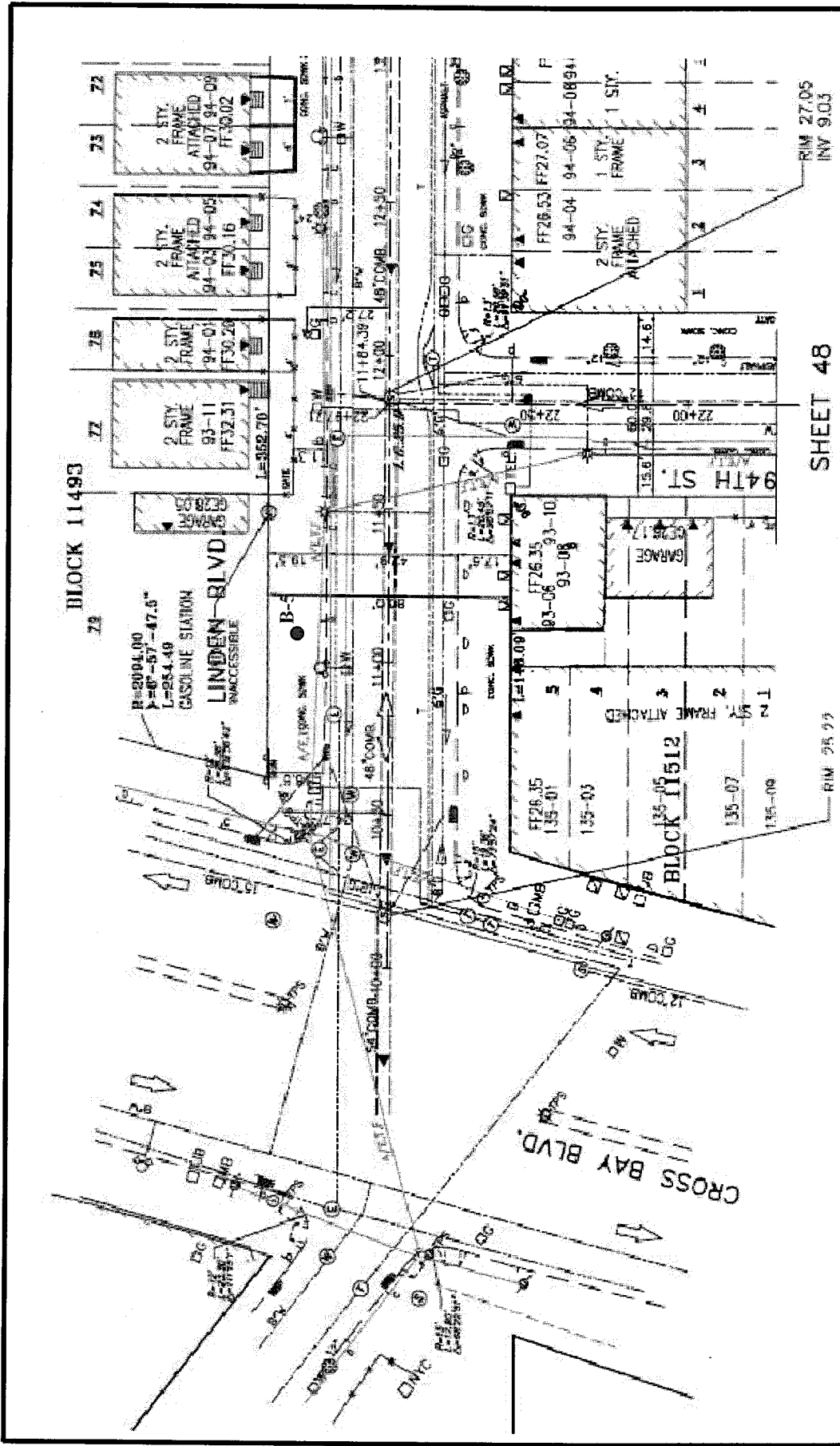
SITE NAME: Reconstruction of Albert Road Area
 BOROUGH, STATE: Queens, New York
 PB PROJECT NO.: 37061A - 67B
 DDC Project No.: HWQ411B
 SCALE: 1" = Approximately 45'

- Soil Boring Location
- ⊗ Soil Boring/Groundwater



North
Arrow



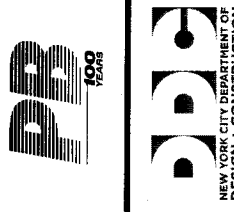
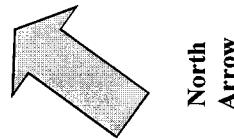


SHEET 48

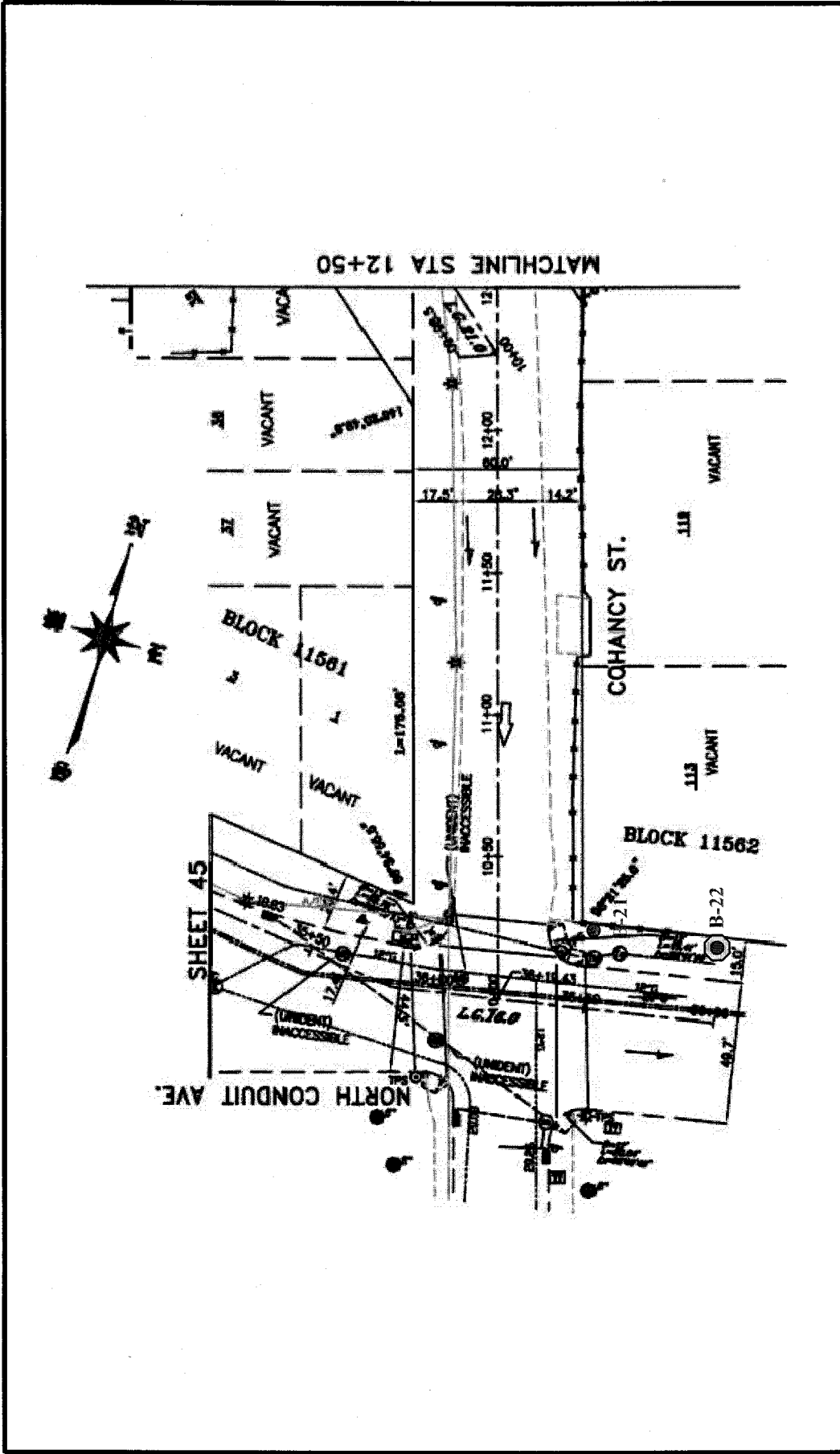
FIGURE - 3-11 BORING LOCATION MAP





LEGEND

SITE NAME: Reconstruction of Albert Road Area
BOROUGH, STATE: Queens, New York
PB PROJECT NO.: 37061A - 67B
DDC Project No.: HWQ411B
SCALE: 1" = Approximately 45'



- Soil Boring Location
- ⊙ Soil Boring/Groundwater



	<p>FIGURE - 3-12 BORING LOCATION MAP</p> <p>SITE NAME: Reconstruction of Albert Road Area BOROUGH, STATE: Queens, New York PB PROJECT NO.: 37061A - 67B DDC Project No.: HWQ411B SCALE: 1" = Approximately 45'</p>	<p>LEGEND</p> <ul style="list-style-type: none">  Soil Boring Location  Soil Boring/Groundwater
 <p>North Arrow</p>	<p>PPD NEW YORK CITY DEPARTMENT OF DESIGN + CONSTRUCTION</p>	

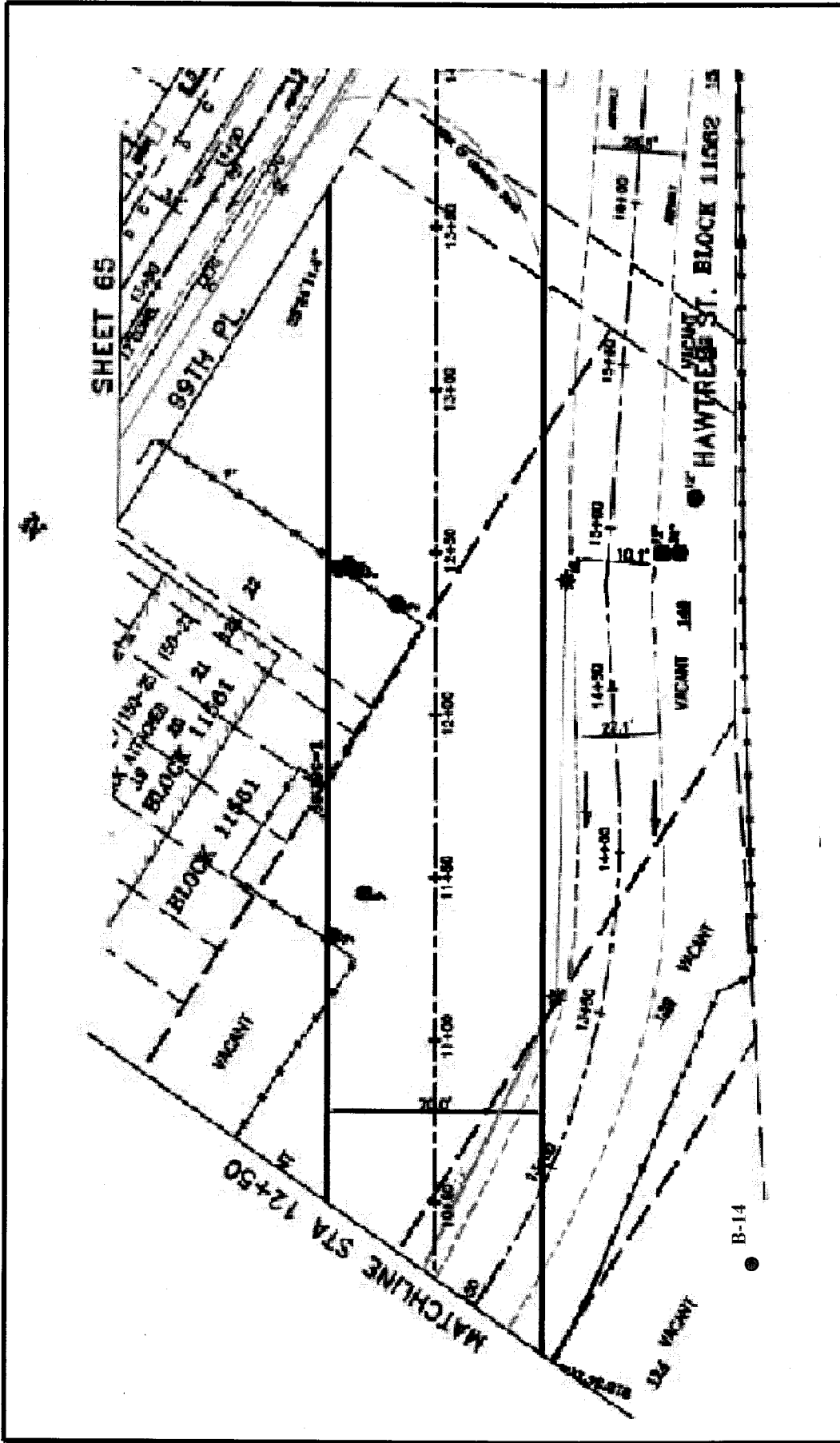


FIGURE - 3-13 BORING LOCATION MAP

SITE NAME: Reconstruction of Albert Road Area
BOROUGH, STATE: Queens, New York
PB PROJECT NO.: 37061A - 67B
DDC Project No.: HWQ411B
SCALE: 1" = Approximately 45'

LEGEND

- Soil Boring Location
- ⊙ Soil Boring/Groundwater

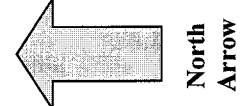
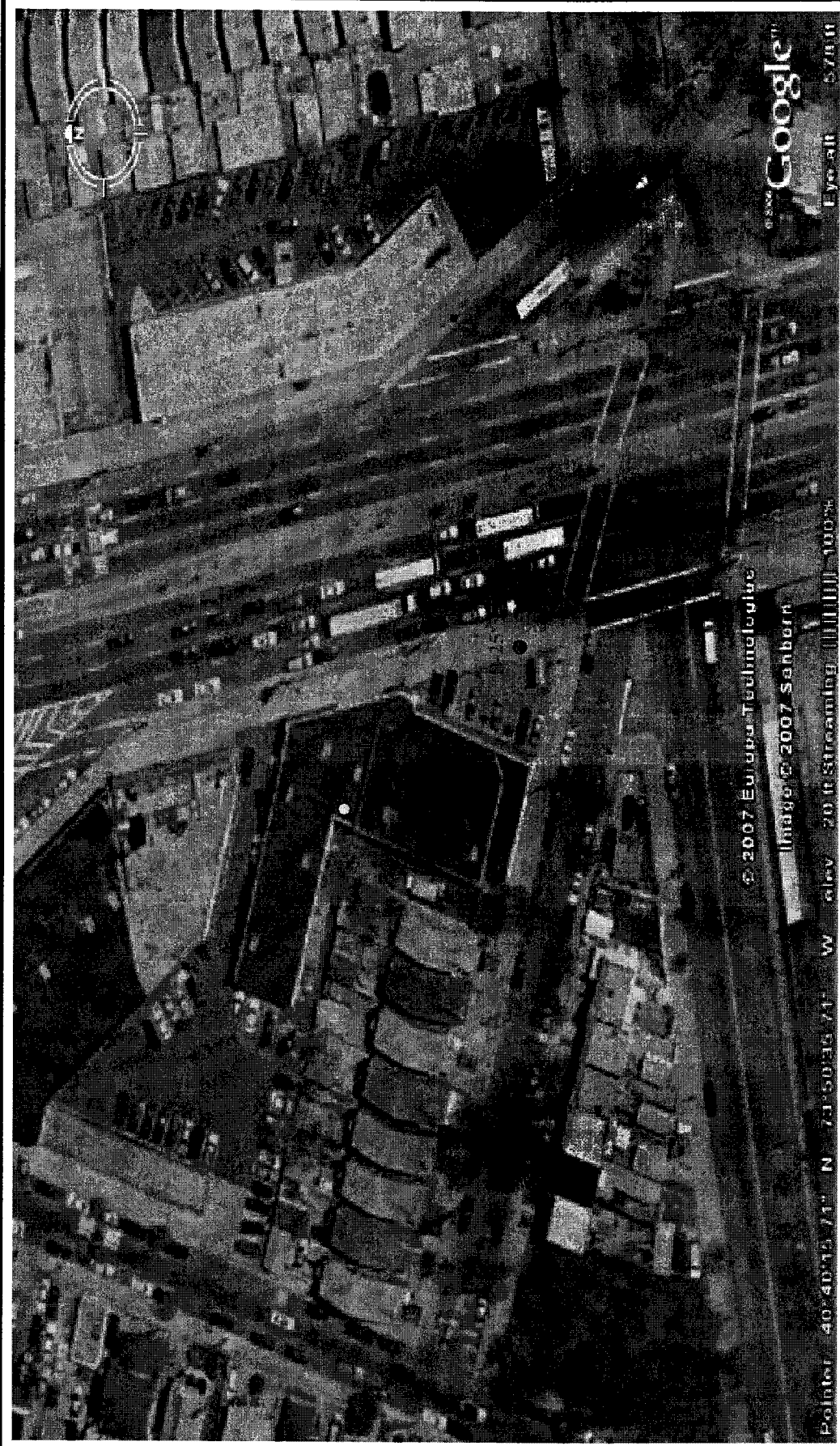


FIGURE - 3-14 BORING LOCATION MAP

SITE NAME: Reconstruction of Albert Road Area
BOROUGH, STATE: Queens, New York
PB PROJECT NO.: 37061A - 67B
DDC Project No.: HWQ411B
SCALE: Not to Scale

LEGEND

- Soil Boring Location
- Soil Boring/Groundwater





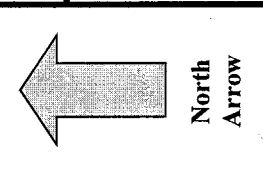
LEGEND	
	Soil Boring Location
	Soil Boring/Groundwater

FIGURE - 3-15 BORING LOCATION MAP

SITE NAME: Reconstruction of Albert Road Area
 BOROUGH, STATE: Queens, New York
 PB PROJECT NO.: 37061A - 67B
 DDC Project No.: HWQ411B
 SCALE: Not to Scale



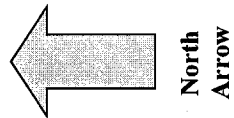


LEGEND

- Soil Boring Location
- ⊙ Soil Boring/Groundwater

FIGURE - 3-16 BORING LOCATION MAP

SITE NAME: Reconstruction of Albert Road Area
BOROUGH, STATE: Queens, New York
PB PROJECT NO.: 37061A - 67B
DDC Project No.: HWQ411B
SCALE: Not to Scale



TABLES

NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL CONSTRUCTION
 DESIGN AND CONSTRUCTION
 ALBERT ROAD LIMITED SUBSURFACE CORRIDOR INVESTIGATION
 SOUTH OZONE PARK, QUEENS, NEW YORK

TABLE 1
 NEW YORK

ENVIRONMENTAL BORING DATA SUMMARY

Soil Boring Number	Initial Location*	Date Performed	Highest PID (U) Reading	Grab Sample Interval (dbg)	Total VOCs (ppb)-Soils	Total BNAS/SVOCs	Metals Exceed? (2)-	Water Table Depth (dbg)	Water Sample	EOB (3) Depth (ftg)	Other Comments
1	B-1: 98-25 Linden Blvd. (Oz Auto Body Shop)	12-Mar-07	0.0	10-15	94	0	Yes	NE	No	20	
2	B-2: 98-31 Linden Blvd (Vacant Lot)	12-Mar-07	6.0	10-15	94	0	Yes	NE	No	20	
3	B-3: Intersection of Linden Blvd. and Centerville Street (Centerville Unit Substation)	12-Mar-07	6.0	10-15	93	0	Yes	NE	No	20	
4	B-4: 94-20 Linden Blvd. (Super Suds Laundromat and Dry Cleaners)	12-Mar-07	0.0	10-15	89	0	Yes	NE	No	20	
5	B-5: 134-01 Cross Bay Blvd. (Hess Gas Station (under construction))	12-Mar-07	0.0	10-15	1,696	0	Yes	NE	No	20	
6	B-6: 137-02 Cross Bay Blvd. (Cross Bay Express Service)	15-Mar-07	33.0	10-15	52	0	Yes	NE	No	20	
7	B-7: 137-02 Cross Bay Blvd. (Cross Bay Express Service)	15-Mar-07	43.0	10-15	44	0	Yes	29	YES	30	
8	B-8: 135-45 Cross Bay Blvd. (Sunoco Fueling Station)	15-Mar-07	24.0	10-15	44	0	Yes	29	YES	30	
9	B-9: 135-45 Cross Bay Blvd. (Sunoco Fueling Station)	15-Mar-07	32.0	10-15	69	874	Yes	NE	No	20	
10	B-10: 135-43 Hawtree Street (NYC Transit System Station)	13-Mar-07	95.0	10-15	78	0	Yes	NE	No	20	
11	B-11: 137-32 Centerville Street (Bay Auto Center)	13-Mar-07	179.0	10-15	41	0	Yes	NE	No	20	
12	B-12: 135-36 Centerville Street (Vacant Lot)	13-Mar-07	61.0	10-15	94	0	Yes	NE	No	20	
13	B-13: 150-25 Centerville Street (Farm Trading Company)	13-Mar-07	6.0	10-15	75	0	Yes	NE	No	20	
14	B-14: 150-41 Colanacy Street (Sony's Collision Auto Body Shop)	15-Mar-07	4.0	10-15	95	0	Yes	NE	No	20	
15	B-15: 98-18 Albert Road (John's Garage Auto Repair Shop)	14-Mar-07	32.0	10-15	76	0	Yes	NE	No	20	
16	B-16: 97-24 Albert Road (Residential Apartments)	14-Mar-07	12.0	10-15	67	0	Yes	NE	No	20	
17	B-17: 155-22; Tahoe Street (Warehouse with associated offices)	15-Mar-07	14.0	10-15	80	0	Yes	13	No	20	
18	B-18: 94-30 Albert Road (Robert Mecabe Construction)	16-Mar-07	17.0	10-15	68	0	Yes	NE	No	20	
19	B-19: Between 9316 and 9400 Albert Road (Residential)	16-Mar-07	23.0	10-15	47	0	Yes	NE	No	20	
20	B-20: 96-18 Albert Road (Residential)	13-Mar-07	30.0	10-15	63	0	Yes	NE	No	20	
21	B-21: 10001 North Conduit Avenue (Closed Auto Repair Shop)	15-Mar-07	125.0	10-15	79	0	Yes	NE	No	20	
22	B-22: 10001 North Conduit Avenue (Closed Auto Repair Shop)	15-Mar-07	60.0	10-15	108	0	Yes	16	YES	16	
23	B-23: 137-23 Cross Bay Blvd. (Cross Bay Motor Inn)	15-Mar-07	56.0	10-15	74	1,140	Yes	NE	No	20	
24	B-24: 149-02 94 th Street, Corner of Albert Road (Apartment Buildings)	13-Mar-07	6.0	10-15	65	999	Yes	NE	No	20	
25	B-25: 137-20 Cross Bay Blvd. (Dairy Mill)	16-Mar-07	0.0	10-15	57	0	Yes	NE	No	20	
26	B-26: 96-01 Albert Road (Centerville Playground)	13-Mar-07	2.0	10-15	79	210	Yes	NE	No	20	

* Locations can be seen on Figures 3.1-3.16

1 - Photoionization Detector (PID)
 2 - Does any metal exceed the TAGM 4046 or Eastern United States Background Guidance?

3 - End of boring.

NE - Water table not encountered.

ftg - feet below grade

ppb - parts per billion

NA - Not analyzed

ND - Not detected at or above the listed laboratory detection limit.

TABLE 2
 NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
 ALBERT ROAD LIMITED SUBSURFACE CORRIDOR INVESTIGATION
 SOUTH OZONE PARK QUEENS, NEW YORK
 VOC ANALYTICAL RESULTS/SOILS

Compound (ppb)	NYSDEC TCLP HL Guidance (L)	NYSDEC Human Health Guidance (L)	NYSDEC TAGM RSCOs (L)	SB-1 (10-15)	SB-2 (10-15)	SB-3 (10-15)	SB-4 (10-15)	SB-5 (10-15)	SB-6 (10-15)	SB-7 (10-15)	SB-8 (10-15)	SB-9 (10-15)	SB-10 (10-15)	SB-11 (10-15)	SB-12 (10-15)	SB-13 (10-15)
Dichlorodifluoromethane	N/A	N/A	10,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	N/A	N/A	10,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	N/A	N/A	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	N/A	N/A	10,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	N/A	N/A	1,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethane	N/A	N/A	10,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethene	N/A	N/A	10,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	N/A	N/A	300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	N/A	N/A	100	70JB	70JB	69JB	52JB	44JB	41JB	57JB	75JB	59JB	59JB	79JB	75JB	52JB
n-Butane	N/A	N/A	2,700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	N/A	N/A	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	N/A	N/A	10,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl acetate	N/A	N/A	10,000*	24J	24J	24J	24J	21J	12J	12J	19J	22J	19J	22J	21J	24J
Methylene chloride	N/A	N/A	50 or MDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Dichloroethane	N/A	N/A	300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	N/A	N/A	300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	N/A	N/A	10,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butane	N/A	N/A	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	N/A	N/A	10,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	N/A	N/A	300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	N/A	N/A	400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	N/A	N/A	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	N/A	N/A	10,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	14	24000	60 or MDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	N/A	N/A	20 or MDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene	N/A	N/A	10,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloroethane	N/A	N/A	10,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	N/A	N/A	1,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	N/A	N/A	20,000,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	N/A	N/A	240	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene	N/A	N/A	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	N/A	N/A	10,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene	N/A	N/A	1,300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	N/A	N/A	1,100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene	N/A	N/A	5,300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	N/A	N/A	200,000,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene	N/A	N/A	1,200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	N/A	N/A	10,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	N/A	N/A	10,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	N/A	NE	2,300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	N/A	N/A	400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	N/A	N/A	1,900	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene	N/A	N/A	1,100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	N/A	N/A	1,100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene	N/A	N/A	1,100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	N/A	N/A	10,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene	N/A	N/A	10,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total TICs	N/A	N/A	N/A	97	94	93	89	1606	44	55	44	69	78	41	94	75

Notes:
 1- TCLP Alternative Guidance Values, NYSDEC Spill Technology and Remediation Series (STARs) Memo #1
 2- Human Health Guidance Values, NYSDEC Spill Technology and Remediation Series (STARs) Memo #1
 3- NYSDEC Recommended Soil Cleanup Objectives (RSCO), Technical and Administrative Guidance Memo (TAGM) 4046, 495.
 * - No specific standard for this compound, however, the standard of 10,000 ug/kg for Total VOCs has been applied.
 ND - Not detected at or above the listed laboratory detection limit.
 N/A - Not Applicable
 NE - Not Established

Dotted Text-Compound detected above MDL but not above NYSDEC guidance or RSCO values.
 Underline text - Exceeds TCLP Alternative Guidance Value - Bold text - Exceeds TAGM RSCO
 All units are micrograms per kilogram (ug/kg) and discussed in the text as parts per billion (ppb)
 TIC - Tentatively Identified Compound

TABLE 2 (CONT.)
 NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL CONSTRUCTION
 ALBERT FREUD LIMITED SURFACE CORROSION INVESTIGATION
 SOUTH OZONE PARK, QUEENS, NEW YORK
 VOC ANALYTICAL RESULTS/SOILS

Compound (ppb)	NYSDDEC TCLP AH Guidance (L)	NYSDDEC Human Health Guidance (L)	NYSDDEC TAGM RSCOs (L)	SB-14 (10-15)	SB-15 (10-15)	SB-16 (10-15)	SB-17 (10-15)	SB-18 (10-15)	SB-19 (10-15)	SB-20 (10-15)	SB-21 (10-15)	SB-22 (10-15)	SB-23 (10-15)	SB-24 (10-15)	SB-25 (10-15)	SB-26 (10-15)
Dichlorodibromomethane	NA	NA	10,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	NA	NA	10,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Dichloroethane	NA	NA	10,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	NA	NA	10,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	NA	NA	10,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	NA	NA	10,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	NA	NA	10,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	NA	NA	10,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	NA	NA	2,700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	1,000	NE	120	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl acetate	NA	NA	10,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	NA	NA	50 or AML	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	NA	NA	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	NA	NA	10,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Bromopropane	NA	NA	10,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	NA	NA	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	NA	NA	400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	NA	NA	400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	NA	NA	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	NA	NA	60 or AML	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	NA	NA	240,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	NA	NA	20 or AML	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethane	NA	NA	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	NA	NA	10,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	NA	NA	10,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	NA	NA	1,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	NA	NA	200,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	NA	NA	240	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	NA	NA	240	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	NA	NA	10,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	NA	NA	10,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	NA	NA	10,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	NA	NA	240	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	NA	NA	10,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	NA	NA	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	NA	NA	10,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	NA	NA	1,100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	NA	NA	1,100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	NA	NA	240	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	NA	NA	1,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	NA	NA	1,800	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	NA	NA	1,100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	NA	NA	10,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NA	NA	10,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NA	NA	10,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NA	NA	10,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs	NA	NA	NA	76	86	67	68	47	63	79	108	74	65	57	79	79

1- TCLP Alternative Guidance Values, NYSDDEC Spill Technology and Remediation Series (STARS) Memo #1
 2- Human Health Guidance Values, NYSDDEC Spill Technology and Remediation Series (STARS) Memo #1
 3- NYSDDEC Recommended Soil Cleanup Objectives (RSCO), Technical and Administrative Guidance Memo (TAGM) 4046, 4056.
 * - No specific standard for this compound, however, the standard of 10,000 ug/kg for Total VOCs has been applied.
 ND - Not Detected
 NE - Estimated Value-Shadowed
 NA - Not Applicable
 NE - Not Established
 Dotted Text-Compound detected above AML, but not above NYSDDEC guidance or RSCO values.
 Underline Text - Exceeds TCLP Alternative Guidance Value, **Bold text** - Exceeds TAGM RSCO
 All units are micrograms per kilogram (ug/kg) and detected in the text as parts per billion (ppb)
 TIC - Tentatively Identified Compound

TABLE 3
 NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
 ALBERT ROAD LIMITED SUBSURFACE CORRIDOR INVESTIGATION
 SOUTH OZONE PARK, NEW YORK
 SVOCs ANALYTICAL RESULTS/SOILS

Compound (ppb)	NYSDDEC TCLP AH Guidance (1)	NYSDDEC Human Health Guidance (2)	NYSDDEC TAGM RSCOs (3)	SB-1 (10-15) 3/12/2007	SB-2 (10-15) 3/12/2007	SB-3 (10-15) 3/12/2007	SB-4 (10-15) 3/12/2007	SB-5 (10-15) 3/12/2007	SB-6 (10-15) 3/15/2007	SB-7 (10-15) 3/15/2007	SB-8 (10-15) 3/15/2007	SB-9 (10-15) 3/15/2007	SB-10 (10-15) 3/13/2007	SB-11 (10-15) 3/13/2007	SB-12 (10-15) 3/13/2007	SB-13 (10-15) 3/13/2007
3-Methylcyclohexane	N/A	N/A	500 or MDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Methylpentane	400	500,000	20,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	N/A	N/A	200 or MDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	N/A	N/A	20 or MDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Naphthol	N/A	N/A	6,200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Naphthylamine	N/A	N/A	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrochlorobenzene	N/A	N/A	4,100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Diethyl phthalate	N/A	N/A	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenane	1,000	3,000,000	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Nitrotoluene	N/A	N/A	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitro-2-methylphenol	N/A	N/A	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	N/A	N/A	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Ethoxyphenyl phenyl ether	N/A	N/A	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzochlorobenzene	N/A	N/A	400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aniline	N/A	N/A	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perchlorophenol	N/A	N/A	5,300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	1,000	N/A	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	1,000	20,000,000	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	N/A	N/A	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	1,000	3,000,000	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	1,000	2,000,000	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	N/A	N/A	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	N/A	N/A	1,400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.04	220	224 or MDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	0.04	N/A	400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	N/A	N/A	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	N/A	N/A	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	0.04	220	61 or MDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	0.04	61	61 or MDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-c-d)pyrene	0.04	NE	3,200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	1,000	1,000	14 or MDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h)perylene	0.04	NE	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Tentatively Identified Compounds (TICs)			500,000	5100	4900	4800	4900	6000	6000	6750	6100	5970	5700	5200	6920	4000
Total SVOCs			500,000	0	0	0	0	0	0	0	0	874	0	0	0	0

(SVOCs Means #1)
 2- Human Health Guidance Values, NYSDDEC Spill Technology and Remediation Series
 3- NYSDDEC Recommended Soil Cleanup Objectives (RSCO), Technical and
 * - No specific standard for this compound, however, the standard of 10,000 ug/kg for Total
 ND - Not detected at or above the listed laboratory detection limit.
 N/A - Not Applicable
 NE - Not Established
 † - Estimated concentration
 Dotted-C Compound detected above MDL, but not above NYSDDEC guidance or RSCO values
 Underline text - Exceeds the TCLP/Alternative Guidance Value. **Bold text** - Exceeds
 All units are micrograms per kilogram (ug/kg) and discussed in the text as parts per billion
 TIC - Tentatively Identified Compound

TABLE 3 (CONT.)
 NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
 ALBERT ROAD LIMITED SUBSURFACE CORRIDOR INVESTIGATION
 SOUTH OZONE PARK, NEW YORK
 SVOCs ANALYTICAL RESULTS/SOILS

Compound (ppb)	NYSDEC TCLP Alt. Guidance (1)	NYSDEC Human Health Guidance (2)	NYSDEC TAGM RSCOs (3)	SB-14 (10-15) 3/15/2007	SB-15 (10-15) 3/14/2007	SB-16 (10-15) 3/14/2007	SB-17 (10-15) 3/15/2007	SB-18 (10-15) 3/16/2007	SB-19 (10-15) 3/16/2007	SB-20 (10-15) 3/13/2007	SB-21 (10-15) 3/15/2007	SB-22 (10-15) 3/15/2007	SB-23 (10-15) 3/15/2007	SB-24 (10-15) 3/15/2007	SB-25 (10-15) 3/16/2007	SB-26 (10-15) 3/13/2007
5-Nitroanthiline	N/A	N/A	500 or MDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	400	5,000,000	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	N/A	N/A	200 or MDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	N/A	N/A	20 or MDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	N/A	N/A	5,300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	N/A	N/A	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Pyridyl phthalate	N/A	N/A	4,100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl Phenyl ether	N/A	N/A	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	1,000	3,000,000	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroanthiline	N/A	N/A	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrosodiphenylamine	N/A	N/A	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl Phenyl ether	N/A	N/A	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	N/A	N/A	400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Atrazine	N/A	N/A	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	N/A	N/A	5,300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	1,000	NE	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	1,000	20,000,000	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D-n-butyl phthalate	1,000	N/A	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	1,000	3,000,000	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	1,000	2,000,000	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Buryl benzoyl phthalate	N/A	N/A	1,400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5,3-Dichlorobenzidine	N/A	N/A	220	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	0.04	200	224 or MDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	N/A	N/A	400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
D-n-octyl phthalate	N/A	N/A	50,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzofluoranthene	0.04	200	61 or MDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzofluoranthene*	0.04	200	61 or MDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzofluoranthene*	0.04	200	61 or MDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzofluoranthene*	0.04	200	61 or MDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-c,d)pyrene	0.04	NE	3,200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-c,d)pyrene	0.04	NE	3,200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofluoranthene	1,000	1,000	14 or MDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzofluoranthene	0.04	NE	500,000 *	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Tentatively Identified Compounds (TICs)			500,000	0	0	0	0	0	0	0	0	0	0	0	0	0
Total SVOCs			500,000	0	0	0	0	0	0	0	0	0	0	0	0	0

1- TCLP Alternative Guidance Values, NYSEDEC Spill Technology and Remediation Series (STARs) Memo #1
 2- Human Health Guidance Values, NYSEDEC Spill Technology and Remediation Series (STARs) Memo #1
 3- NYSEDEC Recommended Soil Cleanup Objectives (RSCO), Technical and Administrative Guidance Memo (TAGM)-0406, 495.
 * - No specific standard for this compound, however, the standard of 10,000 ug/kg for Total VOCs has been applied.
 ND - Not detected at or above the listed laboratory detection limit.
 N/A - Not Applicable
 NE - Not Established
 J - Estimated concentration
 Dotted-Compound detected above MDL but not above NYSEDEC guidance or RSCO values
 Underline text - Exceeds the TCLP Alternative Guidance Value; **Bold text** - Exceeds TAGM RSCO
 All units are micrograms per kilogram (ug/kg) and discussed in the text as parts per billion (ppb)
 TIC - Tentatively Identified Compound

TABLE 4
NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
ALBERT EINSTEIN TUNNEL AND UNDERPASS INVESTIGATION
SOUTH COAST PARK, QUEENS, NEW YORK
TAL METALS ANALYTICAL RESULTS

Compound, (ppm)	NYSD/C, RSCO (1)	EASTERN USA BCG (2)	SB-1 (10'-15') 3/12/2007	SB-2 (10'-15') 3/12/2007	SB-3 (10'-15') 3/12/2007	SB-4 (10'-15') 3/15/2007	SB-5 (10'-15') 3/15/2007	SB-6 (10'-15') 3/15/2007	SB-7 (10'-15') 3/15/2007	SB-8 (10'-15') 3/15/2007	SB-9 (10'-15') 3/15/2007	SB-10 (10'-15') 3/13/2007	SB-11 (10'-15') 3/13/2007	SB-12 (10'-15') 3/13/2007	SB-13 (10'-15') 3/13/2007
Aluminum	SB	33,000	3,370	2,710	3,370	3,370	2,400	3,160	2,400	3,160	2,400	3,370	3,160	3,160	2,400
Antimony	SB	N/A	2.11	ND	ND	ND	ND	ND	ND	ND	ND	1.71	ND	ND	2.80
Arsenic	300 or SB	15-600	1.22	48.3	6.12	35.61	ND	ND	ND	ND	ND	74.83	31.17	ND	22.60
Barium	0.15 (HEAST)		16.7	14.9	22.4	17.3	20.6	14.3	11.8	32.2	20.3	16.4	15	16.4	11.4
Beryllium	or SB	0-1.75	2.973	10.23	23.83	0.833	ND	0.833	1.893	1.77	1.83	1.783	1.43	1.783	1.603
Cadmium	1 or SB	0-1-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	SB	100-5,000	411	288	401	362	509	320	603	475	4410	311	343	382	381
Chromium	10 or SB	15-40	18.6	11	18.6	5.92	8	8	24.8	5.5	7.41	7.92	7.41	8	6.96
Cobalt	30 or SB	2-500	2.7	2.7	2.7	1.73	3.1	3.6	3.1	2.4	3.2	2.94	3.2	2.7	3.27
Copper	25 or SB	1-50	5.38	9.33	6.22	6.22	6.22	6.22	6.22	6.22	6.22	6.22	6.22	6.22	6.22
Iron	2,000 or SB	2,000-550,000	15,700	12,700	15,700	6,440	11,800	11,800	11,800	6,500	12,400	12,400	11,800	12,400	11,800
Lead	200-500	4-500	2.73	2.73	2.29	1.6	8.39	14.3	17.7	11.1	22.5	14.3	17.8	17.5	21.6
Magnesium	SB	100-5,000	1,160	843	1,280	741	2,000	916	874	825	1,360	895	825	1,010	834
Manganese	SB	50-5,000	309	268	448	57.6	193	143	126	143	201	192	154	239	201
Mercury	0.1	0.001-0.2	0.014	0.053	0.053	0.053	ND	ND	ND	ND	0.103	ND	ND	0.053	ND
Nickel	13 or SB	5-25	8.33	8.39	9.18	3.88	9.2	7.3	7.3	5.5	9.4	6.32	5.5	7.18	4.84
Potassium	SB	8,500-45,000	260	325	307	280	368	397	374	374	439	200	280	260	174
Selenium	2 or SB	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	SB	0.0008-0.000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	SB	6,000-8,000	116	85.7	78.93	113	170	230	230	174	185	ND	185	174	185
Thallium	SB	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	150 or SB	1-300	15.7	21	15.5	9.77	17.8	12.7	12.7	15.4	12	12	9.62	9.38	7.24
Zinc	20 or SB	9-50	28.4	33	18.1	10.9	17.7	14.4	14.4	13.4	21.1	15.6	13.4	14.6	13.1

1 - NYSD/C Recommended Soil Cleanup Objectives, Technical and Administrative Guidance Memo (TAGM) 4046, 495
2 - Average Eastern USA or NYS Background Concentration, Technical and Administrative Guidance Memo (TAGM) 4046, 495
ND - Not detected at or above the listed laboratory detection limit
SB - Site Background
SB - Not detected at or above the listed laboratory detection limit
N - Spiked sample recovery not within control limits
J - Estimated value
E - Indicates compound exceeded the calibration range for the GC/MS
* - Duplicate analysis not within control limits
Dotted text denotes that compound was detected but does not exceed RSCO or
Shaded and Bold Italicized text denotes Eastern USA Typical Background Concentration-exceedance.
All units are milligrams per kilogram (mg/kg) and discussed in text as parts per million (ppm)

TABLE 5
 NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
 ALBERT ROAD LIMITED SUBSURFACE CORRIDOR INVESTIGATION
 SOUTH OZONE PARK, QUEENS, NEW YORK
 PCB ANALYTICAL RESULTS/SOILS

Compound (ppb)	NYSDEC RSCD	SB-1 (10 ⁻¹⁵) 3/12/2007	SB-2 (10 ⁻¹⁵) 3/12/2007	SB-3 (10 ⁻¹⁵) 3/12/2007	SB-4 (10 ⁻¹⁵) 3/12/2007	SB-5 (10 ⁻¹⁵) 3/12/2007	SB-6 (10 ⁻¹⁵) 3/15/2007	SB-7 (10 ⁻¹⁵) 3/15/2007	SB-8 (10 ⁻¹⁵) 3/15/2007	SB-9 (10 ⁻¹⁵) 3/15/2007	SB-10 (10 ⁻¹⁵) 3/13/2007	SB-11 (10 ⁻¹⁵) 3/13/2007	SB-12 (10 ⁻¹⁵) 3/13/2007	SB-13 (10 ⁻¹⁵) 3/13/2007
Aroclor 1016	100	31	ND	ND	ND	21	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1221	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1232	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1242	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1248	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1254	100	33	ND	ND	ND	31P	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1260	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

Compound (ppb)	NYSDEC RSCD	SB-14 (10 ⁻¹⁵) 3/15/2007	SB-15 (10 ⁻¹⁵) 3/14/2007	SB-16 (10 ⁻¹⁵) 3/14/2007	SB-17 (10 ⁻¹⁵) 3/15/2007	SB-18 (10 ⁻¹⁵) 3/16/2007	SB-19 (10 ⁻¹⁵) 3/16/2007	SB-20 (10 ⁻¹⁵) 3/13/2007	SB-21 (10 ⁻¹⁵) 3/15/2007	SB-22 (10 ⁻¹⁵) 3/15/2007	SB-23 (10 ⁻¹⁵) 3/15/2007	SB-24 (10 ⁻¹⁵) 3/13/2007	SB-25 (10 ⁻¹⁵) 3/16/2007	SB-26 (10 ⁻¹⁵) 3/13/2007
Aroclor 1016	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1221	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1232	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1242	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1248	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1254	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1260	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

1 - NYSDEC Recommended Soil Cleanup Objectives, Technical and Administrative Guidance Memo (TAGM) 4046, 4/95.

ND - Not detected at or above the laboratory detection limit.

*The PDB for PCBs is 1000 ppb for surface soils and 10,000 ppb for sub-surface soils.

All units are milligrams per kilogram (ug/kg or ppb).

Shaded=analyte detected above MDL

TABLE 6-1
 NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
 ALBERT ROAD LIMITED SUBSURFACE CORRIDOR INVESTIGATION
 SOUTH OZONE PARK, QUEENS, NEW YORK
 Waste Classification- Site Composite-Full TCLP

Compound (ppm)	Site Composite-C-1 (SB-5, 23, 24)	Site Composite-C-2 (SB10,11,12)	Site Composite C-3 (SB-9, 21, 16)	EPA TOXICITY CHARACTERISTIC LIMITS GUIDANCE (ppm)
Date Sampled:	3/28/07	3/28/07	3/28/07	
TCLP VOCs				
Vinyl Chloride	ND	ND	ND	0.2
1,1 Dichloroethene	ND	ND	ND	0.7
2-Butanone	ND	ND	ND	200
Carbon Tetrachloride	ND	ND	ND	0.5
Chloroform	ND	ND	ND	6
Benzene	ND	ND	ND	0.5
1,2 Dichloroethane	ND	ND	ND	0.5
Trichloroethene	ND	ND	ND	0.7
Tetrachloroethene	ND	ND	ND	0.5
Chlorobenzene	ND	ND	ND	100
TCLP SVOCs				
Pyridine	ND	ND	ND	5
1,4-Dichlorobenzene	ND	ND	ND	7.5
2-Methylphenol	ND	ND	ND	200
3+4 -Methylphenols	ND	ND	ND	200
Hexachloroethane	ND	ND	ND	3
Nitrobenzene	ND	ND	ND	2
Hexachlorobutadiene	ND	ND	ND	0.5
2,4,5-Trichlorophenol	ND	ND	ND	400
2,4,6-Trichlorophenol	ND	ND	ND	2
2,4-Dinitrotoluene	ND	ND	ND	0.13
Hexachlorobenzene	ND	ND	ND	0.13
Pentachlorophenol	ND	ND	ND	100
TCLP Pesticides				
gamma-BHC (lindane)	ND	ND	ND	0.4
Heptachlor	ND	ND	ND	0.008
Heptachlor Epoxide	ND	ND	ND	0.008
Endrine	ND	ND	ND	0.02
Methoxychlor	ND	ND	ND	10
Toxaphene	ND	ND	ND	0.5
Chlordane	ND	ND	ND	0.03
TCLP Herbicides				
2,4-D	ND	ND	ND	1
2,4,5-TP (silvex)	ND	ND	ND	10
TCLP Metals				
Arsenic as As	.090J	0.0813	0.0475	5
Barium as Ba	0.522	0.458	0.526	100
Cadmium as Cd	0.0142	0.0132	0.0117	1
Chromium as Cr	.0105J	0.012	0.0161	5
Lead as Pb	.019J	ND	ND	5
Mercury as Hg	ND	ND	ND	0.2
Selenium as Se	.0768J	0.0609	0.0913	1
Silver as Ag	ND	ND	ND	5

ND - Not detected at or above the laboratory detection limit.

TABLE 6-2
 NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
 ALBERT ROAD LIMITED SUBSURFACE CORRIDOR INVESTIGATION
 SOUTH OZONE PARK, QUEENS, NEW YORK
 WASTE CLASSIFICATION-Site Composite -Pesticides

Compound (ppb) PB Sample ID:	Site Composite-C-1 (SB-5, 23, 24) 3/28/07	Site Composite-C-2 (SB10,11,12) 3/28/07	Site Composite C-3 (SB-9, 21, 16) 3/28/07
Date Sampled:			
Sample Type:	ND	ND	ND
alpha-BHC	ND	ND	ND
beta-BHC	ND	ND	ND
delta-BHC	ND	ND	ND
gamma-BHC	ND	ND	ND
heptachlor	ND	ND	ND
aldrin	ND	ND	ND
heptachlor epoxide	ND	ND	ND
endosulfan I	ND	ND	ND
dieldrin	ND	ND	ND
4,4-DDE	ND	ND	ND
endrin	ND	ND	ND
endosulfan II	ND	ND	ND
4,4 DDD	ND	ND	ND
endosulfan sulfate	ND	ND	ND
4,4 DDT	ND	ND	ND
methoxychlor	ND	ND	ND
endrin ketone	ND	ND	ND
endrin aldehyde	ND	ND	ND
alpha-chlordane	ND	ND	ND
gamma-chlordane	ND	ND	ND
toxaphene	ND	ND	ND

ND= Non-Detect

TABLE 6-3
 NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
 ALBERT ROAD LIMITED SUBSURFACE CORRIDOR INVESTIGATION
 SOUTH OZONE PARK, NEW YORK
 WASTE CLASSIFICATION-Site Composite,
 Additional Parameters

Compound (ppm)	Site Composite-C-1 (SB-5, 23, 24)	Site Composite-C-2 (SB10,11,12)	Site Composite C-3 (SB-9, 21, 16)
	3/28/07	3/28/07	3/28/07
Aroclor 1016	ND	ND	ND
Aroclor 1221	ND	ND	ND
Aroclor 1232	ND	ND	ND
Aroclor 1242	ND	ND	ND
Aroclor 1248	ND	ND	ND
Aroclor 1254	ND	ND	ND
Aroclor 1260	ND	ND	ND
Reactivity Cyanide	NS	NS	NS
Reactivity Sulfide	ND	ND	ND
pH	8	7	10
Ignitibility	NO	NO	NO
TPHC Diesel Range Organics (DRO)	3241	3064	2798
TPHC Gasoline Range Organics (GRO)	ND	ND	ND

* The total sum of all subsurface PCBs is not to exceed 5 ppm

** The total sum of both DRO and GRO not to exceed 1,000 ppm

ND - Not detected at or above the laboratory detection limit.

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
ALBERT ROAD LIMITED SUBSURFACE CORRIDOR INVESTIGATION
SOUTH OZONE PARK, QUEENS, NEW YORK
TABLE 7
GROUNDWATER ANALYTICAL RESULTS

Volatile Organic Compounds (VOCs) (ppb)	Boring/GW Sample Number				
	NYSDEC TOGS (1), Class GA	NYCDEP Daily Limits for Effluent	SB-7	SB-8	SB-22
Methyl tertiary butyl ether	10	50	ND	ND	ND
Benzene	1	134	ND	ND	ND
Toluene	5	74	ND	ND	ND
Ethylbenzene		380	ND	ND	ND
Xylenes (Total)			ND	ND	ND
Tetrachloroethene (Perc)	5	20	110	20	ND
Carbon tetrachloride	5	NA	ND	ND	ND
Chloroform	7	NA	ND	ND	ND
1,1,1-Trichloroethane	5	NA	ND	ND	ND
Semi-Volatile Organic Compounds (SVOC) (ppb)					
Phenol	5	NA	ND	ND	ND
Naphthalene	5	47	ND	ND	ND
Metal Compounds (ppb)					
Mercury	0.7	50	ND	ND	ND
Cadmium	5	690	7.71	ND	1.46J
Copper	200	5000	400	ND	130
Lead	25	2,000	139	ND	ND
Nickel	100	3,000	461	ND	148
Chromium (VI)		5,000			
Zinc	2000 (GV)	5,000	550	ND	188
PCB Compounds (ppb)					
Aroclor 1016	0.09	NA	ND	ND	ND
Aroclor 1221	0.09	NA	ND	ND	ND
Aroclor 1232	0.09	NA	ND	ND	ND
Aroclor 1242	0.09	NA	ND	ND	ND
Aroclor 1248	0.09	NA	ND	ND	ND
Aroclor 1254	0.09	NA	ND	ND	ND
Aroclor 1260	0.09	NA	ND	ND	ND
Total PCBs	NA	1	ND	ND	ND
Other Parameters (ppm)					
TSS	NA	350 mg/l	4500	2400	4300
CBOD5	NA	NA	ND	ND	ND
Total Nitrogen	10	NA	11.175	9.218	2.559
Non-Polar Material (Oil and Grease)	NA	50 mg/l	6.8	5.2	6.9
Flash Point		>140 (degrees F)			
Temperature		<150			

1 - Technical and Operational Guidance Series - Class GA Drinking Water

ND - Not detected at or above the listed laboratory detection limit.

N/A - No standard or guidance value available

GV - Guidance value - used where a standard for a substance/group of substances hasn't been established

J - Estimated concentration

Bold and Shaded Text denotes TOGS and DEP Effluent Limits exceedance.

Bold Text Only denotes TOGS exceedance

Shaded Text denotes TOGS exceedance

APPENDIX A
Geologic Logs



GEOLOGIC BORING LOG

CLIENT: New York City Department of Design and Construction
PROJECT: Reconstruction of Albert Road Area, South Ozone Park, Queens, New York
DDC PROJECT NO. HWQ411B **DDC W.O.L. No.:** 4427-PBQD-4195

BORING NO: SB-2 **BORING LOCATION:** See Table 1
RIG: Truck Mount Geoprobe™ **DRILLING CONTRACTOR:** Zebra Environmental Corp. (Zebra)

DATE STARTED: 3/12/07 **DATE FINISHED:** 3/12/07
APPROX. DEPTH TO GROUNDWATER: N/A **GEOLOGIST:** Boris Feldman

DEPTH (feet)	SAMPLE				DESCRIPTION		REMARKS
	NO.	TYPE	BLOWS PER 6"	REC.	COLOR	MATERIAL DESCRIPTION	PID (ppm)
0 - 2	1	Hand Dig	N/A	N/A		Top Soil	6.0
2-5	2	Hand Dig	NA	NM	Brown	m- SAND	
5-10	3	MC	NA	NM	Brown	m- SAND	6.0
10-15	4	MC	NA	NM	Brown	m- SAND	6.0
15-20	5	MC	NA	NM	Brown	m- SAND	6.0

COMMENTS:	PB PROJECT NO.
Sampled for Lab Analysis@ 10-15 fbg	37061A-67B.2
NM=Not Measured	BORING NO.
	SB-2



GEOLOGIC BORING LOG

CLIENT: New York City Department of Design and Construction
PROJECT: Reconstruction of Albert Road Area, South Ozone Park, Queens, New York
DDC PROJECT NO. HWQ411B **DDC W.O.L. No.: 4427-PBQD-4195**

BORING NO: SB-3 **BORING LOCATION:** See Table 1
RIG: Truck Mount Geoprobe™ **DRILLING CONTRACTOR:** Zebra Environmental Corp. (Zebra)

DATE STARTED: 3/12/07 **DATE FINISHED:** 3/12/07
APPROX. DEPTH TO GROUNDWATER: N/A **GEOLOGIST:** Boris Feldman

DEPTH (feet)	SAMPLE				DESCRIPTION		REMARKS PID (ppm)
	NO.	TYPE	BLOWS PER 6"	REC.	COLOR	MATERIAL DESCRIPTION	
0 - 1	1	Hand Dig	N/A	N/A		Top Soil	6.0
1-5	2	Hand Dig	NA	NM	Brown	m- SAND	
5-10	3	MC	NA	NM	Brown	m- SAND	6.0
10-15	4	MC	NA	NM	Brown	m- SAND	6.0
15-20	5	MC	NA	NM	Brown	m- SAND	6.0

COMMENTS:	PB PROJECT NO.
Sampled for Lab Analysis@ 10-15 fbg	37061A-67B.2
NM=Not Measured	BORING NO.
	SB-3



GEOLOGIC BORING LOG

CLIENT: New York City Department of Design and Construction
PROJECT: Reconstruction of Albert Road Area, South Ozone Park, Queens, New York
DDC PROJECT NO. HWQ411B **DDC W.O.L. No.:** 4427-PBQD-4195

BORING NO: SB-4 **BORING LOCATION:** See Table 1
RIG: Truck Mount Geoprobe™ **DRILLING CONTRACTOR:** Zebra Environmental Corp. (Zebra)

DATE STARTED: 3/12/07 **DATE FINISHED:** 3/12/07
APPROX. DEPTH TO GROUNDWATER: N/A **GEOLOGIST:** Boris Feldman

DEPTH (feet)	SAMPLE				DESCRIPTION		REMARKS PID (ppm)
	NO.	TYPE	BLOWS PER 6"	REC.	COLOR	MATERIAL DESCRIPTION	
0 - 5	1	Hand Dig	N/A	N/A		Top Soil	0
5-10	3	MC	NA	NM	Brown	m- SAND	0
10-15	4	MC	NA	NM	Brown	m- SAND	0
15-20	5	MC	NA	NM	Brown	m- SAND	0

COMMENTS: Sampled for Lab Analysis@ 10-15 fbg NM=Not Measured	PB PROJECT NO.
	37061A-67B.2
	BORING NO.
	SB-4



GEOLOGIC BORING LOG

CLIENT: New York City Department of Design and Construction
PROJECT: Reconstruction of Albert Road Area, South Ozone Park, Queens, New York
DDC PROJECT NO. HWQ411B **DDC W.O.L. No.:** 4427-PBQD-4195

BORING NO: SB-5

BORING LOCATION: See Table 1

RIG: Truck Mount Geoprobe™

DRILLING CONTRACTOR: Zebra Environmental Corp. (Zebra)

DATE STARTED: 3/12/07

DATE FINISHED: 3/12/07

APPROX. DEPTH TO GROUNDWATER: N/A

GEOLOGIST: Boris Feldman

DEPTH (feet)	SAMPLE				COLOR	DESCRIPTION MATERIAL DESCRIPTION	REMARKS PID (ppm)
	NO.	TYPE	BLOWS PER 6"	REC.			
0 - 5	1	Hand Dig	N/A	N/A	Brown	m- SAND	0
5-10	2	MC	NA	NM	Brown	m- SAND	0
10-15	3	MC	NA	NM	Brown	m- SAND	0
15-20	4	MC	NA	NM	Brown	m- SAND	0

COMMENTS:	PB PROJECT NO.
Sampled for Lab Analysis@ 10-15 fbg	37061A-67B.2
NM=Not Measured	BORING NO.
	SB-5



GEOLOGIC BORING LOG

CLIENT: New York City Department of Design and Construction

PROJECT: Reconstruction of Albert Road Area, South Ozone Park, Queens, New York

DDC PROJECT NO. HWQ411B

DDC W.O.L. No.: 4427-PBQD-4195

BORING NO: SB-7

BORING LOCATION: See Table 1

RIG: Truck Mount Geoprobe™

DRILLING CONTRACTOR: Zebra Environmental Corp. (Zebra)

DATE STARTED: 3/15/07

DATE FINISHED: 3/15/07

APPROX. DEPTH TO GROUNDWATER: 29'

GEOLOGIST: Boris Feldman

DEPTH (feet)	SAMPLE				DESCRIPTION		REMARKS
	NO.	TYPE	BLOWS PER 6"	REC.	COLOR	MATERIAL DESCRIPTION	PID (ppm)
0 - 5	1	Hand Dig	N/A	N/A	Brown	m- SAND	22
5-10	2	MC	NA	NM	Brown	m- SAND	11
10-15	3	MC	NA	NM	Brown	m- SAND	43
15-20 *29	4	MC	NA	NM	Brown	m- SAND	33

COMMENTS:

Sampled for Lab Analysis@ 10-15 fbg

NM=Not Measured

*Groundwater Sample Collected

PB PROJECT NO.

37061A-67B.2

BORING NO.

SB-7



GEOLOGIC BORING LOG

CLIENT: New York City Department of Design and Construction
PROJECT: Reconstruction of Albert Road Area, South Ozone Park, Queens, New York
DDC PROJECT NO. HWQ411B **DDC W.O.L. No.:** 4427-PBQD-4195

BORING NO: SB-11 **BORING LOCATION:** See Table 1

RIG: Truck Mount Geoprobe™ **DRILLING CONTRACTOR:** Zebra Environmental Corp. (Zebra)

DATE STARTED: 3/13/07

DATE FINISHED: 3/13/07

APPROX. DEPTH TO GROUNDWATER: N/A

GEOLOGIST: Boris Feldman

DEPTH (feet)	SAMPLE				DESCRIPTION		REMARKS PID (ppm)
	NO.	TYPE	BLOWS PER 6"	REC.	COLOR	MATERIAL DESCRIPTION	
0 - 5	1	Hand Dig	N/A	N/A	Grey	m- SAND, odor	179
5-10	2	MC	NA	NM	Brown	m- SAND	149
10-15	3	MC	NA	NM	Brown	m- SAND	96
15-20	4	MC	NA	NM	Brown	m- SAND	85

COMMENTS:	PB PROJECT NO.
Sampled for Lab Analysis@ 10-15 fbg	37061A-67B.2
NM=Not Measured	BORING NO.
	SB-11



GEOLOGIC BORING LOG

CLIENT: New York City Department of Design and Construction
PROJECT: Reconstruction of Albert Road Area, South Ozone Park, Queens, New York
DDC PROJECT NO. HWQ411B **DDC W.O.L. No.:** 4427-PBQD-4195

BORING NO: SB-12 **BORING LOCATION:** See Table 1

RIG: Truck Mount Geoprobe™ **DRILLING CONTRACTOR:** Zebra Environmental Corp. (Zebra)

DATE STARTED: 3/13/07 **DATE FINISHED:** 3/13/07

APPROX. DEPTH TO GROUNDWATER: N/A **GEOLOGIST:** Boris Feldman

DEPTH (feet)	SAMPLE				DESCRIPTION		REMARKS PID (ppm)
	NO.	TYPE	BLOWS PER 6"	REC.	COLOR	MATERIAL DESCRIPTION	
0 - 1	1	Hand Dig	N/A	N/A		Top Soil	25
1-5	2	Hand Dig	NA	NM	Brown	m- SAND	31
5-10	3	MC	NA	NM	Brown	m- SAND	56
10-15	4	MC	NA	NM	Brown	m- SAND	61
15-20	5	MC	NA	NM	Brown	m- SAND	55

COMMENTS: Sampled for Lab Analysis@ 10-15 fbg NM=Not Measured	PB PROJECT NO.
	37061A-67B.2
	BORING NO.
SB-12	



GEOLOGIC BORING LOG

CLIENT: New York City Department of Design and Construction

PROJECT: Reconstruction of Albert Road Area, South Ozone Park, Queens, New York

DDC PROJECT NO. HWQ411B

DDC W.O.L. No.: 4427-PBQD-4195

BORING NO: SB-13

BORING LOCATION: See Table 1

RIG: Truck Mount Geoprobe™

DRILLING CONTRACTOR: Zebra Environmental Corp. (Zebra)

DATE STARTED: 3/13/07

DATE FINISHED: 3/13/07

APPROX. DEPTH TO GROUNDWATER: N/A

GEOLOGIST: Boris Feldman

DEPTH (feet)	SAMPLE				COLOR	DESCRIPTION MATERIAL DESCRIPTION	REMARKS PID (ppm)
	NO.	TYPE	BLOWS PER 6"	REC.			
0 - 1	1	Hand Dig	N/A	N/A		Top Soil	0
1-5	2	Hand Dig	NA	NM	Brown	m- SAND	6
5-10	3	MC	NA	NM	Brown	m- SAND	5
10-15	4	MC	NA	NM	Brown	m- SAND	6
15-20	5	MC	NA	NM	Brown	m- SAND	5

COMMENTS:

Sampled for Lab Analysis@ 10-15 fbg

NM=Not Measured

PB PROJECT NO.

37061A-67B.2

BORING NO.

SB-13



GEOLOGIC BORING LOG

CLIENT: New York City Department of Design and Construction

PROJECT: Reconstruction of Albert Road Area, South Ozone Park, Queens, New York

DDC PROJECT NO. HWQ411B

DDC W.O.L. No.: 4427-PBQD-4195

BORING NO: SB-14

BORING LOCATION: See Table 1

RIG: Truck Mount Geoprobe™

DRILLING CONTRACTOR: Zebra Environmental Corp. (Zebra)

DATE STARTED: 3/15/07

DATE FINISHED: 3/15/07

APPROX. DEPTH TO GROUNDWATER: N/A

GEOLOGIST: Boris Feldman

DEPTH (feet)	SAMPLE				DESCRIPTION		REMARKS PID (ppm)
	NO.	TYPE	BLOWS PER 6"	REC.	COLOR	MATERIAL DESCRIPTION	
0 - 5	1	Hand Dig	N/A	N/A	Brown	m- SAND	3
5-10	2	MC	NA	NM	Brown	m- SAND	1
10-15	3	MC	NA	NM	Brown	m- SAND	4
15-20	4	MC	NA	NM	Brown	m- SAND	2

COMMENTS: Sampled for Lab Analysis@ 10-15 fbg NM=Not Measured	PB PROJECT NO. 37061A-67B.2
	BORING NO. SB-14



GEOLOGIC BORING LOG

CLIENT: New York City Department of Design and Construction

PROJECT: Reconstruction of Albert Road Area, South Ozone Park, Queens, New York

DDC PROJECT NO. HWQ411B

DDC W.O.L. No.: 4427-PBQD-4195

BORING NO: SB-15

BORING LOCATION: See Table 1

RIG: Truck Mount Geoprobe™

DRILLING CONTRACTOR: Zebra Environmental Corp. (Zebra)

DATE STARTED: 3/14/07

DATE FINISHED: 3/14/07

APPROX. DEPTH TO GROUNDWATER: N/A

GEOLOGIST: Boris Feldman

DEPTH (feet)	SAMPLE				DESCRIPTION		REMARKS
	NO.	TYPE	BLOWS PER 6"	REC.	COLOR	MATERIAL DESCRIPTION	PID (ppm)
1 - 5	1	Hand Dig	N/A	N/A	Brown	m- SAND	20
5-10	2	MC	NA	NM	Brown	m- SAND	30
10-15	3	MC	NA	NM	Brown	m- SAND	30
15-20	4	MC	NA	NM	Brown	m- SAND	32

COMMENTS:

Sampled for Lab Analysis@ 10-15 fbg

NM=Not Measured

PB PROJECT NO.

37061A-67B.2

BORING NO.

SB-15



GEOLOGIC BORING LOG

CLIENT: New York City Department of Design and Construction
PROJECT: Reconstruction of Albert Road Area, South, Queens, New York
DDC PROJECT NO. HWQ411B **DDC W.O.L. No.:** 4427-PBQD-4195

BORING NO: SB-18 **BORING LOCATION:** See Table 1
RIG: Truck Mount Geoprobe™ **DRILLING CONTRACTOR:** Zebra Environmental Corp. (Zebra)

DATE STARTED: 3/16/07 **DATE FINISHED:** 3/16/07
APPROX. DEPTH TO GROUNDWATER: N/A **GEOLOGIST:** Boris Feldman

DEPTH (feet)	SAMPLE				DESCRIPTION		REMARKS
	NO.	TYPE	BLOWS PER 6"	REC.	COLOR	MATERIAL DESCRIPTION	PID (ppm)
0 - 1	1	Hand Dig	N/A	N/A		Top Soil	0
1-5	2	Hand Dig	NA	NM	Brown	m- SAND	12
5-10	3	MC	NA	NM	Brown	m- SAND	14
10-15	4	MC	NA	NM	Brown	m- SAND	17
15-20	5	MC	NA	NM	Brown	m- SAND	11

COMMENTS:	PB PROJECT NO.
Sampled for Lab Analysis@ 10-15 fbg	37061A-67B.2
NM=Not Measured	BORING NO.
	SB-18

APPENDIX B
Laboratory Analytical Report

**DATA PACKAGE FOR
VOLATILE ORGANICS
SEMI-VOLATILE ORGANICS
GC SEMI-VOLATILES
METALS
GENERAL CHEMISTRY**

PROJECT NAME: DDC albert road

**PARSONS BRINCKERHOFF
5 PENN PLAZA
NEW YORK, NY 10001
2124655000**

**CHEMTECH PROJECT NO.
ATTENTION:**

**Y1974
Sue Bianchetti**

CHEMTECH

284 Sheffield Street Mountainside NJ 07092
Tel. 908-789-8900

COVER PAGE

COVER PAGE

OrderID: Y1974

ProjectID: DDC albert road

CustomerName: Parsons Brinckerhoff

LAB SAMPLE NO.

Y1974-01

Y1974-02

Y1974-03

CLIENT SAMPLE NO

B22

B8

B7

I certify that the 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 hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature: *Mildred V. Keys* Name: *Mildred V. Keys*
Date: *4/5/07* Title: *QA/QC*

**TABLE OF CONTENTS
PROJECT NUMBER Y1974RQ**

	PAGE #
COVER PAGE	02
CHAIN OF CUSTODY	06
METHODOLOGY REVIEW & LABORATORY CHRONICLE	14
CONFORMANCE / NON-COFORMANCE SUMMARY	20
GC/MS VOLATILE ORGANIC DATA	
TABULATED ANALYTICAL RESULTS SUMMARY	28
QUALITY CONTROL SUMMARY REPORTS	32
GC/MS EXTRACTABLE ORGANIC DATA	
TABULATED ANALYTICAL RESULTS SUMMARY	44
QUALITY CONTROL SUMMARY REPORTS	48
GC/MS EXTRACTABLE ORGANIC DATA	
TABULATED ANALYTICAL RESULTS SUMMARY	54
QUALITY CONTROL SUMMARY REPORTS	58
METALS ANALYSIS	
TABULATED ANALYTICAL RESULTS SUMMARY	64
QUALITY CONTROL SUMMARY REPORTS	68
GENERAL CHEMISTRY DATA	
TABULATED ANALYTICAL RESULTS SUMMARY	90
QUALITY CONTROL SUMMARY REPORTS	94
TOTAL NUMBER OF PAGES	117

CHEMTECH

284 Sheffield Street Mountainside NJ 07092
Tel. 908-789-8900

**CHAIN OF
CUSTODY
RECORD**



CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO. Y1974

COC Number 060495

CLIENT INFORMATION		REPORT TO BE SENT TO:		CLIENT PROJECT INFORMATION		CLIENT BILLING INFORMATION	
COMPANY:	PB AMERICAS, INC.	PROJECT NAME:	Albert Rd	PROJECT NO.:	3061A-676	BILL TO:	SAME Client
ADDRESS:	5 Penn Plaza, 19th floor	PROJECT NO.:	3061A-676	PROJECT NO.:	3061A-676	ADDRESS:	SAME Client
CITY:	New York	STATE:	NJ	PROJECT MANAGER:		CITY:	
ATTENTION:	JOE BRANCHETTI	PHONE:	212 631-3770	e-mail:		STATE:	
PHONE:	212 631-3770	FAX:	212 631-3770	PHONE:		ATTENTION:	
DATA TURNAROUND INFORMATION		DATA DELIVERABLE INFORMATION		DATA DELIVERABLE INFORMATION		ANALYSIS	
FAX:		RESULTS ONLY	<input type="checkbox"/>	USEPA CLP	<input type="checkbox"/>	← Specify Preservatives	
HARD COPY:		RESULTS + QC	<input type="checkbox"/>	New York State ASP "B"	<input type="checkbox"/>	A-HCl	
EDD:		New Jersey REDUCED	<input type="checkbox"/>	New York State ASP "A"	<input type="checkbox"/>	B-HNO ₃	
* TO BE APPROVED BY CHEMTECH STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS		New Jersey CLP	<input type="checkbox"/>	Other	<input type="checkbox"/>	C-H ₂ SO ₄	
		EDD FORMAT	<input type="checkbox"/>		<input type="checkbox"/>	D-NaOH	
						E-ICE	
						F-Other	
CHEMTECH SAMPLE ID		PROJECT IDENTIFICATION		SAMPLE COLLECTION		PRESERVATIVES	
1. 2 } B8		SAMPLE MATRIX		DATE		1 2 3 4 5 6 7 8 9	
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4. 4 } 3		BY VS		1430 2		ADMIC VIALS	
5. 5 } 3		BY VS		1		1L AMBER	
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Laboratory Certification

State	License No.
New Jersey	20012
New York	11376
Arizona	AZ0653
Connecticut	PH-0649
Florida	E87935
Kansas	E-10355
Maryland	296
Massachusetts	M-NJ503
Maine	NJ0503
North Carolina	630
Oklahoma	9705
Pennsylvania	68-548
Rhode Island	LAO00259

QA Control Code: A2070148

DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following " Results Qualifiers" are used:

- Value If the result is a value greater than or equal to the detection limit, report the value
- U** Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
- J** Indicates an estimated value. This flag is used:
- (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.)
 - (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This is flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
- B** Indicates the analyte was found in the blank as well as the sample report as "12 B".
- E** Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
- D** This flag identifies all compounds identified in an analysis at a secondary dilution factor.
- P** This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".
- N** This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.

DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following " Results Qualifiers" are used:

- J If the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).
- U If the analyte was analyzed for, but not detected.
- E The reported value is estimated because of the presence of interference
- M Duplicate injection precision not met.
- N Spiked sample recovery not within control limits.
- S The reported value was determined by the Method of Standard Addition (MSA).
- W Post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while absorbance is less than 50% of spike absorbance.
- * Duplicate analysis not within control limits.
- + Correlation coefficient for the MSA is less than 0.995.
- *** Entering "S", "W" or "+" is mutually exclusive. NO combination of these qualifiers can appear in the same field for an analyte.
- D The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
- M Method qualifiers
 - "P" for ICP instrument
 - "A" for Flame AA
 - "PM" for ICP when Microwave Digestion is used
 - "AM" for flame AA when Microwave Digestion is used
 - "FM" for furnace AA when Microwave Digestion is used
 - "CV" for Manual Cold Vapor AA
 - "AV" for automated Cold Vapor AA
 - "CA" for MIDI-Distillation Spectrophotometric
 - "AS" for Semi -Automated Spectrophotometric
 - "C" for Manual Spectrophotometric
 - "T" for Titrimetric
 - "NR" for analyte not required to be analyzed
- OR Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: 71974

Completed

For thorough review, the report must have the following:

GENERAL:

Are all original paperwork present (chain of custody, record of communication, airbill, sample management lab chronicle, login page) ✓
Check chain-of-custody for proper relinquish/return of samples ✓
Is the chain of custody signed and complete ✓
Check internal chain-of-custody for proper relinquish/return of samples /sample extracts ✓
Collect information for each project id from server. Were all requirements followed ✓

COVER PAGE:

Do numbers of samples correspond to the number of samples in the Chain of Custody and on login page ✓
Do lab numbers and client Ids on cover page agree with the Chain of Custody ✓

CHAIN OF CUSTODY:

Do requested analyses on Chain of Custody agree with form I results ✓
Do requested analyses on Chain of Custody agree with the log-in page ✓
Were the correct method log-in for analysis according to the Analytical Request and Chain of Custody ✓
Were the samples received within hold time ✓
Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle ✓

ANALYTICAL:

Was method requirement followed? ✓
Was client requirement followed? ✓
Does the case narrative summarize all QC failure? ✓
All runlogs reviewed for manual integration requirements ✓

1st Level QA Review Signature: Roy H. Cattle, Keelpana Date: 4/15/07

2nd Level QA Review Signature: Mildred V. Reyes Date: 4/15/07

CHEMTECH

284 Sheffield Street Mountainside, NJ 07092
Tel: 908-789-8900

**METHODOLOGY
REVIEW
&
LABORATORY
CHRONICLE**

CHEMTECH

Lab Chronicle

Order Date: 3/19/2007 12:32:56 PM
Project: DDC albert road
Location: L42

Y1974
Parsons Brinckerhoff
Sue Bianchetti

Order ID:
Client:
Contact:

Lab ID	Client ID	Matrix	Test	Method	Sample Date	PrepDate	AnnalDate	Received
Y1974-01	B22	WATER	<u>VOCMS Group1</u>	8260	03/15/07		03/21/07	03/19/07
Y1974-02	B8	WATER	<u>VOCMS Group1</u>	8260	03/15/07		03/21/07	03/19/07
Y1974-03	B7	WATER	<u>VOCMS Group1</u>	8260	03/15/07		03/22/07	03/19/07

CHEMTECH

Lab Chronicle

Order ID: Y1974
Client: Parsons Brinckerhoff
Contact: Sue Bianchetti
Order Date: 3/19/2007 12:32:56 PM
Project: DDC albert road
Location: L42

Lab ID	Client ID	Matrix	Test	Method	Sample Date	PrepDate	AnnalDate	Received
Y1974-01	B22	WATER	<u>SVOCMS Group1</u>	625	03/15/07	03/21/07	03/22/07	03/19/07
Y1974-02	B8	WATER	<u>SVOCMS Group1</u>	625	03/15/07	03/21/07	03/22/07	03/19/07
Y1974-03	B7	WATER	<u>SVOCMS Group1</u>	625	03/15/07	03/21/07	03/23/07	03/19/07

CHEMTECH

Lab Chronicle

Order ID: Y1974
Client: Parsons Brinckerhoff
Contact: Sue Bianchetti

Order Date: 3/19/2007 12:32:56 PM
Project: DDC albert road
Location: L42

Lab ID	Client ID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Y1974-01	B22	WATER	PCB	608	03/15/07	03/21/07	03/22/07	03/19/07
Y1974-02	B8	WATER	PCB	608	03/15/07	03/21/07	03/22/07	03/19/07
Y1974-03	B7	WATER	PCB	608	03/15/07	03/21/07	03/22/07	03/19/07

CHEMTECH

Lab Chronicle

Order ID: Y1974 Order Date: 3/19/2007 12:32:56 PM
Client: Parsons Brinckerhoff Project: DDC albert road
Contact: Sue Bianchetti Location: L42

Lab ID	Client ID	Matrix	Test	Method	Sample Date	PrepDate	AnalDate	Received
Y1974-01	B22	WATER	<u>Mercury</u>	7470	03/15/07	03/20/07	03/21/07	03/19/07
			<u>Metals ICP-Group</u>	6010		03/21/07	03/23/07	
Y1974-02	B8	WATER	<u>Mercury</u>	7470	03/15/07	03/20/07	03/21/07	03/19/07
			<u>Metals ICP-Group</u>	6010		03/21/07	03/23/07	
Y1974-03	B7	WATER	<u>Mercury</u>	7470	03/15/07	03/20/07	03/21/07	03/19/07
			<u>Metals ICP-Group</u>	6010		03/21/07	03/23/07	

CHEMTECH

Lab Chronicle

Order ID:	Y1974	Order Date:	3/19/2007 12:32:56 PM					
Client:	Parsons Brinckerhoff	Project:	DDC albert road					
Contact:	Sue Bianchetti	Location:	L42					
Lab ID	Client ID	Matrix	Test	Method	Sample Date	PrepDate	AnalDate	Received
Y1974-01	B22	WATER	<u>CBOD5</u>	405.1	03/15/07	03/21/07	03/21/07	03/19/07
			<u>Nitrate+Nitrite</u>	353.2		03/23/07	03/23/07	
			<u>Non-Polar Material</u>	1664		03/23/07	03/23/07	
			<u>TKN</u>	351.3		03/26/07	03/26/07	
			<u>TSS</u>	160.2		03/22/07	03/22/07	
Y1974-02	B8	WATER	<u>Nitrate+Nitrite</u>	353.2		03/23/07	03/23/07	
			<u>CBOD5</u>	405.1		03/21/07	03/21/07	
			<u>Non-Polar Material</u>	1664		03/23/07	03/23/07	
			<u>TKN</u>	351.3		03/26/07	03/26/07	
			<u>TSS</u>	160.2		03/22/07	03/22/07	
Y1974-03	B7	WATER	<u>Nitrate+Nitrite</u>	353.2		03/23/07	03/23/07	
			<u>CBOD5</u>	405.1		03/21/07	03/21/07	
			<u>Non-Polar Material</u>	1664		03/23/07	03/23/07	
			<u>TKN</u>	351.3		03/26/07	03/26/07	
			<u>TSS</u>	160.2		03/22/07	03/22/07	

CHEMTECH

284 Sheffield Street Mountainside NJ 07092
Tel. 908-789-8900

**CONFORMANCE/
NON-
CONFORMANCE
SUMMARY**

CHEMTECH 284 Sheffield Street, Mountainside New Jersey 07092
NEW JERSEY LAB ID#: 20012; NEW YORK LAB ID#: 11376

GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: Y1974

MATRIX: Water

METHOD: 8260

	NA	NO	YES
1. Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks)			✓
2. GC/MS Tuning Specifications BFB Meet Criteria (NOTE THAT THERE ARE DIFFERENT CRITERIA FOR NY ASP CLP, CLP AND NJ)			✓
3. GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 Series.			✓
4. GC/MS Calibration - Initial Calibration performed before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series.			✓
5. GC/MS Calibration Requirements.			✓
a. Calibration Check Compounds for 8260 and CLP.		✓	
b. The Calibration did not meet requirements.		✓	
6. Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
7. Surrogate Recoveries Meet Criteria			✓
If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			
8. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria			✓
If not met, list those compounds and their recoveries which fall outside the acceptable range.			
9. Internal Standard Area/Retention Time Shift Meet Criteria			✓

Comments:

CHEMTECH 284 Sheffield Street, Mountainside New Jersey 07092
NEW JERSEY LAB ID#: 20012; NEW YORK LAB ID#: 11376

GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

	NA	NO	YES
10. Analysis Holding Time Met			✓
If not met, list number of days exceeded for each sample:			

ADDITIONAL COMMENTS: The Calibration met the requirements except for Tetrachloroethene .

The Blank Spike met requirements for all samples.

 pm
QA REVIEW

 4/5/7
Date

CHEMTECH 284 Sheffield Street, Mountainside New Jersey 07092

NEW JERSEY LAB ID#: 20012; NEW YORK LAB ID#: 11376

GC/MS SEMI-VOLATILE ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: Y1974

MATRIX: Water

METHOD: 625

- | | NA | NO | YES |
|---|----|----|-----|
| 1. Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks) | | | ✓ |
| 2. GC/MS Tuning Specifications. DFTPP Meet Criteria.
(NOTE THAT THERE ARE DIFFERENT CRITERIA FOR NY ASP CLP,
CLP AND NJ) | | | ✓ |
| 3. GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 Series. | | | ✓ |
| 4. GC/MS Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series. | | | ✓ |
| 5. GC/MS Calibration Requirements. | | | ✓ |
| a. Calibration Check Compounds for 8270 and CLP. | | | ✓ |
| b. System Performance Check Compounds for 8270 and CLP | | | ✓ |

8270 CALIBRATION CRITERIA

<u>SPCC Compounds</u>	<u>MINRF</u>	<u>CCC Compounds</u>	
		<u>Base/Neutral Fraction</u>	<u>Acid Fraction</u>
N-nitroso-di-n-propylamine	0.050	Acenaphthene	4-Chloro-3-methylphenol
Hexachlorocyclopentadiene	0.050	1,4-Dichlorobenzene	2,4-Dichlorophenol
2,4-Dinitrophenol	0.050	Hexachlorobutadiene	2-Nitrophenol
4-Nitrophenol	0.050	Diphenylamine	Phenol
		Di-n-octyl phthalate	Pentachlorophenol
		Fluoranthene	2,4,6-Trichlorophenol
		Benzo(a)pyrene	

For CCC compounds Initial Calibration Criteria -- RSD less than or equal to 30%
For CCC compounds Continuing Calibration Criteria - %D less than or equal to 20%

6. Blank Contamination - If yes, list compounds and concentrations in each blank: ✓

CHEMTECH 284 Sheffield Street, Mountainside New Jersey 07092
NEW JERSEY LAB ID#: 20012: NEW YORK LAB ID#: 11376

GC/MS SEMI-VOLATILE ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

	NA	NO	YES
7. Surrogate Recoveries Meet Criteria			✓
If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			
8. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria			✓
If not met, list those compounds and their recoveries which fall outside the acceptable range.			
9. Internal Standard Area/Retention Time Shift Meet Criteria			✓
Comments:			
10. Extraction Holding Time Met			✓
If not met, list number of days exceeded for each sample:			
11. Analysis Holding Time Met			✓
If not met, list number of days exceeded for each sample:			

ADDITIONAL COMMENTS:

The Blank Spike met requirements for all samples.

Roy Keiffers, Keiffers
QA REVIEW

4/5/7
Date

CHEMTECH 284 Sheffield Street, Mountainside New Jersey 07092
NEW JERSEY LAB ID#: 20012: NEW YORK LAB ID#: 11376

GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: Y1974

MATRIX: Water

METHOD: 608

- | | NA | NO | YES |
|---|----|----|-----|
| 1. Chromatograms Labeled/Compounds Identified. | | | ✓ |
| 2. Standard Summary Submitted. | | | ✓ |
| 3. Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis, 12 HOURS IF 8000 SERIES METHOD. | | | ✓ |
| 4. Blank Contamination - If yes, list compounds and concentrations in each blank: | | ✓ | |
| 5. Surrogate Recoveries Meet Criteria | | ✓ | |
| If not met, list those compounds and their recoveries which fall outside the acceptable ranges. | | | |
| The Surrogate recoveries met the acceptable criteria except for PB25706B, I.BLK.1 & I.BLK-2. | | | |
| 6. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria | | | ✓ |
| If not met, list those compounds and their recoveries which fall outside the acceptable range. | | | |
| 7. Retention Time Shift Meet Criteria (if applicable) | | | ✓ |
| Comments: | | | |
| 8. Extraction Holding Time Met | | | ✓ |
| If not met, list number of days exceeded for each sample: | | | |
| 9. Analysis Holding Time Met | | | |
| If not met, list those compounds and their recoveries which fall outside the acceptable range. | | | |

ADDITIONAL COMMENTS: The Calibration File ID CCAL02 met the requirements except for Aroclor-1260 but not present in the samples. The Blank Spike met requirements for all samples.

Roz
QA REVIEW

4/11/07
Date

CHEMTECH 284 Sheffield Street, Mountainside New Jersey 07092
NEW JERSEY LAB ID#: 20012; NEW YORK LAB ID#: 11376

METALS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: y1974

MATRIX: Water

METHOD: 7470/6010

	NA	NO	YES
1. Calibration Summary met criteria.			✓
2. ICP Interference Check Sample Results Summary Submitted.			✓
3. Serial Dilution Summary (if applicable) Submitted.			✓
4. Laboratory Control Sample Summary (if applicable) Submitted.			✓
5. Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
6. Matrix Spike/Matrix Spike Duplicate Recoveries Met Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range.			✓
7. Sample Duplicate Analysis Met QC Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range.			✓
8. Digestion Holding Time Met If not met, list number of days exceeded for each sample:			✓
9. Analysis Holding Time Met If not met, list those compounds and their recoveries which fall outside the acceptable range.			✓



QA REVIEW

4/15/77

Date

CHEMTECH 284 Sheffield Street, Mountainside New Jersey 07092
NEW JERSEY LAB ID#: 20012; NEW YORK LAB ID#: 11376

GENERAL CHEMISTRY CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: y1974

MATRIX: Water

METHOD: 300.0

- | | NA | NO | YES |
|---|----|----|-----|
| 1. Blank Contamination - If yes, list compounds and concentrations in each blank: | | ✓ | |
| 2. Digestion Holding Time Met | | ✓ | |

If not met, list number of days exceeded for each sample:

Roy Hettle
QA REVIEW

4/15/77
Date

CHEMTECH

TABULATED ANALYTICAL RESULTS

GC/MS VOLATILE ORGANICS

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B22	SDG No.:	Y1974
Lab Sample ID:	Y1974-01	Matrix:	WATER
Analytical Method:	8260	% Moisture:	100
Sample Wt/Wol:	5.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VD009518.D	1	3/21/2007	VD031907

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	0.28	U	5.0	0.28	ug/L
56-23-5	Carbon Tetrachloride	1.1	U	5.0	1.1	ug/L
67-66-3	Chloroform	0.33	U	5.0	0.33	ug/L
71-55-6	1,1,1-Trichloroethane	0.32	U	5.0	0.32	ug/L
71-43-2	Benzene	0.39	U	5.0	0.39	ug/L
108-88-3	Toluene	0.36	U	5.0	0.36	ug/L
127-18-4	Tetrachloroethene	0.48	U	5.0	0.48	ug/L
100-41-4	Ethylbenzene	0.45	U	5.0	0.45	ug/L
126777-61-2	m/p-Xylenes	1.2	U	5.0	1.2	ug/L
95-47-6	o-Xylene	0.46	U	5.0	0.46	ug/L
106-46-7	1,4-Dichlorobenzene	0.54	U	5.0	0.54	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.46	U	5.0	0.46	ug/L
1330-20-7	Total Xylenes	1.7	U	10.0	1.7	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	49.12	98 %	72 - 119		SPK: 50
1868-53-7	Dibromofluoromethane	49.14	98 %	85 - 115		SPK: 50
2037-26-5	Toluene-d8	55.39	111 %	81 - 120		SPK: 50
460-00-4	4-Bromofluorobenzene	48.86	98 %	76 - 119		SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	692814	4.19			
540-36-3	1,4-Difluorobenzene	999170	4.88			
3114-55-4	Chlorobenzene-d5	1246965	9.27			
3855-82-1	1,4-Dichlorobenzene-d4	757334	11.66			

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B8	SDG No.:	Y1974
Lab Sample ID:	Y1974-02	Matrix:	WATER
Analytical Method:	8260	% Moisture:	100
Sample Wt/Wol:	5.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VD009519.D	1	3/21/2007	VD031907

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	0.28	U	5.0	0.28	ug/L
56-23-5	Carbon Tetrachloride	1.1	U	5.0	1.1	ug/L
67-66-3	Chloroform	0.33	U	5.0	0.33	ug/L
71-55-6	1,1,1-Trichloroethane	0.32	U	5.0	0.32	ug/L
71-43-2	Benzene	0.39	U	5.0	0.39	ug/L
108-88-3	Toluene	0.36	U	5.0	0.36	ug/L
127-18-4	Tetrachloroethene	20		5.0	0.48	ug/L
100-41-4	Ethylbenzene	0.45	U	5.0	0.45	ug/L
126777-61-2	m/p-Xylenes	1.2	U	5.0	1.2	ug/L
95-47-6	o-Xylene	0.46	U	5.0	0.46	ug/L
106-46-7	1,4-Dichlorobenzene	0.54	U	5.0	0.54	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.46	U	5.0	0.46	ug/L
1330-20-7	Total Xylenes	1.7	U	10.0	1.7	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	46.82	94 %	72 - 119		SPK: 50
1868-53-7	Dibromofluoromethane	46.51	93 %	85 - 115		SPK: 50
2037-26-5	Toluene-d8	54.87	110 %	81 - 120		SPK: 50
460-00-4	4-Bromofluorobenzene	47.63	95 %	76 - 119		SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	711108	4.20			
540-36-3	1,4-Difluorobenzene	1060757	4.88			
3114-55-4	Chlorobenzene-d5	1393992	9.28			
3855-82-1	1,4-Dichlorobenzene-d4	837057	11.67			

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B7	SDG No.:	Y1974
Lab Sample ID:	Y1974-03	Matrix:	WATER
Analytical Method:	8260	% Moisture:	100
Sample Wt/Wol:	5.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VI011945.D	1	3/22/2007	VI031307

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	0.28	U	5.0	0.28	ug/L
56-23-5	Carbon Tetrachloride	1.1	U	5.0	1.1	ug/L
67-66-3	Chloroform	0.33	U	5.0	0.33	ug/L
71-55-6	1,1,1-Trichloroethane	0.32	U	5.0	0.32	ug/L
71-43-2	Benzene	0.39	U	5.0	0.39	ug/L
108-88-3	Toluene	0.36	U	5.0	0.36	ug/L
127-18-4	Tetrachloroethene	110		5.0	0.48	ug/L
100-41-4	Ethylbenzene	0.45	U	5.0	0.45	ug/L
126777-61-2	m/p-Xylenes	1.2	U	5.0	1.2	ug/L
95-47-6	o-Xylene	0.46	U	5.0	0.46	ug/L
106-46-7	1,4-Dichlorobenzene	0.54	U	5.0	0.54	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.46	U	5.0	0.46	ug/L
1330-20-7	Total Xylenes	1.7	U	10.0	1.7	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	53.02	106 %	72 - 119		SPK: 50
1868-53-7	Dibromofluoromethane	51.18	102 %	85 - 115		SPK: 50
2037-26-5	Toluene-d8	48.49	97 %	81 - 120		SPK: 50
460-00-4	4-Bromofluorobenzene	40.79	82 %	76 - 119		SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	727046	3.68			
540-36-3	1,4-Difluorobenzene	1406099	4.12			
3114-55-4	Chlorobenzene-d5	922805	7.15			
3855-82-1	1,4-Dichlorobenzene-d4	365112	9.50			

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound

CHEMTECH

**QUALITY CONTROL SUMMARY
REPORTS**

GC/MS VOLATILE ORGANICS

Chemtech

Surrogate Summary
SW-846

SDG No.: Y1974
Client: Parsons Brinckerhoff

Analytical Method: EPA SW846 8260

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery	Qual	Limits	
							Low	High
BSD0321W1	VLCS01	1,2-Dichloroethane-d4	50	47.09	94		72.00	119.00
		Dibromofluoromethane	50	49.68	99		85.00	115.00
		Toluene-d8	50	52.95	106		81.00	120.00
		4-Bromofluorobenzene	50	52.58	105		76.00	119.00
BSD0321W2	VLCS02	1,2-Dichloroethane-d4	50	49.76	100		72.00	119.00
		Dibromofluoromethane	50	51.85	104		85.00	115.00
		Toluene-d8	50	57.94	116		81.00	120.00
		4-Bromofluorobenzene	50	55.43	111		76.00	119.00
BSI0322-01	VLCS03	1,2-Dichloroethane-d4	50	57.21	114		72.00	119.00
		Dibromofluoromethane	50	52.4	105		85.00	115.00
		Toluene-d8	50	48.17	96		81.00	120.00
		4-Bromofluorobenzene	50	40.82	82		76.00	119.00
BSI0322-03	VLCS04	1,2-Dichloroethane-d4	50	57.28	115		72.00	119.00
		Dibromofluoromethane	50	51.59	103		85.00	115.00
		Toluene-d8	50	46.11	92		81.00	120.00
		4-Bromofluorobenzene	50	38.31	77		76.00	119.00
VBD0321W1	VBLK01	1,2-Dichloroethane-d4	50	45.01	90		72.00	119.00
		Dibromofluoromethane	50	50.49	101		85.00	115.00
		Toluene-d8	50	51.25	103		81.00	120.00
		4-Bromofluorobenzene	50	47.11	94		76.00	119.00
VBI0322-01	VBLK02	1,2-Dichloroethane-d4	50	46.63	93		72.00	119.00
		Dibromofluoromethane	50	51.32	103		85.00	115.00
		Toluene-d8	50	46.47	93		81.00	120.00
		4-Bromofluorobenzene	50	40.08	80		76.00	119.00
Y1974-01	B22	1,2-Dichloroethane-d4	50	49.12	98		72.00	119.00
		Dibromofluoromethane	50	49.14	98		85.00	115.00
		Toluene-d8	50	55.39	111		81.00	120.00
		4-Bromofluorobenzene	50	48.86	98		76.00	119.00
Y1974-02	B8	1,2-Dichloroethane-d4	50	46.82	94		72.00	119.00
		Dibromofluoromethane	50	46.51	93		85.00	115.00
		Toluene-d8	50	54.87	110		81.00	120.00
		4-Bromofluorobenzene	50	47.63	95		76.00	119.00
Y1974-03	B7	1,2-Dichloroethane-d4	50	53.02	106		72.00	119.00
		Dibromofluoromethane	50	51.18	102		85.00	115.00
		Toluene-d8	50	48.49	97		81.00	120.00
		4-Bromofluorobenzene	50	40.79	82		76.00	119.00

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Y1974

Client: Parsons Brinckerhoff

Analytical Method: EPA SW846 8260

Lab Sample ID	Parameter	Spike	Result	Rec	RPD	Qual	Limits	
							Low	High RPD
BSD0321W1	Methyl tert-butyl Ether	20	17	85			70	130
	Chloroform	20	17	85			70	130
	1,1,1-Trichloroethane	20	18	90			70	130
	Carbon Tetrachloride	20	17	85			70	130
	Benzene	20	17	85			70	130
	Toluene	20	20	100			70	130
	Tetrachloroethene	20	19	95			70	130
	Ethylbenzene	20	20	100			70	130
	m/p-Xylenes	40	42	105			70	130
	o-Xylene	20	20	100			70	130
	1,4-Dichlorobenzene	20	19	95			70	130
	1,2,4-Trichlorobenzene	20	19	95			70	130
	BSD0321W2	Methyl tert-butyl Ether	20	17	85			70
Chloroform		20	18	90			70	130
1,1,1-Trichloroethane		20	18	90			70	130
Carbon Tetrachloride		20	18	90			70	130
Benzene		20	18	90			70	130
Toluene		20	22	110			70	130
Tetrachloroethene		20	18	90			70	130
Ethylbenzene		20	19	95			70	130
m/p-Xylenes		40	38	95			70	130
o-Xylene		20	19	95			70	130
1,4-Dichlorobenzene		20	19	95			70	130
1,2,4-Trichlorobenzene		20	18	90			70	130
BSI0322-01		Methyl tert-butyl Ether	20	17	85			70
	Chloroform	20	22	110			70	130
	1,1,1-Trichloroethane	20	19	95			70	130
	Carbon Tetrachloride	20	19	95			70	130
	Benzene	20	19	95			70	130
	Toluene	20	19	95			70	130
	Tetrachloroethene	20	24	120			70	130
	Ethylbenzene	20	21	105			70	130
	m/p-Xylenes	40	41	103			70	130
	o-Xylene	20	21	105			70	130
	1,4-Dichlorobenzene	20	22	110			70	130
	1,2,4-Trichlorobenzene	20	23	115			70	130
	BSI0322-03	Methyl tert-butyl Ether	15	12	80			70
Chloroform		15	14	93			70	130
1,1,1-Trichloroethane		15	13	87			70	130
Carbon Tetrachloride		15	13	87			70	130
Benzene		15	13	87			70	130

Chemtech

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary
SW-846

SDG No.: Y1974

Client: Parsons Brinckerhoff

Analytical Method: EPA SW846 8260

Lab Sample ID	Parameter	Spike	Result	Rec	RPD	Qual	Low	Limits	
								High	RPD
BSI0322-03	Toluene	15	12	80			70	130	
	Tetrachloroethene	15	17	113			70	130	
	Ethylbenzene	15	14	93			70	130	
	m/p-Xylenes	30	27	90			70	130	
	o-Xylene	15	14	93			70	130	
	1,4-Dichlorobenzene	15	15	100			70	130	
	1,2,4-Trichlorobenzene	15	14	93			70	130	

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	
Project:	DDC albert road	Date Received:	
Client Sample ID:	VLCS01	SDG No.:	Y1974
Lab Sample ID:	BSD0321W1	Matrix:	WATER
Analytical Method:	8260	% Moisture:	100
Sample Wt/Wol:	5.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VD009501.D	1	3/21/2007	VD031907

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	17		5.0	0.28	ug/L
56-23-5	Carbon Tetrachloride	17		5.0	1.1	ug/L
67-66-3	Chloroform	17		5.0	0.33	ug/L
71-55-6	1,1,1-Trichloroethane	18		5.0	0.32	ug/L
71-43-2	Benzene	17		5.0	0.39	ug/L
108-88-3	Toluene	20		5.0	0.36	ug/L
127-18-4	Tetrachloroethene	19		5.0	0.48	ug/L
100-41-4	Ethylbenzene	20		5.0	0.45	ug/L
126777-61-2	m/p-Xylenes	42		5.0	1.2	ug/L
95-47-6	o-Xylene	20		5.0	0.46	ug/L
106-46-7	1,4-Dichlorobenzene	19		5.0	0.54	ug/L
120-82-1	1,2,4-Trichlorobenzene	19		5.0	0.46	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	47.09	94 %	72 - 119		SPK: 50
1868-53-7	Dibromofluoromethane	49.68	99 %	85 - 115		SPK: 50
2037-26-5	Toluene-d8	52.95	106 %	81 - 120		SPK: 50
460-00-4	4-Bromofluorobenzene	52.58	105 %	76 - 119		SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	786788	4.17			
540-36-3	1,4-Difluorobenzene	1129993	4.85			
3114-55-4	Chlorobenzene-d5	1441033	9.25			
3855-82-1	1,4-Dichlorobenzene-d4	949577	11.64			

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	
Project:	DDC albert road	Date Received:	
Client Sample ID:	VLCS02	SDG No.:	Y1974
Lab Sample ID:	BSD0321W2	Matrix:	WATER
Analytical Method:	8260	% Moisture:	100
Sample Wt/Vol:	5.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VD009502.D	1	3/21/2007	VD031907

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	17		5.0	0.28	ug/L
56-23-5	Carbon Tetrachloride	18		5.0	1.1	ug/L
67-66-3	Chloroform	18		5.0	0.33	ug/L
71-55-6	1,1,1-Trichloroethane	18		5.0	0.32	ug/L
71-43-2	Benzene	18		5.0	0.39	ug/L
108-88-3	Toluene	22		5.0	0.36	ug/L
127-18-4	Tetrachloroethene	18		5.0	0.48	ug/L
100-41-4	Ethylbenzene	19		5.0	0.45	ug/L
126777-61-2	m/p-Xylenes	38		5.0	1.2	ug/L
95-47-6	o-Xylene	19		5.0	0.46	ug/L
106-46-7	1,4-Dichlorobenzene	19		5.0	0.54	ug/L
120-82-1	1,2,4-Trichlorobenzene	18		5.0	0.46	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	49.76	100 %	72 - 119		SPK: 50
1868-53-7	Dibromofluoromethane	51.85	104 %	85 - 115		SPK: 50
2037-26-5	Toluene-d8	57.94	116 %	81 - 120		SPK: 50
460-00-4	4-Bromofluorobenzene	55.43	111 %	76 - 119		SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	755905	4.18			
540-36-3	1,4-Difluorobenzene	1055121	4.86			
3114-55-4	Chlorobenzene-d5	1453311	9.26			
3855-82-1	1,4-Dichlorobenzene-d4	923575	11.65			

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	
Project:	DDC albert road	Date Received:	
Client Sample ID:	VLCS03	SDG No.:	Y1974
Lab Sample ID:	BSI0322-01	Matrix:	WATER
Analytical Method:	8260	% Moisture:	100
Sample Wt/Wol:	5.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VI011937.D	1	3/22/2007	VI031307

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	17		5.0	0.28	ug/L
56-23-5	Carbon Tetrachloride	19		5.0	1.1	ug/L
67-66-3	Chloroform	22		5.0	0.33	ug/L
71-55-6	1,1,1-Trichloroethane	19		5.0	0.32	ug/L
71-43-2	Benzene	19		5.0	0.39	ug/L
108-88-3	Toluene	19		5.0	0.36	ug/L
127-18-4	Tetrachloroethene	24		5.0	0.48	ug/L
100-41-4	Ethylbenzene	21		5.0	0.45	ug/L
126777-61-2	m/p-Xylenes	41		5.0	1.2	ug/L
95-47-6	o-Xylene	21		5.0	0.46	ug/L
106-46-7	1,4-Dichlorobenzene	22		5.0	0.54	ug/L
120-82-1	1,2,4-Trichlorobenzene	23		5.0	0.46	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	57.21	114 %	72 - 119		SPK: 50
1868-53-7	Dibromofluoromethane	52.4	105 %	85 - 115		SPK: 50
2037-26-5	Toluene-d8	48.17	96 %	81 - 120		SPK: 50
460-00-4	4-Bromofluorobenzene	40.82	82 %	76 - 119		SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	764803	3.68			
540-36-3	1,4-Difluorobenzene	1476713	4.12			
3114-55-4	Chlorobenzene-d5	940646	7.15			
3855-82-1	1,4-Dichlorobenzene-d4	445005	9.49			

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	
Project:	DDC albert road	Date Received:	
Client Sample ID:	VLCS04	SDG No.:	Y1974
Lab Sample ID:	BSI0322-03	Matrix:	WATER
Analytical Method:	8260	% Moisture:	100
Sample Wt/Wol:	5.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VI011944.D	1	3/22/2007	VI031307

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	12		5.0	0.28	ug/L
56-23-5	Carbon Tetrachloride	13		5.0	1.1	ug/L
67-66-3	Chloroform	14		5.0	0.33	ug/L
71-55-6	1,1,1-Trichloroethane	13		5.0	0.32	ug/L
71-43-2	Benzene	13		5.0	0.39	ug/L
108-88-3	Toluene	12		5.0	0.36	ug/L
127-18-4	Tetrachloroethene	17		5.0	0.48	ug/L
100-41-4	Ethylbenzene	14		5.0	0.45	ug/L
126777-61-2	m/p-Xylenes	27		5.0	1.2	ug/L
95-47-6	o-Xylene	14		5.0	0.46	ug/L
106-46-7	1,4-Dichlorobenzene	15		5.0	0.54	ug/L
120-82-1	1,2,4-Trichlorobenzene	14		5.0	0.46	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	57.28	115 %	72 - 119		SPK: 50
1868-53-7	Dibromofluoromethane	51.59	103 %	85 - 115		SPK: 50
2037-26-5	Toluene-d8	46.11	92 %	81 - 120		SPK: 50
460-00-4	4-Bromofluorobenzene	38.31	77 %	76 - 119		SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	735232	3.67			
540-36-3	1,4-Difluorobenzene	1457032	4.12			
3114-55-4	Chlorobenzene-d5	885893	7.15			
3855-82-1	1,4-Dichlorobenzene-d4	396136	9.49			

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VELK01

Lab Name: Chemtech Contract: PARS01
Lab Code: CTECH Case No.: Y1974 SAS No.: Y1974 SDG NO.: Y1974
Lab File ID: VD009500.D Lab Sample ID: VBD0321W1
Date Analyzed: 3/21/2007 Time Analyzed: 11:34
GC Column: RTX502.2 ID: 0.18 (mm) Heated Purge: (Y/N) N
Instrument ID: MSVOAD

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
VLCS01	BSD0321W1	VD009501.D	12:11
VLCS02	BSD0321W2	VD009502.D	12:42
B22	Y1974-01	VD009518.D	21:05
B8	Y1974-02	VD009519.D	21:36

COMMENTS: _____

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	
Project:	DDC albert road	Date Received:	
Client Sample ID:	VBLK01	SDG No.:	Y1974
Lab Sample ID:	VBD0321W1	Matrix:	WATER
Analytical Method:	8260	% Moisture:	100
Sample Wt/Wol:	5.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VD009500.D	1	3/21/2007	VD031907

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	0.28	U	5.0	0.28	ug/L
56-23-5	Carbon Tetrachloride	1.1	U	5.0	1.1	ug/L
67-66-3	Chloroform	0.33	U	5.0	0.33	ug/L
71-55-6	1,1,1-Trichloroethane	0.32	U	5.0	0.32	ug/L
71-43-2	Benzene	0.39	U	5.0	0.39	ug/L
108-88-3	Toluene	0.36	U	5.0	0.36	ug/L
127-18-4	Tetrachloroethene	0.48	U	5.0	0.48	ug/L
100-41-4	Ethylbenzene	0.45	U	5.0	0.45	ug/L
126777-61-2	m/p-Xylenes	1.2	U	5.0	1.2	ug/L
95-47-6	o-Xylene	0.46	U	5.0	0.46	ug/L
106-46-7	1,4-Dichlorobenzene	0.54	U	5.0	0.54	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.46	U	5.0	0.46	ug/L
1330-20-7	Total Xylenes	1.7	U	10.0	1.7	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	45.01	90 %	72 - 119		SPK: 50
1868-53-7	Dibromofluoromethane	50.49	101 %	85 - 115		SPK: 50
2037-26-5	Toluene-d8	51.25	103 %	81 - 120		SPK: 50
460-00-4	4-Bromofluorobenzene	47.11	94 %	76 - 119		SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	787489	4.17			
540-36-3	1,4-Difluorobenzene	1173078	4.85			
3114-55-4	Chlorobenzene-d5	1431589	9.25			
3855-82-1	1,4-Dichlorobenzene-d4	938008	11.63			

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK02

Lab Name: Chemtech Contract: PARS01
Lab Code: CTECH Case No.: Y1974 SAS No.: Y1974 SDG NO.: Y1974
Lab File ID: VI011935.D Lab Sample ID: VBI0322-01
Date Analyzed: 3/22/2007 Time Analyzed: 10:41
GC Column: RTXVMS ID: 0.18 (mm) Heated Purge: (Y/N) N
Instrument ID: MSVOAI

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
VLCS03	BSI0322-01	VI011937.D	11:42
VLCS04	BSI0322-03	VI011944.D	15:16
E7	Y1974-03	VI011945.D	15:46

COMMENTS: _____

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	
Project:	DDC albert road	Date Received:	
Client Sample ID:	VBLK02	SDG No.:	Y1974
Lab Sample ID:	VBI0322-01	Matrix:	WATER
Analytical Method:	8260	% Moisture:	100
Sample Wt/Wol:	5.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VI011935.D	1	3/22/2007	VI031307

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	0.28	U	5.0	0.28	ug/L
56-23-5	Carbon Tetrachloride	1.1	U	5.0	1.1	ug/L
67-66-3	Chloroform	0.33	U	5.0	0.33	ug/L
71-55-6	1,1,1-Trichloroethane	0.32	U	5.0	0.32	ug/L
71-43-2	Benzene	0.39	U	5.0	0.39	ug/L
108-88-3	Toluene	0.36	U	5.0	0.36	ug/L
127-18-4	Tetrachloroethene	0.48	U	5.0	0.48	ug/L
100-41-4	Ethylbenzene	0.45	U	5.0	0.45	ug/L
126777-61-2	m/p-Xylenes	1.2	U	5.0	1.2	ug/L
95-47-6	o-Xylene	0.46	U	5.0	0.46	ug/L
106-46-7	1,4-Dichlorobenzene	0.54	U	5.0	0.54	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.46	U	5.0	0.46	ug/L
1330-20-7	Total Xylenes	1.7	U	10.0	1.7	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	46.63	93 %	72 - 119		SPK: 50
1868-53-7	Dibromofluoromethane	51.32	103 %	85 - 115		SPK: 50
2037-26-5	Toluene-d8	46.47	93 %	81 - 120		SPK: 50
460-00-4	4-Bromofluorobenzene	40.08	80 %	76 - 119		SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	881152	3.67			
540-36-3	1,4-Difluorobenzene	1597675	4.11			
3114-55-4	Chlorobenzene-d5	993849	7.14			
3855-82-1	1,4-Dichlorobenzene-d4	422448	9.49			

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound

CHEMTECH

TABULATED ANALYTICAL RESULTS
GC/MS EXTRACTABLES

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B22	SDG No.:	Y1974
Lab Sample ID:	Y1974-01	Matrix:	WATER
Analytical Method:	625	% Moisture:	100
Sample Wt/Wol:	960.0 mL	Extract Vol:	1000 uL

File ID	Dilution	Date Extracted	Date Analyzed	Analytical Batch ID
BE039547.D	1	3/21/2007	3/22/2007	BE032207

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
108-95-2	Phenol	0.28	U	10	0.28	ug/L
91-20-3	Naphthalene	0.29	U	10	0.29	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	65.73	66 %	20 - 112		SPK: 10
13127-88-3	Phenol-d5	70.26	70 %	20 - 85		SPK: 10
4165-60-0	Nitrobenzene-d5	69.6	70 %	35 - 114		SPK: 10
321-60-8	2-Fluorobiphenyl	61.48	61 %	26 - 108		SPK: 10
118-79-6	2,4,6-Tribromophenol	78.4	78 %	20 - 107		SPK: 10
1718-51-0	Terphenyl-d14	68.01	68 %	20 - 110		SPK: 10
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	84595	4.68			
1146-65-2	Naphthalene-d8	288843	6.49			
15067-26-2	Acenaphthene-d10	160497	9.21			
1517-22-2	Phenanthrene-d10	267389	11.56			
1719-03-5	Chrysene-d12	269592	15.77			
1520-96-3	Perylene-d12	150164	17.88			

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found In Associated Method Blank
 N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample	B8	SDG No.:	Y1974
Lab Sample ID:	Y1974-02	Matrix:	WATER
Analytical Method:	625	% Moisture:	100
Sample Wt/Wol:	490.0 mL	Extract Vol:	1000 uL

File ID	Dilution	Date Extracted	Date Analyzed	Analytical Batch ID
BE039546.D	1	3/21/2007	3/22/2007	BE032207

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
108-95-2	Phenol	0.56	U	20	0.56	ug/L
91-20-3	Naphthalene	0.58	U	20	0.58	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	62.86	63 %	20 - 112		SPK: 10
13127-88-3	Phenol-d5	67.65	68 %	20 - 85		SPK: 10
4165-60-0	Nitrobenzene-d5	67.53	68 %	35 - 114		SPK: 10
321-60-8	2-Fluorobiphenyl	59.7	60 %	26 - 108		SPK: 10
118-79-6	2,4,6-Tribromophenol	73.11	73 %	20 - 107		SPK: 10
1718-51-0	Terphenyl-d14	65.99	66 %	20 - 110		SPK: 10
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	84660	4.68			
1146-65-2	Naphthalene-d8	288254	6.49			
15067-26-2	Acenaphthene-d10	161550	9.21			
1517-22-2	Phenanthrene-d10	264039	11.55			
1719-03-5	Chrysene-d12	265123	15.77			
1520-96-3	Perylene-d12	147887	17.88			

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found In Associated Method Blank
 N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample	B7	SDG No.:	Y1974
Lab Sample ID:	Y1974-03	Matrix:	WATER
Analytical Method:	625	% Moisture:	100
Sample Wt/Wol:	930.0 mL	Extract Vol:	1000 uL

File ID	Dilution	Date Extracted	Date Analyzed	Analytical Batch ID
BE039549.D	1	3/21/2007	3/23/2007	BE032207

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
108-95-2	Phenol	0.29	U	11	0.29	ug/L
91-20-3	Naphthalene	0.30	U	11	0.30	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	66.49	66 %	20 - 112		SPK: 10
13127-88-3	Phenol-d5	72.51	73 %	20 - 85		SPK: 10
4165-60-0	Nitrobenzene-d5	73.29	73 %	35 - 114		SPK: 10
321-60-8	2-Fluorobiphenyl	63.62	64 %	26 - 108		SPK: 10
118-79-6	2,4,6-Tribromophenol	77.39	77 %	20 - 107		SPK: 10
1718-51-0	Terphenyl-d14	72.14	72 %	20 - 110		SPK: 10
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	77865	4.68			
1146-65-2	Naphthalene-d8	259620	6.49			
15067-26-2	Acenaphthene-d10	145414	9.21			
1517-22-2	Phenanthrene-d10	235167	11.56			
1719-03-5	Chrysene-d12	237101	15.77			
1520-96-3	Perylene-d12	132416	17.87			

U = Not Detected
 RL = Reporting Limit
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 E = Value Exceeds Calibration Range

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 B = Analyte Found In Associated Method Blank
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CHEMTECH

**QUALITY CONTROL SUMMARY
REPORTS**

GC/MS EXTRACTABLES

Chemtech Consulting Group

Surrogate Summary
SW-846

SDG No.: Y1974
Client: Parsons Brinckerhoff

Analytical Method: EPA SW-846 625

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery	Qual	Limits	
							Low	High
PB25705B	SBLK01	2-Fluorophenol	100	65.34	65		20.00	112.00
		Phenol-d5	100	70.04	70		20.00	85.00
		Nitrobenzene-d5	100	66.84	67		35.00	114.00
		2-Fluorobiphenyl	100	59.43	59		26.00	108.00
		2,4,6-Tribromophenol	100	72.61	73		20.00	107.00
		Terphenyl-d14	100	67.48	67		20.00	110.00
PB25705BS	SLCS01	2-Fluorophenol	100	64.2	64		20.00	112.00
		Phenol-d5	100	69.25	69		20.00	85.00
		Nitrobenzene-d5	100	66.83	67		35.00	114.00
		2-Fluorobiphenyl	100	60.21	60		26.00	108.00
		2,4,6-Tribromophenol	100	74.75	75		20.00	107.00
		Terphenyl-d14	100	67.16	67		20.00	110.00
Y1974-01	B22	2-Fluorophenol	100	65.73	66		20.00	112.00
		Phenol-d5	100	70.26	70		20.00	85.00
		Nitrobenzene-d5	100	69.6	70		35.00	114.00
		2-Fluorobiphenyl	100	61.48	61		26.00	108.00
		2,4,6-Tribromophenol	100	78.4	78		20.00	107.00
		Terphenyl-d14	100	68.01	68		20.00	110.00
Y1974-02	B8	2-Fluorophenol	100	62.86	63		20.00	112.00
		Phenol-d5	100	67.65	68		20.00	85.00
		Nitrobenzene-d5	100	67.53	68		35.00	114.00
		2-Fluorobiphenyl	100	59.7	60		26.00	108.00
		2,4,6-Tribromophenol	100	73.11	73		20.00	107.00
		Terphenyl-d14	100	65.99	66		20.00	110.00
Y1974-03	B7	2-Fluorophenol	100	66.49	66		20.00	112.00
		Phenol-d5	100	72.51	73		20.00	85.00
		Nitrobenzene-d5	100	73.29	73		35.00	114.00
		2-Fluorobiphenyl	100	63.62	64		26.00	108.00
		2,4,6-Tribromophenol	100	77.39	77		20.00	107.00
		Terphenyl-d14	100	72.14	72		20.00	110.00

Chemtech Consulting Group

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary
SW-846

SDG No.: Y1974

Client: Parsons Brinckerhoff

Analytical Method: EPA SW-846 625

Lab Sample ID	Parameter	Spike	Result	Rec	RPD	Qual	Low	Limits	
								High	RPD
PB25705BS	Phenol	20	12	60			21	97	
	Naphthalene	20	13	65			43	114	

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	
Project:	DDC albert road	Date Received:	
Client Sample ID:	SLCS01	SDG No.:	Y1974
Lab Sample ID:	PB25705BS	Matrix:	WATER
Analytical Method:	625	% Moisture:	100
Sample Wt/Wol:	1000.0 mL	Extract Vol:	1000 uL

File ID	Dilution	Date Extracted	Date Analyzed	Analytical Batch ID
BE039545.D	1	3/21/2007	3/22/2007	BE032207

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
108-95-2	Phenol	12		10	0.27	ug/L
91-20-3	Naphthalene	13		10	0.28	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	64.2	64 %	20 - 112		SPK: 10
13127-88-3	Phenol-d5	69.25	69 %	20 - 85		SPK: 10
4165-60-0	Nitrobenzene-d5	66.83	67 %	35 - 114		SPK: 10
321-60-8	2-Fluorobiphenyl	60.21	60 %	26 - 108		SPK: 10
118-79-6	2,4,6-Tribromophenol	74.75	75 %	20 - 107		SPK: 10
1718-51-0	Terphenyl-d14	67.16	67 %	20 - 110		SPK: 10
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	88052	4.68			
1146-65-2	Naphthalene-d8	312806	6.49			
15067-26-2	Acenaphthene-d10	172631	9.22			
1517-22-2	Phenanthrene-d10	290841	11.56			
1719-03-5	Chrysene-d12	282652	15.79			
1520-96-3	Perylene-d12	169907	17.88			

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4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK01

Lab Name: Chemtech Consulting Group Contract: PARS01
 Lab Code: CHEM Case No.: Y1974 SAS No.: Y1974 SDG NO.: Y1974
 Lab File ID: BE039544.D Lab Sample ID: PB25705B
 Instrument ID: BNAE Date Extracted: 3/21/2007
 Matrix: (soil/water) WATER Date Analyzed: 3/22/2007
 Level: (low/med) LOW Time Analyzed: 22:24

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SLCS01	PB25705BS	BE039545.D	3/22/2007
02	B8	Y1974-02	BE039546.D	3/22/2007
03	B22	Y1974-01	BE039547.D	3/22/2007
04	B7	Y1974-03	BE039549.D	3/23/2007

COMMENTS: _____

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	
Project:	DDC albert road	Date Received:	
Client Sample ID:	SBLK01	SDG No.:	Y1974
Lab Sample ID:	PB25705B	Matrix:	WATER
Analytical Method:	625	% Moisture:	100
Sample Wt/Wol:	1000.0 mL	Extract Vol:	1000 uL

File ID	Dilution	Date Extracted	Date Analyzed	Analytical Batch ID
BE039544.D	1	3/21/2007	3/22/2007	BE032207

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
108-95-2	Phenol	0.27	U	10	0.27	ug/L
91-20-3	Naphthalene	0.28	U	10	0.28	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	65.34	65 %	20 - 112		SPK: 10
13127-88-3	Phenol-d5	70.04	70 %	20 - 85		SPK: 10
4165-60-0	Nitrobenzene-d5	66.84	67 %	35 - 114		SPK: 10
321-60-8	2-Fluorobiphenyl	59.43	59 %	26 - 108		SPK: 10
118-79-6	2,4,6-Tribromophenol	72.61	73 %	20 - 107		SPK: 10
1718-51-0	Terphenyl-d14	67.48	67 %	20 - 110		SPK: 10
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	85908	4.68			
1146-65-2	Naphthalene-d8	303283	6.49			
15067-26-2	Acenaphthene-d10	169906	9.21			
1517-22-2	Phenanthrene-d10	276795	11.56			
1719-03-5	Chrysene-d12	274113	15.77			
1520-96-3	Perylene-d12	159408	17.88			
TENTITIVE IDENTIFIED COMPOUNDS						
123-42-2	ACP2.83	110	JM	2.83		ug/L

u
u/g/L

U = Not Detected
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CHEMTECH

TABULATED ANALYTICAL RESULTS

GC EXTRACTABLES

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B22	SDG No.:	Y1974
Lab Sample ID:	Y1974-01	Matrix:	WATER
Analytical Method:	608	% Moisture:	100
Sample Wt/Vol:	980 mL	Extract Vol:	1000 uL

File ID:	Dilution:	Date Prep	Date Analyzed	Analytical Batch ID
P602400.D	1	3/21/2007	3/22/2007	P6031507

CAS Number	Parameter	Conc	Qualifier	RL	MDL	Units
TARGETS						
12674-11-2	AROCLOR 1016	0.015	U	0.05	0.015	ug/L
11104-28-2	AROCLOR 1221	0.014	U	0.05	0.014	ug/L
11141-16-5	AROCLOR 1232	0.014	U	0.05	0.014	ug/L
53469-21-9	AROCLOR 1242	0.0052	U	0.05	0.0052	ug/L
12672-29-6	AROCLOR 1248	0.0045	U	0.05	0.0045	ug/L
11097-69-1	AROCLOR 1254	0.0036	U	0.05	0.0036	ug/L
11096-82-5	AROCLOR 1260	0.012	U	0.05	0.012	ug/L
SURROGATES						
877-09-8	Tetrachloro-m-xylene	18.34	92 %	40 - 135		SPK: 20
2051-24-3	Decachlorobiphenyl	24.02	120 %	42 - 133		SPK: 20

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found In Associated Method Blank
 N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B8	SDG No.:	Y1974
Lab Sample ID:	Y1974-02	Matrix:	WATER
Analytical Method:	608	% Moisture:	100
Sample Wt/Vol:	490 mL	Extract Vol:	1000 uL

File ID:	Dilution:	Date Prep	Date Analyzed	Analytical Batch ID
P602401.D	1	3/21/2007	3/22/2007	P6031507

CAS Number	Parameter	Conc	Qualifier	RL	MDL	Units
TARGETS						
12674-11-2	AROCLOR 1016	0.03	U	0.10	0.03	ug/L
11104-28-2	AROCLOR 1221	0.027	U	0.10	0.027	ug/L
11141-16-5	AROCLOR 1232	0.028	U	0.10	0.028	ug/L
53469-21-9	AROCLOR 1242	0.01	U	0.10	0.01	ug/L
12672-29-6	AROCLOR 1248	0.009	U	0.10	0.009	ug/L
11097-69-1	AROCLOR 1254	0.0071	U	0.10	0.0071	ug/L
11096-82-5	AROCLOR 1260	0.025	U	0.10	0.025	ug/L
SURROGATES						
877-09-8	Tetrachloro-m-xylene	18.33	92 %	40 - 135		SPK: 20
2051-24-3	Decachlorobiphenyl	23.87	119 %	42 - 133		SPK: 20

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found In Associated Method Blank
 N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B7	SDG No.:	Y1974
Lab Sample ID:	Y1974-03	Matrix:	WATER
Analytical Method:	608	% Moisture:	100
Sample Wt/Vol:	880 mL	Extract Vol:	1000 uL

File ID:	Dilution:	Date Prep	Date Analyzed	Analytical Batch ID
P602402.D	1	3/21/2007	3/22/2007	P6031507

CAS Number	Parameter	Conc	Qualifier	RL	MDL	Units
TARGETS						
12674-11-2	AROCLOR 1016	0.017	U	0.06	0.017	ug/L
11104-28-2	AROCLOR 1221	0.015	U	0.06	0.015	ug/L
11141-16-5	AROCLOR 1232	0.016	U	0.06	0.016	ug/L
53469-21-9	AROCLOR 1242	0.0058	U	0.06	0.0058	ug/L
12672-29-6	AROCLOR 1248	0.005	U	0.06	0.005	ug/L
11097-69-1	AROCLOR 1254	0.004	U	0.06	0.004	ug/L
11096-82-5	AROCLOR 1260	0.014	U	0.06	0.014	ug/L
SURROGATES						
877-09-8	Tetrachloro-m-xylene	17.82	89 %	40 - 135		SPK: 20
2051-24-3	Decachlorobiphenyl	24.26	121 %	42 - 133		SPK: 20

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

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 B = Analyte Found In Associated Method Blank
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CHEMTECH

**QUALITY CONTROL SUMMARY
REPORTS**

GC EXTRACTABLES

Surrogate Summary
SW-846

SDG No.: Y1974
Client: Parsons Brinckerhoff

Analytical Method: EPA SW-846 608 PCB

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery	Qual	Limits	
							Low	High
I.BLK	PIBLK01	Tetrachloro-m-xylene	20	22.73	114		40.00	135.00
		Decachlorobiphenyl	20	31.28	156	*	42.00	133.00
Y1974-01	B22	Tetrachloro-m-xylene	20	18.34	92		40.00	135.00
		Decachlorobiphenyl	20	24.02	120		42.00	133.00
Y1974-02	B8	Tetrachloro-m-xylene	20	18.33	92		40.00	135.00
		Decachlorobiphenyl	20	23.87	119		42.00	133.00
Y1974-03	B7	Tetrachloro-m-xylene	20	17.82	89		40.00	135.00
		Decachlorobiphenyl	20	24.26	121		42.00	133.00
PB25706B	PB25706B	Tetrachloro-m-xylene	20	21.08	105		40.00	135.00
		Decachlorobiphenyl	20	31.02	155	*	42.00	133.00
I.BLK	PIBLK02	Tetrachloro-m-xylene	20	21.97	110		40.00	135.00
		Decachlorobiphenyl	20	31.25	156	*	42.00	133.00
	PIBLK03	Tetrachloro-m-xylene	20	19.99	100		40.00	135.00
		Decachlorobiphenyl	20	19.66	98		42.00	133.00
PB25706BS	PB25706BS	Tetrachloro-m-xylene	20	16.84	84		40.00	135.00
		Decachlorobiphenyl	20	15.91	80		42.00	133.00
I.BLK	PIBLK04	Tetrachloro-m-xylene	20	21.47	107		40.00	135.00
		Decachlorobiphenyl	20	20.32	102		42.00	133.00

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7/15/77

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary
SW-846

SDG No.: Y1974

Client: Parsons Brinckerhoff

Analytical Method: EPA SW-846 608.PCB

Lab Sample ID	Parameter	Spike	Result	Rec	RPD	Qual	Limits	
							Low	High
PB25706BS	AROCLOR 1016	0.05	0.05	100			50	114
	AROCLOR 1260	0.05	0.05	100			8	127

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	
Project:	DDC albert road	Date Received:	
Client Sample ID:	PB25706BS	SDG No.:	Y1974
Lab Sample ID:	PB25706BS	Matrix:	WATER
Analytical Method:	608	% Moisture:	100
Sample Wt/Vol:	1000 mL	Extract Vol:	1000 uL

File ID:	Dilution:	Date Prep	Date Analyzed	Analytical Batch ID
P602670.D	1	3/21/2007	3/30/2007	P6031507

CAS Number	Parameter	Conc	Qualifier	RL	MDL	Units
TARGETS						
12674-11-2	AROCLOR 1016	0.05	J	0.05	0.015	ug/L
11104-28-2	AROCLOR 1221	0.013	U	0.05	0.013	ug/L
11141-16-5	AROCLOR 1232	0.014	U	0.05	0.014	ug/L
53469-21-9	AROCLOR 1242	0.0051	U	0.05	0.0051	ug/L
12672-29-6	AROCLOR 1248	0.0044	U	0.05	0.0044	ug/L
11097-69-1	AROCLOR 1254	0.0035	U	0.05	0.0035	ug/L
11096-82-5	AROCLOR 1260	0.05	J	0.05	0.012	ug/L
SURROGATES						
877-09-8	Tetrachloro-m-xylene	16.84	84 %	40 - 135		SPK: 20
2051-24-3	Decachlorobiphenyl	15.91	80 %	42 - 133		SPK: 20

U = Not Detected
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 MDL = Method Detection Limit
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 N = Presumptive Evidence of a Compound

PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

PB25706B

Lab Name: Chemtech Contract: Parsons Brinckerhoff
 Lab Code: CTECH Case No.: Y1974 SAS No.: Y1974 SDG No.: Y1974
 Lab Sample ID: PB25706B Lab File ID: P602407.D
 Matrix: (soil/water) WATER Extraction: (Type) SEPF
 Sulfur Cleanup: (Y/N) N Date Extracted: 3/21/2007
 Date Analyzed (1): 3/22/2007 Date Analyzed (2): 3/22/2007
 Time Analyzed (1): 20:12 Time Analyzed (2): 20:12
 Instrument ID (1): ECD6 Instrument ID (2): ECD6
 GC Column (1): RTX-CLPes ID: 0.32 (mm) GC Column (2): RTX-CLPest ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED 1	DATE ANALYZED 2
B22	Y1974-01	P602400.D	3/22/2007	3/22/2007
B8	Y1974-02	P602401.D	3/22/2007	3/22/2007
B7	Y1974-03	P602402.D	3/22/2007	3/22/2007
PB25706BS	PB25706BS	P602670.D	3/30/2007	3/30/2007

COMMENTS:

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	
Project:	DDC albert road	Date Received:	
Client Sample ID:	PB25706B	SDG No.:	Y1974
Lab Sample ID:	PB25706B	Matrix:	WATER
Analytical Method:	608	% Moisture:	100
Sample Wt/Vol:	1000 mL	Extract Vol:	1000 uL

File ID:	Dilution:	Date Prep	Date Analyzed	Analytical Batch ID
P602407.D	1	3/21/2007	3/22/2007	P6031507

CAS Number	Parameter	Conc	Qualifier	RL	MDL	Units
TARGETS						
12674-11-2	AROCLOR 1016	0.015	U	0.05	0.015	ug/L
11104-28-2	AROCLOR 1221	0.013	U	0.05	0.013	ug/L
11141-16-5	AROCLOR 1232	0.014	U	0.05	0.014	ug/L
53469-21-9	AROCLOR 1242	0.0051	U	0.05	0.0051	ug/L
12672-29-6	AROCLOR 1248	0.0044	U	0.05	0.0044	ug/L
11097-69-1	AROCLOR 1254	0.0035	U	0.05	0.0035	ug/L
11096-82-5	AROCLOR 1260	0.012	U	0.05	0.012	ug/L
SURROGATES						
877-09-8	Tetrachloro-m-xylene	21.08	105 %	40 - 135		SPK: 20
2051-24-3	Decachlorobiphenyl	31.02	155 %	42 - 133		SPK: 20

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found In Associated Method Blank
 N = Presumptive Evidence of a Compound

CHEMTECH

TABULATED ANALYTICAL RESULTS

METALS ANALYSIS

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B22	SDG No.:	Y1974
Lab Sample ID:	Y1974-01	Matrix:	WATER
		% Solids:	0.00

CAS No.	Analyte	Conc.	Qualifier	Units	DL	Dilution	Date Prep	Date Anal.	Method
7440-43-9	Cadmium	1.460	J	ug/L	0.900	1	3/21/2007	3/23/2007	EPA SW-846 6010
7440-50-8	Copper	130		ug/L	0.500	1	3/21/2007	3/23/2007	EPA SW-846 6010
7439-92-1	Lead	30.2		ug/L	1.900	1	3/21/2007	3/23/2007	EPA SW-846 6010
7439-97-6	Mercury	0.1100	U	ug/L	0.110	1	3/20/2007	3/21/2007	EPA SW-846 7470
7440-02-0	Nickel	148		ug/L	1.800	1	3/21/2007	3/23/2007	EPA SW-846 6010
7440-66-6	Zinc	188		ug/L	2.900	1	3/21/2007	3/23/2007	EPA SW-846 6010

Comments:

U = Not Detected
DL = Method Detection Limit or Instrument Detection Limit

J = Estimated Value
B = Analyte Found In Associated Method Blank
N = Spiked sample recovery not within control limits

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B8	SDG No.:	Y1974
Lab Sample ID:	Y1974-02	Matrix:	WATER
		% Solids:	0.00

CAS No.	Analyte	Conc.	Qualifier	Units	DL	Dilution	Date Prep	Date Anal.	Method
7440-43-9	Cadmium	1.870	J	ug/L	0.900	1	3/21/2007	3/23/2007	EPA SW-846 6010
7440-50-8	Copper	173		ug/L	0.500	1	3/21/2007	3/23/2007	EPA SW-846 6010
7439-92-1	Lead	49.4		ug/L	1.900	1	3/21/2007	3/23/2007	EPA SW-846 6010
7439-97-6	Mercury	0.1100	U	ug/L	0.110	1	3/20/2007	3/21/2007	EPA SW-846 7470
7440-02-0	Nickel	443		ug/L	1.800	1	3/21/2007	3/23/2007	EPA SW-846 6010
7440-66-6	Zinc	257		ug/L	2.900	1	3/21/2007	3/23/2007	EPA SW-846 6010

Comments:

U = Not Detected
DL = Method Detection Limit or Instrument Detection LimitJ = Estimated Value
B = Analyte Found In Associated Method Blank
N = Spiked sample recovery not within control limits

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B7	SDG No.:	Y1974
Lab Sample ID:	Y1974-03	Matrix:	WATER
		% Solids:	0.00

CAS No.	Analyte	Conc.	Qualifier	Units	DL	Dilution	Date Prep	Date Anal.	Method
7440-43-9	Cadmium	6.710		ug/L	0.900	1	3/21/2007	3/23/2007	EPA SW-846 6010
7440-50-8	Copper	400		ug/L	0.500	1	3/21/2007	3/23/2007	EPA SW-846 6010
7439-92-1	Lead	139		ug/L	1.900	1	3/21/2007	3/23/2007	EPA SW-846 6010
7439-97-6	Mercury	0.1100	U	ug/L	0.110	1	3/20/2007	3/21/2007	EPA SW-846 7470
7440-02-0	Nickel	461		ug/L	1.800	1	3/21/2007	3/23/2007	EPA SW-846 6010
7440-66-6	Zinc	550		ug/L	2.900	1	3/21/2007	3/23/2007	EPA SW-846 6010

Comments:

U = Not Detected
DL = Method Detection Limit or Instrument Detection Limit

J = Estimated Value
B = Analyte Found In Associated Method Blank
N = Spiked sample recovery not within control limits

CHEMTECH

QUALITY CONTROL SUMMARY REPORTS

METALS ANALYSIS

Metals
- 3a -
INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Parsons Brinckerhoff

SDG No.: Y1974

Contract: Parsons Brinckerhoff

Lab Code: CHEMED

Case No.: Y1974

SAS No.: Y1974

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	CRQL	M	Analysis Date	Analysis Time	Run
ICB01	Mercury	-0.12	+/-0.20	J	0.11	0.20	CV	3/21/2007	19:45	032107B
CCB01	Mercury	-0.13	+/-0.20	J	0.11	0.20	CV	3/21/2007	19:49	032107B
CCB02	Mercury	0.11	+/-0.20	U	0.11	0.20	CV	3/21/2007	20:10	032107B
CCB03	Mercury	0.11	+/-0.20	U	0.11	0.20	CV	3/21/2007	20:30	032107B
CCB04	Mercury	0.11	+/-0.20	U	0.11	0.20	CV	3/21/2007	20:51	032107B
CCB05	Mercury	0.11	+/-0.20	U	0.11	0.20	CV	3/21/2007	21:13	032107B
CCB06	Mercury	0.11	+/-0.20	U	0.11	0.20	CV	3/21/2007	21:34	032107B
CCB07	Mercury	-0.11	+/-0.20	J	0.11	0.20	CV	3/21/2007	21:48	032107B
ICB01	Cadmium	0.9	+/-3.0	U	0.9	3.0	P	3/23/2007	10:48	P1032307
	Copper	0.5	+/-10.0	U	0.5	10.0	P	3/23/2007	10:48	P1032307
	Lead	1.9	+/-6.0	U	1.9	6.0	P	3/23/2007	10:48	P1032307
	Nickel	1.8	+/-20.0	U	1.8	20.0	P	3/23/2007	10:48	P1032307
	Zinc	2.9	+/-20.0	U	2.9	20.0	P	3/23/2007	10:48	P1032307

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Parsons Brinckerhoff

SDG No.: Y1974

Contract: Parsons Brinckerhoff

Lab Code: CHEMED

Case No.: Y1974

SAS No.: Y1974

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	CRQL	M	Analysis Date	Analysis Time	Run
CCB01										
	Cadmium	0.9	+/-3.0	U	0.9	3.0	P	3/23/2007	11:07	P1032307
	Copper	0.5	+/-10.0	U	0.5	10.0	P	3/23/2007	11:07	P1032307
	Lead	1.9	+/-6.0	U	1.9	6.0	P	3/23/2007	11:07	P1032307
	Nickel	1.8	+/-20.0	U	1.8	20.0	P	3/23/2007	11:07	P1032307
	Zinc	2.9	+/-20.0	U	2.9	20.0	P	3/23/2007	11:07	P1032307
CCB02										
	Cadmium	-1.1	+/-3.0	J	0.9	3.0	P	3/23/2007	11:45	P1032307
	Copper	-0.7	+/-10.0	J	0.5	10.0	P	3/23/2007	11:45	P1032307
	Lead	1.9	+/-6.0	U	1.9	6.0	P	3/23/2007	11:45	P1032307
	Nickel	1.8	+/-20.0	U	1.8	20.0	P	3/23/2007	11:45	P1032307
	Zinc	-3.3	+/-20.0	J	2.9	20.0	P	3/23/2007	11:45	P1032307
CCB03										
	Cadmium	0.9	+/-3.0	U	0.9	3.0	P	3/23/2007	12:14	P1032307
	Copper	-0.7	+/-10.0	J	0.5	10.0	P	3/23/2007	12:14	P1032307
	Lead	1.9	+/-6.0	U	1.9	6.0	P	3/23/2007	12:14	P1032307
	Nickel	1.8	+/-20.0	U	1.8	20.0	P	3/23/2007	12:14	P1032307
	Zinc	-3.2	+/-20.0	J	2.9	20.0	P	3/23/2007	12:14	P1032307
CCB04										
	Cadmium	-0.9	+/-3.0	J	0.9	3.0	P	3/23/2007	12:41	P1032307
	Copper	0.5	+/-10.0	U	0.5	10.0	P	3/23/2007	12:41	P1032307
	Lead	1.9	+/-6.0	U	1.9	6.0	P	3/23/2007	12:41	P1032307
	Nickel	1.8	+/-20.0	U	1.8	20.0	P	3/23/2007	12:41	P1032307
	Zinc	2.9	+/-20.0	U	2.9	20.0	P	3/23/2007	12:41	P1032307
CCB05										
	Cadmium	0.9	+/-3.0	U	0.9	3.0	P	3/23/2007	14:03	P1032307
	Copper	-1.7	+/-10.0	J	0.5	10.0	P	3/23/2007	14:03	P1032307
	Lead	1.9	+/-6.0	U	1.9	6.0	P	3/23/2007	14:03	P1032307
	Nickel	-2.0	+/-20.0	J	1.8	20.0	P	3/23/2007	14:03	P1032307
	Zinc	2.9	+/-20.0	U	2.9	20.0	P	3/23/2007	14:03	P1032307

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Parsons Brinckerhoff

SDG No.: Y1974

Contract: Parsons Brinckerhoff

Lab Code: CHEMED

Case No.: Y1974

SAS No.: Y1974

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	CRQL	M	Analysis Date	Analysis Time	Run
CCB06										
	Cadmium	-1.1	+/-3.0	J	0.9	3.0	P	3/23/2007	14:33	P1032307
	Copper	-1.3	+/-10.0	J	0.5	10.0	P	3/23/2007	14:33	P1032307
	Lead	1.9	+/-6.0	U	1.9	6.0	P	3/23/2007	14:33	P1032307
	Nickel	-1.9	+/-20.0	J	1.8	20.0	P	3/23/2007	14:33	P1032307
	Zinc	-3.1	+/-20.0	J	2.9	20.0	P	3/23/2007	14:33	P1032307
CCB07										
	Cadmium	0.9	+/-3.0	U	0.9	3.0	P	3/23/2007	15:01	P1032307
	Copper	-1.5	+/-10.0	J	0.5	10.0	P	3/23/2007	15:01	P1032307
	Lead	1.9	+/-6.0	U	1.9	6.0	P	3/23/2007	15:01	P1032307
	Nickel	1.8	+/-20.0	U	1.8	20.0	P	3/23/2007	15:01	P1032307
	Zinc	2.9	+/-20.0	U	2.9	20.0	P	3/23/2007	15:01	P1032307
CCB08										
	Cadmium	0.9	+/-3.0	U	0.9	3.0	P	3/23/2007	15:36	P1032307
	Copper	-2.1	+/-10.0	J	0.5	10.0	P	3/23/2007	15:36	P1032307
	Lead	1.9	+/-6.0	U	1.9	6.0	P	3/23/2007	15:36	P1032307
	Nickel	1.8	+/-20.0	U	1.8	20.0	P	3/23/2007	15:36	P1032307
	Zinc	-3.0	+/-20.0	J	2.9	20.0	P	3/23/2007	15:36	P1032307
CCB09										
	Cadmium	0.9	+/-3.0	U	0.9	3.0	P	3/23/2007	16:22	P1032307
	Copper	-1.5	+/-10.0	J	0.5	10.0	P	3/23/2007	16:22	P1032307
	Lead	1.9	+/-6.0	U	1.9	6.0	P	3/23/2007	16:22	P1032307
	Nickel	-1.8	+/-20.0	J	1.8	20.0	P	3/23/2007	16:22	P1032307
	Zinc	2.9	+/-20.0	U	2.9	20.0	P	3/23/2007	16:22	P1032307

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Parsons Brinckerhoff

SDG No.: Y1974

Instrument: P1

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	MDL ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB25700BL		WATER		Batch Number: PB25700		Prep Date: 3/21/2007				
	Cadmium	-0.850	<3.000	U	0.900	3.000	P	3/23/2007	11:09	P1032307
	Copper	0.150	<10.000	U	0.500	10.000	P	3/23/2007	11:09	P1032307
	Lead	0.580	<6.000	U	1.900	6.000	P	3/23/2007	11:09	P1032307
	Nickel	-0.330	<20.000	U	1.800	20.000	P	3/23/2007	11:09	P1032307
	Zinc	-3.020	<20.000	J	2.900	20.000	P	3/23/2007	11:09	P1032307
PB25688BL		WATER		Batch Number: PB25688		Prep Date: 3/20/2007				
	Mercury	-0.056	<0.200	U	0.108	0.200	CV	3/21/2007	20:00	032107B

Metals
- 5a -

MATRIX SPIKE SUMMARY

Client: Parsons Brinckerhoff Level: LOW SDG No.: Y1974

Contract: Parsons Brinckerhoff Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974

Matrix: WATER Sample ID: Y1967-01 Client ID: MW-IDS

Percent Solids for Sample: 0.00 Spiked ID: Y1967-01S Percent Solids for Spike Sample: 0.00

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75 - 125	4.3700		0.1085	U	4.00	109.2		CV

Metals

- 5a -

MATRIX SPIKE DUPLICATE SUMMARY

Client: Parsons Brinckerhoff Level: LOW SDG No.: Y1974

Contract: Parsons Brinckerhoff Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974

Matrix: WATER Sample ID: Y1967-01 Client ID: MW-1DSD

Percent Solids for Sample: 0.00 Spiked ID: Y1967-01SD Percent Solids for Spike Sample: 0.00

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75 - 125	4.4500		0.1085	U	4.00	111.2		CV

Metals

- 5a -

MATRIX SPIKE SUMMARY

Client: Parsons Brinckerhoff Level: LOW SDG No.: Y1974

Contract: Parsons Brinckerhoff Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974

Matrix: WATER Sample ID: Y1937-01 Client ID: MW-2R(UNFILTERED)S

Percent Solids for Sample: 0.00 Spiked ID: Y1937-01S Percent Solids for Spike Sample: 0.00

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cadmium	ug/L	75 - 125	176.2100		0.9000	U	200.00	88.1		P
Copper	ug/L	75 - 125	279.9100		7.2100	J	300.00	90.9		P
Lead	ug/L	75 - 125	867.4300		2.6500	J	1000.00	86.5		P
Nickel	ug/L	75 - 125	456.8700		6.1100	J	500.00	90.2		P
Zinc	ug/L	75 - 125	1181.0800		1020.5400		200.00	80.3		P

Metals
- 5a -

MATRIX SPIKE DUPLICATE SUMMARY

Client: Parsons Brinckerhoff Level: LOW SDG No.: Y1974

Contract: Parsons Brinckerhoff Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974

Matrix: WATER Sample ID: Y1937-01 Client ID: MW-2R(UNFILTERED)SD

Percent Solids for Sample: 0.00 Spiked ID: Y1937-01SD Percent Solids for Spike Sample: 0.00

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cadmium	ug/L	75 - 125	178.2700		0.9000	U	200.00	89.1		P
Copper	ug/L	75 - 125	279.6000		7.2100	J	300.00	90.8		P
Lead	ug/L	75 - 125	881.9100		2.6500	J	1000.00	87.9		P
Nickel	ug/L	75 - 125	461.4700		6.1100	J	500.00	91.1		P
Zinc	ug/L	75 - 125	1192.9400		1020.5400		200.00	86.2		P

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: Parsons Brinckerhoff Level: LOW SDG No.: Y1974
 Contract: Parsons Brinckerhoff Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974
 Matrix: WATER Sample ID: Y1967-01 Client ID: MW-IDD
 Percent Solids for Sample: 0.00 Duplicate ID: Y1967-01D Percent Solids for Duplicate: 0.00

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L		0.1085	U	0.1085	U			CV

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: Parsons Brinckerhoff Level: LOW SDG No.: Y1974
 Contract: Parsons Brinckerhoff Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974
 Matrix: WATER Sample ID: Y1967-01S Client ID: MW-1DSD
 Percent Solids for Sample: 0.00 Duplicate ID: Y1967-01SD Percent Solids for Duplicate: 0.00

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L		4.3700		4.4500		1.8		CV

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: Parsons Brinckerhoff Level: LOW SDG No.: Y1974
 Contract: Parsons Brinckerhoff Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974
 Matrix: WATER Sample ID: Y1937-01 Client ID: MW-2R(UNFILTERED)D
 Percent Solids for Sample: 0.00 Duplicate ID: Y1937-01D Percent Solids for Duplicate: 0.00

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cadmium	ug/L		0.9000	U	0.9000	U			P
Copper	ug/L		7.2100	J	5.8600	J	20.7		P
Lead	ug/L		2.6500	J	2.0500	J	25.5		P
Nickel	ug/L		6.1100	J	5.0200	J	19.6		P
Zinc	ug/L		1020.5400		1024.1000		0.3		P

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: Parsons Brinckerhoff Level: LOW SDG No.: Y1974
 Contract: Parsons Brinckerhoff Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974
 Matrix: WATER Sample ID: Y1937-01S Client ID: MW-2R(UNFILTERED)SD
 Percent Solids for Sample: 0.00 Duplicate ID: Y1937-01SD Percent Solids for Duplicate: 0.00

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cadmium	ug/L		176.2100		178.2700		1.2		P
Copper	ug/L		279.9100		279.6000		0.1		P
Lead	ug/L		867.4300		881.9100		1.7		P
Nickel	ug/L		456.8700		461.4700		1.0		P
Zinc	ug/L		1181.0799		1192.9400		1.0		P

Metals

- 7 -

LABORATORY CONTROL SAMPLE SUMMARY

Client: Parsons Brinckerhoff SDG No.: Y1974
Contract: Parsons Brinckerhoff Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974
Aqueous LCS Source: EPA-ICV Solid LCS Source:

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB25688BS	Mercury	ug/L	4.100	4.210		102.7	80.0 - 120.0	CV

Metals

- 7 -

LABORATORY CONTROL SAMPLE SUMMARY

Client: Parsons Brinckerhoff

SDG No.: Y1974

Contract: Parsons Brinckerhoff

Lab Code: CHEMED

Case No.: Y1974

SAS No.: Y1974

Aqueous LCS Source: EPA-ICV

Solid LCS Source:

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB25700BS								
	Cadmium	ug/L	200.0	169.43		84.7	80.0 - 120.0	P
	Copper	ug/L	300.0	262.56		87.5	80.0 - 120.0	P
	Lead	ug/L	1000.0	831.91		83.2	80.0 - 120.0	P
	Nickel	ug/L	500.0	442.72		88.5	80.0 - 120.0	P
	Zinc	ug/L	200.0	188.56		94.3	80.0 - 120.0	P

Metals

- 9 -

SERIAL DILUTION SAMPLE SUMMARY

Client: Parsons Brinckerhoff SDG No.: Y1974
Contract: Parsons Brinckerhoff Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974
Matrix: WATER Level: LOW Client ID: MW-1DL
Sample ID: Y1967-01 Serial Dilution ID: Y1967-01L

Analyte	Initial Result ug/L	C	Serial Result ug/L	C	% Difference	Qual	Acceptance Limits	M
Mercury	0.11	U	0.11	U			10.00 %	CV

Metals

- 9 -

SERIAL DILUTION SAMPLE SUMMARY

Client: Parsons Brinckerhoff SDG No.: Y1974
 Contract: Parsons Brinckerhoff Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974
 Matrix: WATER Level: LOW Client ID: MW-2R(UNFILTERED)L
 Sample ID: Y1937-01 Serial Dilution ID: Y1937-01L

Analyte	Initial Result ug/L	C	Serial Result ug/L	C	% Difference	Qual	Acceptance Limits	M
Cadmium	0.90	U	0.90	U			10.00 %	P
Copper	7.21	J	0.50	U	100.0		10.00 %	P
Lead	2.65	J	1.90	U	100.0		10.00 %	P
Nickel	6.11	J	1.80	U	100.0		10.00 %	P
Zinc	1020.54		1067.25		4.6		10.00 %	P

Metals
14
ANALYSIS RUN LOG

Client: Parsons Brinckerhoff Contract: Parsons Brinckerhoff
 Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974 SDG No.: Y1974
 Instrument ID Number: CV2 Method: CV Run Number: 032107B
 Start Date: 3/21/2007 End Date: 3/21/2007

EPA Sample No.	D/F	Time	% R	Analytes																																	
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	N A	T L	V L	Z N	C N										
MW-1DD	1.00	2045																											X								
MW-1DL	5.00	2047																												X							
CCV04	1.00	2049																												X							
CCB04	1.00	2051																												X							
MW-1DS	1.00	2053																												X							
MW-1DSD	1.00	2056																												X							
MW-1DA	1.00	2058																																			
ZZZZZZ	1.00	2100																																			
ZZZZZZ	1.00	2102																																			
ZZZZZZ	1.00	2104																																			
ZZZZZZ	1.00	2106																																			
ZZZZZZ	1.00	2109																																			
CCV05	1.00	2111																																			X
CCB05	1.00	2113																																			X
ZZZZZZ	1.00	2115																																			
ZZZZZZ	1.00	2117																																			
ZZZZZZ	1.00	2119																																			
ZZZZZZ	1.00	2121																																			
ZZZZZZ	1.00	2123																																			
ZZZZZZ	1.00	2125																																			
B22	1.00	2127																																			X
B8	1.00	2129																																			X
CCV06	1.00	2132																																			X
CCB06	1.00	2134																																			X
B7	1.00	2136																																			X
ZZZZZZ	1.00	2138																																			
ZZZZZZ	1.00	2140																																			
ZZZZZZ	1.00	2142																																			
ZZZZZZ	1.00	2144																																			
CCV07	1.00	2146																																			X
CCB07	1.00	2148																																			X

Metals
14
ANALYSIS RUN LOG

Client: Parsons Brinckerhoff Contract: Parsons Brinckerhoff
 Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974 SDG No.: Y1974
 Instrument ID Number: P1 Method: P Run Number: P1032307
 Start Date: 3/23/2007 End Date: 3/23/2007

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K I	S E	A E	N T	T V	Z N	C N					
S0	1.00	1027						X			X	X					X										X				
S1	1.00	1029						X			X	X					X										X				
S2	1.00	1032						X			X	X					X										X				
S3	1.00	1034						X			X	X					X										X				
S4	1.00	1037						X			X	X					X										X				
S5	1.00	1039						X			X	X					X										X				
ICV01	1.00	1046						X			X	X					X										X				
ICB01	1.00	1048						X			X	X					X										X				
CRI01	1.00	1050						X			X	X					X										X				
ICS-A01	1.00	1055						X			X	X					X										X				
ICS-AB01	1.00	1102						X			X	X					X										X				
CCV01	1.00	1105						X			X	X					X										X				
CCB01	1.00	1107						X			X	X					X										X				
PB25700BL	1.00	1109						X			X	X					X										X				
PB25700BS	1.00	1115						X			X	X					X										X				
ZZZZZZ	1.00	1125																													
MW-2R (UNFILTERED) D	1.00	1127						X			X	X					X										X				
MW-2R (UNFILTERED) L	5.00	1129						X			X	X					X										X				
MW-2R (UNFILTERED) S	1.00	1131						X			X	X					X										X				
MW-2R (UNFILTERED) SD	1.00	1133						X			X	X					X										X				
MW-2R (UNFILTERED) A	1.00	1135																													
ZZZZZZ	1.00	1137																													
ZZZZZZ	1.00	1139																													
CCV02	1.00	1143						X			X	X					X										X				
CCB02	1.00	1145						X			X	X					X										X				
B22	1.00	1149						X			X	X					X										X				
B8	1.00	1151						X			X	X					X										X				
B7	1.00	1155						X			X	X					X										X				
ZZZZZZ	1.00	1157																													
ZZZZZZ	1.00	1159																													
ZZZZZZ	1.00	1201																													
ZZZZZZ	1.00	1203																													
ZZZZZZ	1.00	1206																													
ZZZZZZ	1.00	1208																													
ZZZZZZ	1.00	1209																													
CCV03	1.00	1212						X			X	X					X										X				

Metals
14
ANALYSIS RUN LOG

Client: Parsons Brinckerhoff Contract: Parsons Brinckerhoff
 Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974 SDG No.: Y1974
 Instrument ID Number: P1 Method: P Run Number: P1032307
 Start Date: 3/23/2007 End Date: 3/23/2007

EPA Sample No.	D/F	Time	% R	Analytes																						
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	N A	T L	V L	Z N
CCB03	1.00	1214						X				X	X					X								X
ZZZZZ	1.00	1216																								
ZZZZZ	1.00	1218																								
ZZZZZ	1.00	1220																								
ZZZZZ	1.00	1222																								
ZZZZZ	1.00	1224																								
ZZZZZ	1.00	1226																								
ZZZZZ	1.00	1228																								
ZZZZZ	1.00	1230																								
ZZZZZ	1.00	1232																								
ZZZZZ	1.00	1235																								
CCV04	1.00	1237					X				X	X					X								X	
CCB04	1.00	1241					X				X	X					X								X	
ZZZZZ	1.00	1243																								
ZZZZZ	1.00	1246																								
ZZZZZ	1.00	1248																								
ZZZZZ	1.00	1250																								
ZZZZZ	1.00	1252																								
ZZZZZ	1.00	1255																								
ZZZZZ	1.00	1353																								
ZZZZZ	1.00	1357																								
ZZZZZ	1.00	1359																								
CCV05	1.00	1401					X				X	X					X								X	
CCB05	1.00	1403					X				X	X					X								X	
ZZZZZ	1.00	1407																								
ZZZZZ	1.00	1410																								
ZZZZZ	1.00	1412																								
ZZZZZ	1.00	1414																								
ZZZZZ	1.00	1416																								
ZZZZZ	5.00	1418																								
ZZZZZ	1.00	1421																								
ZZZZZ	1.00	1423																								
ZZZZZ	1.00	1424																								
ZZZZZ	1.00	1427																								
CCV06	1.00	1431					X				X	X					X								X	
CCB06	1.00	1433					X				X	X					X								X	

Metals
14
ANALYSIS RUN LOG

Client: Parsons Brinckerhoff Contract: Parsons Brinckerhoff
 Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974 SDG No.: Y1974
 Instrument ID Number: P1 Method: P Run Number: P1032307
 Start Date: 3/23/2007 End Date: 3/23/2007

EPA Sample No.	D/F	Time	% R	Analytes																						
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	A L	T A	V L	Z N
ZZZZZZ	1.00	1435																								
ZZZZZZ	1.00	1438																								
ZZZZZZ	1.00	1440																								
ZZZZZZ	1.00	1442																								
ZZZZZZ	1.00	1444																								
ZZZZZZ	1.00	1446																								
ZZZZZZ	1.00	1448																								
ZZZZZZ	1.00	1451																								
ZZZZZZ	1.00	1453																								
ZZZZZZ	1.00	1456																								
CCV07	1.00	1458					X			X	X			X											X	
CCB07	1.00	1501					X			X	X			X												X
ZZZZZZ	1.00	1503																								
ZZZZZZ	1.00	1505																								
ZZZZZZ	1.00	1508																								
ZZZZZZ	1.00	1510																								
ZZZZZZ	1.00	1513																								
ZZZZZZ	1.00	1515																								
ZZZZZZ	1.00	1517																								
ZZZZZZ	1.00	1520																								
ZZZZZZ	1.00	1522																								
ZZZZZZ	5.00	1525																								
CCV08	1.00	1534					X			X	X			X												X
CCB08	1.00	1536					X			X	X			X												X
ZZZZZZ	1.00	1539								X	X			X												
ZZZZZZ	1.00	1541																								
ZZZZZZ	1.00	1543																								
ZZZZZZ	1.00	1545																								
ZZZZZZ	1.00	1548																								
CR102	1.00	1554					X			X	X			X												X
ICS-A02	1.00	1610					X			X	X			X												X
ICS-AB02	1.00	1615					X			X	X			X												X
CCV09	1.00	1620					X			X	X			X												X
CCB09	1.00	1622					X			X	X			X												X

**TABULATED ANALYTICAL RESULTS
GENERAL CHEMISTRY**

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B22	SDG No.:	Y1974
Lab Sample ID:	Y1974-01	Matrix:	WATER
% Solids:	0.00		

Analyte	Result	Qualifier	RL	Units	DF	Date Analyzed	Method
TSS	4300		4.00	mg/L	1	3/22/2007	160.2 TSS
Nonpolar Material	6.900		0.735	mg/L	1	3/23/2007	1664 Nonpolar Material
TKN	0.559		0.500	mg/L	1	3/26/2007	351.3 TKN
CBOD5	2.00	U	2.00	mg/L	1	3/21/2007	405.1 CBOD5
Nitrate+Nitrite	2.0		0.10	mg/L	1	3/23/2007	300 Nitrate+Nitrate

Comment

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B8	SDG No.:	Y1974
Lab Sample ID:	Y1974-02	Matrix:	WATER
% Solids:	0.00		

Analyte	Result	Qualifier	RL	Units	DF	Date Analyzed	Method
TSS	2400		4.00	mg/L	1	3/22/2007	160.2 TSS
Nonpolar Material	5.200		0.685	mg/L	1	3/23/2007	1664 Nonpolar Material
TKN	0.518		0.500	mg/L	1	3/26/2007	351.3 TKN
CBOD5	2.00	U	2.00	mg/L	1	3/21/2007	405.1 CBOD5
Nitrate+Nitrite	8.7		0.10	mg/L	1	3/23/2007	300 Nitrate+Nitrate

Comment

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B7	SDG No.:	Y1974
Lab Sample ID:	Y1974-03	Matrix:	WATER
% Solids:	0.00		

Analyte	Result	Qualifier	RL	Units	DF	Date Analyzed	Method
TSS	4500		4.00	mg/L	1	3/22/2007	160.2 TSS
Nonpolar Material	6.800		0.725	mg/L	1	3/23/2007	1664 Nonpolar Material
TKN	0.575		0.500	mg/L	1	3/26/2007	351.3 TKN
CBOD5	2.00	U	2.00	mg/L	1	3/21/2007	405.1 CBOD5
Nitrate+Nitrite	10.6		0.10	mg/L	1	3/23/2007	300 Nitrate+Nitrate

Comment

**QUALITY CONTROL SUMMARY
REPORTS
GENERAL CHEMISTRY**

Initial and Continuing Calibration Verification

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1						
Nitrate+Nitrite	mg/L	1.95	2.00	97.5	90-110	2/23/2007
Sample ID: CCV1						
TKN	mg/L	4.99	5.00	99.8	90-110	3/26/2007
Nitrate+Nitrite	mg/L	5.29	5.3	99.8	90-110	3/23/2007
Sample ID: CCV2						
TKN	mg/L	4.97	5.00	99.4	90-110	3/26/2007
Nitrate+Nitrite	mg/L	5.47	5.3	103.2	90-110	3/23/2007
Sample ID: CCV3						
TKN	mg/L	5.18	5.00	103.6	90-110	3/26/2007
Sample ID: CCV4						
TKN	mg/L	5.01	5.00	100.2	90-110	3/26/2007
Sample ID: LB33104ICV						
Nonpolar Materia	mg/L	19.40	20.00	98.0	90-110	3/23/2007
TKN	mg/L	4.95	5.00	99.0	90-110	3/26/2007
TKN	mg/L	5.20	5.00	104.0	90-110	3/26/2007

Initial and Continuing Calibration Blank Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Analyte	Units	Result	Acceptance Limits	Conc Qual	RDL	Analysis Date
Sample ID: ICB1						
TKN	mg/L	< 0.50	+/-0.50	U	0.50	3/26/2007
Nitrate+Nitrite	mg/L	< 0.1	+/-0.1	U	0.1	2/23/2007
Sample ID: CCB1						
TKN	mg/L	< 0.50	+/-0.50	U	0.50	3/26/2007
Nitrate+Nitrite	mg/L	< 0.1	+/-0.1	U	0.1	3/23/2007
Sample ID: CCB2						
TKN	mg/L	< 0.50	+/-0.50	U	0.50	3/26/2007
Nitrate+Nitrite	mg/L	< 0.1	+/-0.1	U	0.1	3/23/2007
Sample ID: CCB3						
TKN	mg/L	< 0.50	+/-0.50	U	0.50	3/26/2007
Sample ID: CCB4						
TKN	mg/L	< 0.50	+/-0.50	U	0.50	3/26/2007
Sample ID: LB33104ICB						
Nonpolar Material	mg/L	< 0.500	+/-0.500	U	0.500	3/23/2007
TKN	mg/L	< 0.50	+/-0.50	U	0.50	3/26/2007

Preparation Blank Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Analyte	Units	Result	Acceptance Limits	Conc Qual	RDL	Analysis Date
Sample ID: LB33102B						
TSS	mg/L	< 4.00	+/-4.00	U	4.00	3/22/2007
Sample ID: LB33104B						
Nonpolar Material	mg/L	< 0.50	+/-0.50	U	0.50	3/23/2007
Sample ID: LB33118B						
Nitrate+Nitrite	mg/L	< 0.100	+/-0.100	U	0.100	3/23/2007
Sample ID: MBW						
CBOD5	mg/L	< 2.00	+/-2.00	U	2.00	3/21/2007
CBOD5	mg/L	< 2.00	+/-2.00	U	2.00	3/21/2007
Sample ID: MBW03-21-07						
TKN	mg/L	< 0.50	+/-0.50	U	0.50	3/26/2007
Sample ID: MBW03-23-07						
TKN	mg/L	< 0.50	+/-0.50	U	0.50	3/26/2007

Matrix Spike Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID: Y1974-01

Client ID: B22S

Percent Solids for Spike Sample: 0.0

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	Dilution Factor	% Rec	Qual	Date Analyzed
TKN	mg/L	75-125	5.6		0.6		5.00	1	100.0		3/26/2007
Nitrate+Nitrite	mg/L	75-125	6.81		2.00		5.30	1	90.75		3/23/2007

Duplicate Sample Summary

Client: Parsons Brinckerhoff	SDG No.: Y1974
Project:	Sample ID: LB33102BSD
Client ID: LCSWD	Percent Solids for Spike Sample: 0.0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	Dilution Factor	RPD/AD	Qual	Date Analyzed
TSS	mg/L	+/-20	546.00		546.00		1	0		3/22/2007

Duplicate Sample Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID: LB33104BSD

Client ID: LCSWD

Percent Solids for Spike Sample: 0.0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	Dilution Factor	RPD/ AD	Qual	Date Analyzed
Nonpolar Material	mg/L	+/-20	38.60		38.60		1	0		3/23/2007

Duplicate Sample Summary

Client: Parsons Brinckerhoff	SDG No.: Y1974
Project:	Sample ID: LB33118BSD
Client ID: LCSWD	Percent Solids for Spike Sample: 0.0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	Dilution Factor	RPD/AD	Qual	Date Analyzed
Nitrate+Nitrite	mg/L	+/-20	5.42		5.42		1	0		3/23/2007

Duplicate Sample Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID: LCSW

Client ID: LCSWD

Percent Solids for Spike Sample: 0.0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	Dilution Factor	RPD/ AD	Qual	Date Analyzed
CBOD5	mg/L	+/-20	202.00		212.00		1	4.8		3/21/2007

Duplicate Sample Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID: Y1948-01

Client ID: MANHOLE-COMPOSITED

Percent Solids for Spike Sample: 0.0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	Dilution Factor	RPD/AD	Qual	Date Analyzed
TSS	mg/L	+/-20	4.00	U	4.00	U	1	0		3/22/2007

Duplicate Sample Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID: Y1974-01

Client ID: B22D

Percent Solids for Spike Sample: 0.0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	Dilution Factor	RPD/AD	Qual	Date Analyzed
TKN	mg/L	+/-20	0.56		0.55		1	1.8		3/26/2007
Nitrate+Nitrite	mg/L	+/-20	2.00		2.01		1	0.5		3/23/2007

Duplicate Sample Summary

Client: Parsons Brinckerhoff	SDG No.: Y1974
Project:	Sample ID: Y1974-03
Client ID: B7D	Percent Solids for Spike Sample: 0.0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	Dilution Factor	RPD/AD	Qual	Date Analyzed
CBOD5	mg/L	+/-20	2.00	U	2.00	U	1	0		3/21/2007



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Laboratory Control Sample Summary

Client: Parsons Brinckerhoff	SDG No.: Y1974
Project:	

Sample ID	Units	True Value	Result	C	% Recovery	Dilution Factor	Acceptance Limit %R	Date Analyzed
LB33102BS								
TSS	mg/L	550.00	546.00		99.3	1	75-125	3/22/2007

Laboratory Control Sample Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Dilution Factor	Acceptance Limit %R	Date Analyzed
LB33102BSD	TSS	mg/L	550.00	546.00		99.3	1	75-125	3/22/2007

Laboratory Control Sample Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID	Units	True Value	Result	C	% Recovery	Dilution Factor	Acceptance Limit %R	Date Analyzed
LB33104BS								
Nonpolar Material	mg/L	40.00	40.50		101.25	1	80-120	3/23/2007

Laboratory Control Sample Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID Analyte	Units	True Value	Result	C	% Recovery	Dilution Factor	Acceptance Limit %R	Date Analyzed
LB33104BSD Nonpolar Material	mg/L	40.00	38.60		96.500	1	80-120	3/23/2007

Laboratory Control Sample Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID	Units	True Value	Result	C	% Recovery	Dilution Factor	Acceptance Limit %R	Date Analyzed
LB33118BS								
Nitrate+Nitrite	mg/L	5.3	5.30		100.0	1	75-125	3/23/2007

Laboratory Control Sample Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID	Units	True Value	Result	C	% Recovery	Dilution Factor	Acceptance Limit %R	Date Analyzed
LB33118BSD								
Nitrate+Nitrite	mg/L	5.3	5.42		102.3	1	75-125	3/23/2007

Laboratory Control Sample Summary

Client: Parsons Brinckerhoff	SDG No.: Y1974
Project:	

Sample ID	Units	True Value	Result	C	% Recovery	Dilution Factor	Acceptance Limit %R	Date Analyzed
LCSW								
Nitrate+Nitrite	mg/L	5.3	5.43		102.5	1	80-120	3/23/2007
CBOD5	mg/L	200.00	202.00		101.0	1	80-120	3/21/2007

Laboratory Control Sample Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID Analyte	Units	True Value	Result	C	% Recovery	Dilution Factor	Acceptance Limit %R	Date Analyzed
LCSW03-21-07 TKN	mg/L	5.00	4.98		99.6	1	80-120	3/26/2007

Laboratory Control Sample Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID	Units	True Value	Result	C	% Recovery	Dilution Factor	Acceptance Limit %R	Date Analyzed
LCSW03-23-07								
TKN	mg/L	5.00	5.11		102.2	1	80-120	3/26/2007

Laboratory Control Sample Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID Analyte	Units	True Value	Result	C	% Recovery	Dilution Factor	Acceptance Limit %R	Date Analyzed
LCSWD CBOD5	mg/L	200.00	212.00		106.0	1	80-120	3/21/2007

Method Detection Limits

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Analyte	Units	MDL	RDL
Method: 160.2 TSS MDL Date: 1/15/2006			
Matrix Category: LIQUID			
TSS	mg/L	4.00	4.00
Method: 1664 Nonpolar Materi MDL Date: 1/15/2006			
Matrix Category: LIQUID			
Nonpolar Material	mg/L	5.00	5.00
Method: 300 Nitrate+Nitrate MDL Date: 1/15/2006			
Matrix Category: LIQUID			
Nitrate+Nitrite	mg/L	0.00	0.00
Method: 351.3 TKN MDL Date: 1/15/2006			
Matrix Category: LIQUID			
TKN	mg/L	0.50	0.50
Method: 405.1 CBOD5 MDL Date: 1/15/2006			
Matrix Category: LIQUID			
CBOD5	mg/L	2.00	2.00

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END OF ANALYTICAL RESULTS

**DATA PACKAGE FOR
VOLATILE ORGANICS
SEMI-VOLATILE ORGANICS
GC SEMI-VOLATILES
METALS
GENERAL CHEMISTRY**

PROJECT NAME: DDC albert road

**PARSONS BRINCKERHOFF
5 PENN PLAZA
NEW YORK, NY 10001
2124655000**

**CHEMTECH PROJECT NO.
ATTENTION:**

**Y1974
Sue Bianchetti**

CHEMTECH

234 Sheffield Street Mountainside NJ 07092
Tel. 908-789-8900

COVER PAGE

COVER PAGE

OrderID: Y1974 **ProjectID:** DDC albert road
CustomerName: Parsons Brinckerhoff

LAB SAMPLE NO.

Y1974-01

Y1974-02

Y1974-03

CLIENT SAMPLE NO

B22

B8

B7

I certify that the 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 hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature: *Hilfred Vleys* Name: *Hilfred Vleys*
Date: *4/5/07* Title: *QA/QC*

CHEMTECH

QA/QC DELIVERABLES CHECKLIST

Project Number: 41974

THIS FORM HAS BEEN COMPLETED BY CHEMTECH LABORATORY AND ACCOMPANIES ALL DATA DELIVERABLES PACKAGES.

The following laboratory deliverables are included in this analytical report. Any deviations from the accepted methodology and procedures, or performance values outside acceptable ranges are summarized in the Non-Conformance Summary.

	Yes	NA
I. Report Cover Page, Laboratory Certification and Field Sample to Lab Sample ID Cross Reference	<u> ✓ </u>	<u> </u>
II. Table of Contents	<u> ✓ </u>	<u> </u>
III. Chain of Custody Documents	<u> ✓ </u>	<u> </u>
IV. Methodology Summaries	<u> ✓ </u>	<u> </u>
V. Laboratory Chronicle and Hold Time Checks	<u> ✓ </u>	<u> </u>
VI. Non-Conformance Summary	<u> ✓ </u>	<u> </u>
VII. Tabulated Analytical Results	<u> ✓ </u>	<u> </u>
VIII. Initial and Continuing Calibration Information	<u> ✓ </u>	<u> </u>
IX. Tune and Internal Standard Area Summaries (GC/MS)	<u> </u>	<u> ✓ </u>
X. Quality Control Summary Reports	<u> ✓ </u>	<u> </u>
XI. Surrogate Recovery Summary	<u> ✓ </u>	<u> </u>
XII. Raw Data Chromatogram, Blank, Samples and QC when applicable	<u> ✓ </u>	<u> </u>
XIII. Subcontract Data	<u> </u>	<u> ✓ </u>

[Signature]
QA/QC Data Reviewer

41517
Date

110 Route 4
Englewood, NJ 07631
Phone: 201.568.7400 Fax: 201.567.3231

284 Sheffield Street
Mountainside, NJ 07092
Tel 908.789.8900 Fax: 908.789.8922

NYSDOH Certification No. 10624

NYSDOH Certification No. 11376
NJDEP Certification No. 20012

**TABLE OF CONTENTS
PROJECT NUMBER Y1974RQ**

	PAGE #
COVER PAGE	02
CHAIN OF CUSTODY	06
METHODOLOGY REVIEW & LABORATORY CHRONICLE	14
CONFORMANCE / NON-COFORMANCE SUMMARY	20
GC/MS VOLATILE ORGANIC DATA	
TABULATED ANALYTICAL RESULTS SUMMARY	28
QUALITY CONTROL SUMMARY REPORTS	32
GC/MS EXTRACTABLE ORGANIC DATA	
TABULATED ANALYTICAL RESULTS SUMMARY	44
QUALITY CONTROL SUMMARY REPORTS	48
GC/MS EXTRACTABLE ORGANIC DATA	
TABULATED ANALYTICAL RESULTS SUMMARY	54
QUALITY CONTROL SUMMARY REPORTS	58
METALS ANALYSIS	
TABULATED ANALYTICAL RESULTS SUMMARY	64
QUALITY CONTROL SUMMARY REPORTS	68
GENERAL CHEMISTRY DATA	
TABULATED ANALYTICAL RESULTS SUMMARY	90
QUALITY CONTROL SUMMARY REPORTS	94
TOTAL NUMBER OF PAGES	117

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**CHAIN OF
CUSTODY
RECORD**



CHAIN OF CUSTODY RECORD

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www.chemtech.net

CHEMTECH PROJECT NO. Y1974

COC Number 060504

CLIENT INFORMATION		CLIENT PROJECT INFORMATION		CLIENT BILLING INFORMATION		
COMPANY: PB AMERICAS, INC	PROJECT NAME: Albert Red	BILL TO: SAME	PROJECT NO.: 37061A-67B	ADDRESS: Client	PO#:	
ADDRESS: 5 PENN PLAZA, 19TH FL.	PROJECT NO. LOCATION:	CITY: New York	PROJECT MANAGER: Blanchetti	STATE: NY	ZIP: 10001	
CITY: New York	STATE: NY	ATTENTION: SUE BRANCHETTI	e-mail:	PHONE:	PHONE:	
ATTENTION: SUE BRANCHETTI	PHONE: 465-5419	PHONE:	FAX: 465-5419	FAX:	FAX:	
PHONE: 465-5419	FAX: 465-5419	DATA DELIVERABLE INFORMATION				
FAX: _____	DAYS: _____	<input type="checkbox"/> RESULTS ONLY	<input type="checkbox"/> USEPA CLP			
HARD COPY: _____	DAYS: _____	<input type="checkbox"/> RESULTS + QC	<input type="checkbox"/> New York State ASP 'B'			
EDD: _____	DAYS: _____	<input type="checkbox"/> New Jersey REDUCED	<input type="checkbox"/> New York State ASP 'A'			
* TO BE APPROVED BY CHEMTECH		<input type="checkbox"/> New Jersey CLP	<input type="checkbox"/> Other			
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS		<input type="checkbox"/> EDD FORMAT				
DATA TURNAROUND INFORMATION		SAMPLE COLLECTION		PRESERVATIVES		COMMENTS
CHEMTECH SAMPLE ID	PROJECT IDENTIFICATION	SAMPLE TYPE	DATE	TIME	# OF BOTTLES	
1. B22		WATER	3/15/07	0935	2	40mc VIALS
2.					1	1L - AMBER
3.					1	1L AMBER
4.					1	1/2L PLASTIC
5.					1	1/2L PLASTIC
6.					1	1L PLASTIC
7.	B8			1230	2	40mc VIALS
8.					1	1L - AMBER
9.					1	1L - AMBER
10.					1	1/2L PLASTIC

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER: *[Signature]* DATE/TIME: 3/15/07

RECEIVED BY: 1. DATE/TIME: 3/15/07

RELINQUISHED BY: *[Signature]* DATE/TIME: 3/19/07

RECEIVED BY: 2. DATE/TIME: 9:44

RELINQUISHED BY: *[Signature]* DATE/TIME: 3/19/07

RECEIVED BY: 3. DATE/TIME: 9:44

Conditions of bottles or coolers at receipt: Compliant Non Compliant Cooler Temp. 6°C

MeOH extraction requires an additional 4 oz jar for percent solid. *ice in cooler: re*

Comments: *Non-polar not collected - please take from ice in cooler: re*

5 voc and for PCB amber and preserve in lab and analyze for B22 & B8

SHIPPED VIA CLIENT: HAND DELIVERED PICKED UP OVERNIGHT OVERNIGHT

Page 2 of 3

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 www.chemtech.net

CHEMTECH PROJECT NO. Y1974
 COC Number 060495

CLIENT INFORMATION			CLIENT PROJECT INFORMATION			CLIENT BILLING INFORMATION		
COMPANY: <u>PB AMERICAS, INC.</u> ADDRESS: <u>5 Penn Plaza, 19th floor</u> CITY: <u>New York</u> STATE: <u>NY</u> ZIP: <u>10001</u> ATTENTION: <u>SUE BRANCHETTI</u> PHONE: <u>212 465-5419</u> FAX: <u>212 631-3770</u>			PROJECT NAME: <u>Albert Rd</u> PROJECT NO.: <u>37061A-676</u> PROJECT MANAGER: e-mail: PHONE: FAX:			BILL TO: <u>SAME Client</u> PO#: ADDRESS: CITY: STATE: ZIP: ATTENTION: PHONE: ANALYSIS:		
DATA DELIVERABLE INFORMATION <input type="checkbox"/> RESULTS ONLY <input type="checkbox"/> RESULTS + QC <input type="checkbox"/> New Jersey REDUCED <input type="checkbox"/> New Jersey CLP <input type="checkbox"/> EDD FORMAT <input type="checkbox"/> USEPA CLP <input type="checkbox"/> New York State ASP "B" <input type="checkbox"/> New York State ASP "A" <input type="checkbox"/> Other			DATA DELIVERABLE INFORMATION <input type="checkbox"/> USEPA CLP <input type="checkbox"/> New York State ASP "B" <input type="checkbox"/> New York State ASP "A" <input type="checkbox"/> Other			PRESERVATIVES <input type="checkbox"/> A-HCl <input type="checkbox"/> B-HNO ₃ <input type="checkbox"/> C-H ₂ SO ₄ <input type="checkbox"/> E-ICE <input type="checkbox"/> F-Other		
DATA TURNAROUND INFORMATION		PROJECT IDENTIFICATION		PRESERVATIVES		COMMENTS		
FAX: _____	DAYS: _____	CHEMTECH SAMPLE ID	PROJECT IDENTIFICATION	1	2	3	4	
HARD COPY: _____	DAYS: _____	<u>B8</u>	<u>WATER</u>					
EDD: _____	DAYS: _____	<u>11</u>					<u>1/2 L PLASTIC</u>	
* TO BE APPROVED BY CHEMTECH STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS		<u>B7</u>					<u>1 L PLASTIC</u>	
		<u>B3</u>					<u>40mic Vials</u>	
		<u>B2</u>					<u>1 L Amber</u>	
		<u>B1</u>					<u>1 L Amber</u>	
		<u>B4</u>					<u>1/2 L PLASTIC</u>	
		<u>B5</u>					<u>1/2 L PLASTIC</u>	
		<u>B6</u>					<u>1 L PLASTIC</u>	
		<u>B7</u>					<u>1 L PLASTIC</u>	
		<u>B8</u>					<u>1 L PLASTIC</u>	
		<u>B9</u>						
		<u>B10</u>						

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RECEIVED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
<u>John J. Fejerman</u>	<u>3/16/07</u>	1.	
		2.	
		3.	

RECEIVED FOR LAB BY: Cusick Ay

DATE/TIME: 3/19/07 9:45

RECEIVED BY: Ed SA

SHIPPED VIA: CLIENT HAND DELIVERED PICKED UP OVERNIGHT OVERNIGHT

Page 2 of 2

SHIPMENT COMPLETE: YES NO

FedEx Express US Airbill

FedEx Tracking Number

8614 2508 6596

1 From This portion can be removed for Recipient's records.

Date 3/16/07 FedEx Tracking Number 861425086596

Sender's Name BOC BANCORP Phone 918-465-5410

Company PARSONS BRINCKERHOFF

Address 1 PENNSILVIA 2

City NEW YORK State NY ZIP 10119-0817

2 Your Internal Billing Reference 37061A-67K

Recipient's Name JOE ADARNO Phone 908-781-8700

Company MENTEC

Address 284 SHERMAN ST

City HOUSTON TX State TX ZIP 77002

035592326



8614 2508 6596

0215 Recipient's Copy

4a Express Package Service
 Express Priority Overnight
 Express Standard Overnight
 Express Saver
 Next Business Day
 Second Day
 Saturday Delivery (Not available in most locations)

4b Express Freight Service
 FedEx 1Day Freight
 FedEx 2Day Freight
 FedEx 3Day Freight
 FedEx 4Day Freight
 FedEx 5Day Freight

5 Packaging
 FedEx Envelope
 FedEx Pak
 FedEx Tube
 FedEx Box
 Other

6 Special Handling
 Saturday Delivery
 Hold at FedEx Location
 Hold at Recipient Location
 Fragile
 Dry Ice
 Hazardous

7 Payment
 Bill to Sender
 Bill to Recipient
 Bill to Third Party
 Bill to Credit Card
 Bill to Cash/Check

Total Packages
 Total Weight

8 Residential Delivery Signature Options
 No Signature
 Direct Signature
 Indirect Signature

519

Laboratory Certification

State	License No.
New Jersey	20012
New York	11376
Arizona	AZ0653
Connecticut	PH-0649
Florida	E87935
Kansas	E-10355
Maryland	296
Massachusetts	M-NJ503
Maine	NJ0503
North Carolina	630
Oklahoma	9705
Pennsylvania	68-548
Rhode Island	LAO00259

QA Control Code: A2070148

DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following " Results Qualifiers" are used:

- Value If the result is a value greater than or equal to the detection limit, report the value
- U Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
- J Indicates an estimated value. This flag is used:
(1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.)
(2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This is flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
- B Indicates the analyte was found in the blank as well as the sample report as "12 B".
- E Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
- D This flag identifies all compounds identified in an analysis at a secondary dilution factor.
- P This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".
- N This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.

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DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following " Results Qualifiers" are used:

- J If the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).
- U If the analyte was analyzed for, but not detected.
- E The reported value is estimated because of the presence of interference
- M Duplicate injection precision not met.
- N Spiked sample recovery not within control limits.
- S The reported value was determined by the Method of Standard Addition (MSA).
- W Post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while absorbance is less than 50% of spike absorbance.
- * Duplicate analysis not within control limits.
- + Correlation coefficient for the MSA is less than 0.995.
- *** Entering "S", "W" or "+" is mutually exclusive. NO combination of these qualifiers can appear in the same field for an analyte.
- D The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
- M Method qualifiers
 - "P" for ICP instrument
 - "A" for Flame AA
 - "PM" for ICP when Microwave Digestion is used
 - "AM" for flame AA when Microwave Digestion is used
 - "FM" for furnace AA when Microwave Digestion is used
 - "CV" for Manual Cold Vapor AA
 - "AV" for automated Cold Vapor AA
 - "CA" for MIDI-Distillation Spectrophotometric
 - "AS" for Semi -Automated Spectrophotometric
 - "C" for Manual Spectrophotometric
 - "T" for Titrimetric
 - "NR" for analyte not required to be analyzed
- OR Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Y1974

Completed

For thorough review, the report must have the following:

GENERAL:

- Are all original paperwork present (chain of custody, record of communication, airbill, sample management lab chronicle, login page) ✓
- Check chain-of-custody for proper relinquish/return of samples ✓
- Is the chain of custody signed and complete ✓
- Check internal chain-of-custody for proper relinquish/return of samples /sample extracts ✓
- Collect information for each project id from server. Were all requirements followed ✓

COVER PAGE:

- Do numbers of samples correspond to the number of samples in the Chain of Custody and on login page ✓
- Do lab numbers and client Ids on cover page agree with the Chain of Custody ✓

CHAIN OF CUSTODY:

- Do requested analyses on Chain of Custody agree with form I results ✓
- Do requested analyses on Chain of Custody agree with the log-in page ✓
- Were the correct method log-in for analysis according to the Analytical Request and Chain of Custody ✓
- Were the samples received within hold time ✓
- Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle ✓

ANALYTICAL:

- Was method requirement followed? ✓
- Was client requirement followed? ✓
- Does the case narrative summarize all QC failure? ✓
- All runlogs reviewed for manual integration requirements ✓

1st Level QA Review Signature: Roy H. H. Kooipana Date: 4/15/07

2nd Level QA Review Signature: Mildred V. Reyes Date: 4/15/07

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Tel: 908-789-8900

**METHODOLOGY
REVIEW
&
LABORATORY
CHRONICLE**

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Lab Chronicle

Order ID: Y1974
Client: Parsons Brinckerhoff
Contact: Sue Bianchetti

Order Date: 3/19/2007 12:32:56 PM
Project: DDC albert road
Location: L42

Lab ID	Client ID	Matrix	Test	Method	Sample Date	PrepDate	AnnIDate	Received
Y1974-01	B22	WATER	<u>VOCMS Group I</u>	8260	03/15/07		03/21/07	03/19/07
Y1974-02	B8	WATER	<u>VOCMS Group I</u>	8260	03/15/07		03/21/07	03/19/07
Y1974-03	B7	WATER	<u>VOCMS Group I</u>	8260	03/15/07		03/22/07	03/19/07

CHEMTECH

Lab Chronicle

Order ID: Y1974
Client: Parsons Brinckerhoff
Contact: Sue Bianchetti
Order Date: 3/19/2007 12:32:56 PM
Project: DDC albert road
Location: L42

Lab ID	Client ID	Matrix	Test	Method	Sample Date	PrepDate	AnalDate	Received
Y1974-01	B22	WATER	<u>SVOCMS Group1</u>	625	03/15/07	03/21/07	03/22/07	03/19/07
Y1974-02	B8	WATER	<u>SVOCMS Group1</u>	625	03/15/07	03/21/07	03/22/07	03/19/07
Y1974-03	B7	WATER	<u>SVOCMS Group1</u>	625	03/15/07	03/21/07	03/23/07	03/19/07

CHEMTECH

Lab Chronicle

Order ID: Y1974
Client: Parsons Brinckerhoff
Contact: Sue Bianchetti

Order Date: 3/19/2007 12:32:56 PM
Project: DDC albert road
Location: L42

Lab ID	Client ID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Y1974-01	B22	WATER	<u>PCB</u>	608	03/15/07	03/21/07	03/22/07	03/19/07
Y1974-02	B8	WATER	<u>PCB</u>	608	03/15/07	03/21/07	03/22/07	03/19/07
Y1974-03	B7	WATER	<u>PCB</u>	608	03/15/07	03/21/07	03/22/07	03/19/07

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Lab Chronicle

Order ID: Y1974
Client: Parsons Brinckerhoff
Contact: Sue Bianchetti
Order Date: 3/19/2007 12:32:56 PM
Project: DDC albert road
Location: L42

Lab ID	Client ID	Matrix	Test	Method	Sample Date	PrepDate	AnalDate	Received
Y1974-01	B22	WATER	<u>Mercury</u>	7470	03/15/07	03/20/07	03/21/07	03/19/07
			<u>Metals ICP-Group</u>	6010	03/15/07	03/21/07	03/23/07	
Y1974-02	B8	WATER	<u>Mercury</u>	7470	03/15/07	03/20/07	03/21/07	03/19/07
			<u>Metals ICP-Group</u>	6010	03/15/07	03/21/07	03/23/07	
Y1974-03	B7	WATER	<u>Mercury</u>	7470	03/15/07	03/20/07	03/21/07	03/19/07
			<u>Metals ICP-Group</u>	6010	03/15/07	03/21/07	03/23/07	

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Lab Chronicle

Order ID:	Order Date:	Project:	Location:	Method	Sample Date	Prep Date	Anal Date	Received
Y1974	3/19/2007 12:32:56 PM	DDC albert road	L42		03/15/07			03/19/07
Client: Parsons Brinckerhoff Sue Bianchetti								
Lab ID	Client ID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Y1974-01	B22	WATER	<u>CBOD5</u>	405.1	03/15/07	03/21/07	03/21/07	03/19/07
			<u>Nitrate+Nitrite</u>	353.2		03/23/07	03/23/07	
			<u>Non-Polar Material</u>	1664		03/23/07	03/23/07	
			<u>TKN</u>	351.3		03/26/07	03/26/07	
			<u>TSS</u>	160.2		03/22/07	03/22/07	
Y1974-02	B8	WATER	<u>Nitrate+Nitrite</u>	353.2		03/23/07	03/23/07	
			<u>CBOD5</u>	405.1		03/21/07	03/21/07	
			<u>Non-Polar Material</u>	1664		03/23/07	03/23/07	
			<u>TKN</u>	351.3		03/26/07	03/26/07	
			<u>TSS</u>	160.2		03/22/07	03/22/07	
Y1974-03	B7	WATER	<u>Nitrate+Nitrite</u>	353.2		03/23/07	03/23/07	
			<u>CBOD5</u>	405.1		03/21/07	03/21/07	
			<u>Non-Polar Material</u>	1664		03/23/07	03/23/07	
			<u>TKN</u>	351.3		03/26/07	03/26/07	
			<u>TSS</u>	160.2		03/22/07	03/22/07	

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**CONFORMANCE/
NON-
CONFORMANCE
SUMMARY**

CHEMTECH 284 Sheffield Street, Mountainside New Jersey 07092

NEW JERSEY LAB ID#: 20012; NEW YORK LAB ID#: 11376

GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: Y1974

MATRIX: Water

METHOD: 8260

	NA	NO	YES
1. Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks)			✓
2. GC/MS Tuning Specifications BFB Meet Criteria (NOTE THAT THERE ARE DIFFERENT CRITERIA FOR NY ASP CLP, CLP AND NJ)			✓
3. GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 Series.			✓
4. GC/MS Calibration - Initial Calibration performed before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series.			✓
5. GC/MS Calibration Requirements.			✓
a. Calibration Check Compounds for 8260 and CLP.		✓	
b. The Calibration did not meet requirements.		✓	
6. Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
7. Surrogate Recoveries Meet Criteria			✓
If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			
8. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria			✓
If not met, list those compounds and their recoveries which fall outside the acceptable range.			
9. Internal Standard Area/Retention Time Shift Meet Criteria			✓
Comments:			

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NEW JERSEY LAB ID#: 20012; NEW YORK LAB ID#: 11376

GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

	NA	NO	YES
10. Analysis Holding Time Met			✓
If not met, list number of days exceeded for each sample:			

ADDITIONAL COMMENTS: The Calibration met the requirements except for Tetrachloroethene .
The Blank Spike met requirements for all samples.

 pen
QA REVIEW

 4/15/77
Date

CHEMTECH 284 Sheffield Street, Mountainside New Jersey 07092
 NEW JERSEY LAB ID#: 20012; NEW YORK LAB ID#: 11376

GC/MS SEMI-VOLATILE ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: Y1974

MATRIX: Water

METHOD: 625

- | | NA | NO | YES |
|---|----|----|-----|
| 1. Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks) | | | ✓ |
| 2. GC/MS Tuning Specifications. DFTPP Meet Criteria.
(NOTE THAT THERE ARE DIFFERENT CRITERIA FOR NY ASP CLP,
CLP AND NJ) | | | ✓ |
| 3. GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for
8000 Series. | | | ✓ |
| 4. GC/MS Calibration - Initial Calibration performed within 30 days before sample
analysis and continuing calibration performed within 24 hours of sample analysis for 600
series and 12 hours for 8000 series. | | | ✓ |
| 5. GC/MS Calibration Requirements. | | | ✓ |
| a. Calibration Check Compounds for 8270 and CLP. | | | ✓ |
| b. System Performance Check Compounds for 8270 and CLP | | | ✓ |

8270 CALIBRATION CRITERIA

<u>SPCC Compounds</u>	<u>MINRF</u>	<u>CCC Compounds</u>	
		<u>Base/Neutral Fraction</u>	<u>Acid Fraction</u>
N-nitroso-di-n-propylamine	0.050	Acenaphthene	4-Chloro-3-methylphenol
Hexachlorocyclopentadiene	0.050	1,4-Dichlorobenzene	2,4-Dichlorophenol
2,4-Dinitrophenol	0.050	Hexachlorobutadiene	2-Nitrophenol
4-Nitrophenol	0.050	Diphenylamine	Phenol
		Di-n-octyl phthalate	Pentachlorophenol
		Fluoranthene	2,4,6-Trichlorophenol
		Benzo(a)pyrene	

For CCC compounds Initial Calibration Criteria – RSD less than or equal to 30%
 For CCC compounds Continuing Calibration Criteria - %D less than or equal to 20%

- | | | | |
|---|--|--|---|
| 6. Blank Contamination - If yes, list compounds and concentrations in each blank: | | | ✓ |
|---|--|--|---|

CHEMTECH 284 Sheffield Street, Mountainside New Jersey 07092
NEW JERSEY LAB ID#: 20012; NEW YORK LAB ID#: 11376

GC/MS SEMI-VOLATILE ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

	NA	NO	YES
7. Surrogate Recoveries Meet Criteria			✓
If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			
8. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria			✓
If not met, list those compounds and their recoveries which fall outside the acceptable range.			
9. Internal Standard Area/Retention Time Shift Meet Criteria			✓
Comments:			
10. Extraction Holding Time Met			✓
If not met, list number of days exceeded for each sample:			
11. Analysis Holding Time Met			✓
If not met, list number of days exceeded for each sample:			

ADDITIONAL COMMENTS:

The Blank Spike met requirements for all samples.

Roy Keattle, Keattle
QA REVIEW

4/5/7
Date

CHEMTECH 284 Sheffield Street, Mountainside New Jersey 07092

NEW JERSEY LAB ID#: 20012; NEW YORK LAB ID#: 11376

GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: Y1974

MATRIX: Water

METHOD: 608

	NA	NO	YES
1. Chromatograms Labeled/Compounds Identified.			✓
2. Standard Summary Submitted.			✓
3. Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis, 12 HOURS IF 8000 SERIES METHOD.			✓
4. Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
5. Surrogate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable ranges. The Surrogate recoveries met the acceptable criteria except for PB25706B, I.BLK.1 & I.BLK-2.		✓	
6. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range.			✓
7. Retention Time Shift Meet Criteria (if applicable) Comments:			✓
8. Extraction Holding Time Met If not met, list number of days exceeded for each sample:			✓
9. Analysis Holding Time Met If not met, list those compounds and their recoveries which fall outside the acceptable range.			

ADDITIONAL COMMENTS: The Calibration File ID CCAL02 met the requirements except for Aroclor-1260 but not present in the samples. The Blank Spike met requirements for all samples.

RAZ
QA REVIEW

4/19/07
Date

CHEMTECH 284 Sheffield Street, Mountainside New Jersey 07092
NEW JERSEY LAB ID#: 20012: NEW YORK LAB ID#: 11376


METALS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: y1974

MATRIX: Water

METHOD: 7470/6010

	NA	NO	YES
1. Calibration Summary met criteria.			✓
2. ICP Interference Check Sample Results Summary Submitted.			✓
3. Serial Dilution Summary (if applicable) Submitted.			✓
4. Laboratory Control Sample Summary (if applicable) Submitted.			✓
5. Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
6. Matrix Spike/Matrix Spike Duplicate Recoveries Met Criteria			✓
If not met, list those compounds and their recoveries which fall outside the acceptable range.			
7. Sample Duplicate Analysis Met QC Criteria			✓
If not met, list those compounds and their recoveries which fall outside the acceptable range.			
8. Digestion Holding Time Met			✓
If not met, list number of days exceeded for each sample:			
9. Analysis Holding Time Met			✓
If not met, list those compounds and their recoveries which fall outside the acceptable range.			


QA REVIEW

41578
Date

CHEMTECH 284 Sheffield Street, Mountainside New Jersey 07092
NEW JERSEY LAB ID#: 20012: NEW YORK LAB ID#: 11376

GENERAL CHEMISTRY CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: y1974

MATRIX: Water

METHOD: 300.0

- | | NA | NO | YES |
|---|----|----|-----|
| 1. Blank Contamination - If yes, list compounds and concentrations in each blank: | | ✓ | |
| 2. Digestion Holding Time Met | | ✓ | |
- If not met, list number of days exceeded for each sample:

Roy H. H. L.
QA REVIEW

4/15/77
Date

CHEMTECH

TABULATED ANALYTICAL RESULTS
GC/MS VOLATILE ORGANICS

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B22	SDG No.:	Y1974
Lab Sample ID:	Y1974-01	Matrix:	WATER
Analytical Method:	8260	% Moisture:	100
Sample Wt/Wol:	5.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VD009518.D	1	3/21/2007	VD031907

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
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TARGETS

1634-04-4	Methyl tert-butyl Ether	0.28	U	5.0	0.28	ug/L
56-23-5	Carbon Tetrachloride	1.1	U	5.0	1.1	ug/L
67-66-3	Chloroform	0.33	U	5.0	0.33	ug/L
71-55-6	1,1,1-Trichloroethane	0.32	U	5.0	0.32	ug/L
71-43-2	Benzene	0.39	U	5.0	0.39	ug/L
108-88-3	Toluene	0.36	U	5.0	0.36	ug/L
127-18-4	Tetrachloroethene	0.48	U	5.0	0.48	ug/L
100-41-4	Ethylbenzene	0.45	U	5.0	0.45	ug/L
126777-61-2	m/p-Xylenes	1.2	U	5.0	1.2	ug/L
95-47-6	o-Xylene	0.46	U	5.0	0.46	ug/L
106-46-7	1,4-Dichlorobenzene	0.54	U	5.0	0.54	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.46	U	5.0	0.46	ug/L
1330-20-7	Total Xylenes	1.7	U	10.0	1.7	ug/L

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	49.12	98 %	72 - 119	SPK: 50
1868-53-7	Dibromofluoromethane	49.14	98 %	85 - 115	SPK: 50
2037-26-5	Toluene-d8	55.39	111 %	81 - 120	SPK: 50
460-00-4	4-Bromofluorobenzene	48.86	98 %	76 - 119	SPK: 50

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	692814	4.19
540-36-3	1,4-Difluorobenzene	999170	4.88
3114-55-4	Chlorobenzene-d5	1246965	9.27
3855-82-1	1,4-Dichlorobenzene-d4	757334	11.66

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B8	SDG No.:	Y1974
Lab Sample ID:	Y1974-02	Matrix:	WATER
Analytical Method:	8260	% Moisture:	100
Sample Wt/Wol:	5.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VD009519.D	1	3/21/2007	VD031907

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	0.28	U	5.0	0.28	ug/L
56-23-5	Carbon Tetrachloride	1.1	U	5.0	1.1	ug/L
67-66-3	Chloroform	0.33	U	5.0	0.33	ug/L
71-55-6	1,1,1-Trichloroethane	0.32	U	5.0	0.32	ug/L
71-43-2	Benzene	0.39	U	5.0	0.39	ug/L
108-88-3	Toluene	0.36	U	5.0	0.36	ug/L
127-18-4	Tetrachloroethene	20		5.0	0.48	ug/L
100-41-4	Ethylbenzene	0.45	U	5.0	0.45	ug/L
126777-61-2	m/p-Xylenes	1.2	U	5.0	1.2	ug/L
95-47-6	o-Xylene	0.46	U	5.0	0.46	ug/L
106-46-7	1,4-Dichlorobenzene	0.54	U	5.0	0.54	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.46	U	5.0	0.46	ug/L
1330-20-7	Total Xylenes	1.7	U	10.0	1.7	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	46.82	94 %	72 - 119		SPK: 50
1868-53-7	Dibromofluoromethane	46.51	93 %	85 - 115		SPK: 50
2037-26-5	Toluene-d8	54.87	110 %	81 - 120		SPK: 50
460-00-4	4-Bromofluorobenzene	47.63	95 %	76 - 119		SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	711108	4.20			
540-36-3	1,4-Difluorobenzene	1060757	4.88			
3114-55-4	Chlorobenzene-d5	1393992	9.28			
3855-82-1	1,4-Dichlorobenzene-d4	837057	11.67			

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B7	SDG No.:	Y1974
Lab Sample ID:	Y1974-03	Matrix:	WATER
Analytical Method:	8260	% Moisture:	100
Sample Wt/Wol:	5.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VI011945.D	1	3/22/2007	VI031307

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	0.28	U	5.0	0.28	ug/L
56-23-5	Carbon Tetrachloride	1.1	U	5.0	1.1	ug/L
67-66-3	Chloroform	0.33	U	5.0	0.33	ug/L
71-55-6	1,1,1-Trichloroethane	0.32	U	5.0	0.32	ug/L
71-43-2	Benzene	0.39	U	5.0	0.39	ug/L
108-88-3	Toluene	0.36	U	5.0	0.36	ug/L
127-18-4	Tetrachloroethene	110		5.0	0.48	ug/L
100-41-4	Ethylbenzene	0.45	U	5.0	0.45	ug/L
126777-61-2	m/p-Xylenes	1.2	U	5.0	1.2	ug/L
95-47-6	o-Xylene	0.46	U	5.0	0.46	ug/L
106-46-7	1,4-Dichlorobenzene	0.54	U	5.0	0.54	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.46	U	5.0	0.46	ug/L
1330-20-7	Total Xylenes	1.7	U	10.0	1.7	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	53.02	106 %	72 - 119		SPK: 50
1868-53-7	Dibromofluoromethane	51.18	102 %	85 - 115		SPK: 50
2037-26-5	Toluene-d8	48.49	97 %	81 - 120		SPK: 50
460-00-4	4-Bromofluorobenzene	40.79	82 %	76 - 119		SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	727046	3.68			
540-36-3	1,4-Difluorobenzene	1406099	4.12			
3114-55-4	Chlorobenzene-d5	922805	7.15			
3855-82-1	1,4-Dichlorobenzene-d4	365112	9.50			

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound

CHEMTECH

**QUALITY CONTROL SUMMARY
REPORTS**

GC/MS VOLATILE ORGANICS

Surrogate Summary
SW-846SDG No.: Y1974
Client: Parsons Brinckerhoff

Analytical Method: EPA SW846 8260

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery	Qual	Limits	
							Low	High
BSD0321W1	VLCS01	1,2-Dichloroethane-d4	50	47.09	94		72.00	119.00
		Dibromofluoromethane	50	49.68	99		85.00	115.00
		Toluene-d8	50	52.95	106		81.00	120.00
		4-Bromofluorobenzene	50	52.58	105		76.00	119.00
BSD0321W2	VLCS02	1,2-Dichloroethane-d4	50	49.76	100		72.00	119.00
		Dibromofluoromethane	50	51.85	104		85.00	115.00
		Toluene-d8	50	57.94	116		81.00	120.00
		4-Bromofluorobenzene	50	55.43	111		76.00	119.00
BSI0322-01	VLCS03	1,2-Dichloroethane-d4	50	57.21	114		72.00	119.00
		Dibromofluoromethane	50	52.4	105		85.00	115.00
		Toluene-d8	50	48.17	96		81.00	120.00
		4-Bromofluorobenzene	50	40.82	82		76.00	119.00
BSI0322-03	VLCS04	1,2-Dichloroethane-d4	50	57.28	115		72.00	119.00
		Dibromofluoromethane	50	51.59	103		85.00	115.00
		Toluene-d8	50	46.11	92		81.00	120.00
		4-Bromofluorobenzene	50	38.31	77		76.00	119.00
VBD0321W1	VBLK01	1,2-Dichloroethane-d4	50	45.01	90		72.00	119.00
		Dibromofluoromethane	50	50.49	101		85.00	115.00
		Toluene-d8	50	51.25	103		81.00	120.00
		4-Bromofluorobenzene	50	47.11	94		76.00	119.00
VBI0322-01	VBLK02	1,2-Dichloroethane-d4	50	46.63	93		72.00	119.00
		Dibromofluoromethane	50	51.32	103		85.00	115.00
		Toluene-d8	50	46.47	93		81.00	120.00
		4-Bromofluorobenzene	50	40.08	80		76.00	119.00
Y1974-01	B22	1,2-Dichloroethane-d4	50	49.12	98		72.00	119.00
		Dibromofluoromethane	50	49.14	98		85.00	115.00
		Toluene-d8	50	55.39	111		81.00	120.00
		4-Bromofluorobenzene	50	48.86	98		76.00	119.00
Y1974-02	B8	1,2-Dichloroethane-d4	50	46.82	94		72.00	119.00
		Dibromofluoromethane	50	46.51	93		85.00	115.00
		Toluene-d8	50	54.87	110		81.00	120.00
		4-Bromofluorobenzene	50	47.63	95		76.00	119.00
Y1974-03	B7	1,2-Dichloroethane-d4	50	53.02	106		72.00	119.00
		Dibromofluoromethane	50	51.18	102		85.00	115.00
		Toluene-d8	50	48.49	97		81.00	120.00
		4-Bromofluorobenzene	50	40.79	82		76.00	119.00

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Y1974

Client: Parsons Brinckerhoff

Analytical Method: EPA SW846 8260

Lab Sample ID	Parameter	Spike	Result	Rec	RPD	Qual	Limits		
							Low	High RPD	
BSD0321W1	Methyl tert-butyl Ether	20	17	85			70	130	
	Chloroform	20	17	85			70	130	
	1,1,1-Trichloroethane	20	18	90			70	130	
	Carbon Tetrachloride	20	17	85			70	130	
	Benzene	20	17	85			70	130	
	Toluene	20	20	100			70	130	
	Tetrachloroethene	20	19	95			70	130	
	Ethylbenzene	20	20	100			70	130	
	m/p-Xylenes	40	42	105			70	130	
	o-Xylene	20	20	100			70	130	
	1,4-Dichlorobenzene	20	19	95			70	130	
	1,2,4-Trichlorobenzene	20	19	95			70	130	
	BSD0321W2	Methyl tert-butyl Ether	20	17	85			70	130
		Chloroform	20	18	90			70	130
1,1,1-Trichloroethane		20	18	90			70	130	
Carbon Tetrachloride		20	18	90			70	130	
Benzene		20	18	90			70	130	
Toluene		20	22	110			70	130	
Tetrachloroethene		20	18	90			70	130	
Ethylbenzene		20	19	95			70	130	
m/p-Xylenes		40	38	95			70	130	
o-Xylene		20	19	95			70	130	
1,4-Dichlorobenzene		20	19	95			70	130	
1,2,4-Trichlorobenzene		20	18	90			70	130	
BSI0322-01		Methyl tert-butyl Ether	20	17	85			70	130
		Chloroform	20	22	110			70	130
	1,1,1-Trichloroethane	20	19	95			70	130	
	Carbon Tetrachloride	20	19	95			70	130	
	Benzene	20	19	95			70	130	
	Toluene	20	19	95			70	130	
	Tetrachloroethene	20	24	120			70	130	
	Ethylbenzene	20	21	105			70	130	
	m/p-Xylenes	40	41	103			70	130	
	o-Xylene	20	21	105			70	130	
	1,4-Dichlorobenzene	20	22	110			70	130	
	1,2,4-Trichlorobenzene	20	23	115			70	130	
	BSI0322-03	Methyl tert-butyl Ether	15	12	80			70	130
		Chloroform	15	14	93			70	130
1,1,1-Trichloroethane		15	13	87			70	130	
Carbon Tetrachloride		15	13	87			70	130	
Benzene		15	13	87			70	130	

Chemtech

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary
SW-846

SDG No.: Y1974

Client: Parsons Brinckerhoff

Analytical Method: EPA SW846 8260

Lab Sample ID	Parameter	Spike	Result	Rec	RPD	Qual	Low	Limits	
								High	RPD
BSI0322-03	Toluene	15	12	80			70	130	
	Tetrachloroethene	15	17	113			70	130	
	Ethylbenzene	15	14	93			70	130	
	m/p-Xylenes	30	27	90			70	130	
	o-Xylene	15	14	93			70	130	
	1,4-Dichlorobenzene	15	15	100			70	130	
	1,2,4-Trichlorobenzene	15	14	93			70	130	

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	
Project:	DDC albert road	Date Received:	
Client Sample ID:	VLCS01	SDG No.:	Y1974
Lab Sample ID:	BSD0321W1	Matrix:	WATER
Analytical Method:	8260	% Moisture:	100
Sample Wt/Wol:	5.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VD009501.D	1	3/21/2007	VD031907

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	17		5.0	0.28	ug/L
56-23-5	Carbon Tetrachloride	17		5.0	1.1	ug/L
67-66-3	Chloroform	17		5.0	0.33	ug/L
71-55-6	1,1,1-Trichloroethane	18		5.0	0.32	ug/L
71-43-2	Benzene	17		5.0	0.39	ug/L
108-88-3	Toluene	20		5.0	0.36	ug/L
127-18-4	Tetrachloroethene	19		5.0	0.48	ug/L
100-41-4	Ethylbenzene	20		5.0	0.45	ug/L
126777-61-2	m/p-Xylenes	42		5.0	1.2	ug/L
95-47-6	o-Xylene	20		5.0	0.46	ug/L
106-46-7	1,4-Dichlorobenzene	19		5.0	0.54	ug/L
120-82-1	1,2,4-Trichlorobenzene	19		5.0	0.46	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	47.09	94 %	72 - 119		SPK: 50
1868-53-7	Dibromofluoromethane	49.68	99 %	85 - 115		SPK: 50
2037-26-5	Toluene-d8	52.95	106 %	81 - 120		SPK: 50
460-00-4	4-Bromofluorobenzene	52.58	105 %	76 - 119		SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	786788	4.17			
540-36-3	1,4-Difluorobenzene	1129993	4.85			
3114-55-4	Chlorobenzene-d5	1441033	9.25			
3855-82-1	1,4-Dichlorobenzene-d4	949577	11.64			

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	
Project:	DDC albert road	Date Received:	
Client Sample ID:	VLCS02	SDG No.:	Y1974
Lab Sample ID:	BSD0321W2	Matrix:	WATER
Analytical Method:	8260	% Moisture:	100
Sample Wt/Wol:	5.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VD009502.D	1	3/21/2007	VD031907

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	17		5.0	0.28	ug/L
56-23-5	Carbon Tetrachloride	18		5.0	1.1	ug/L
67-66-3	Chloroform	18		5.0	0.33	ug/L
71-55-6	1,1,1-Trichloroethane	18		5.0	0.32	ug/L
71-43-2	Benzene	18		5.0	0.39	ug/L
108-88-3	Toluene	22		5.0	0.36	ug/L
127-18-4	Tetrachloroethene	18		5.0	0.48	ug/L
100-41-4	Ethylbenzene	19		5.0	0.45	ug/L
126777-61-2	m/p-Xylenes	38		5.0	1.2	ug/L
95-47-6	o-Xylene	19		5.0	0.46	ug/L
106-46-7	1,4-Dichlorobenzene	19		5.0	0.54	ug/L
120-82-1	1,2,4-Trichlorobenzene	18		5.0	0.46	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	49.76	100 %	72 - 119		SPK: 50
1868-53-7	Dibromofluoromethane	51.85	104 %	85 - 115		SPK: 50
2037-26-5	Toluene-d8	57.94	116 %	81 - 120		SPK: 50
460-00-4	4-Bromofluorobenzene	55.43	111 %	76 - 119		SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	755905		4.18		
540-36-3	1,4-Difluorobenzene	1055121		4.86		
3114-55-4	Chlorobenzene-d5	1453311		9.26		
3855-82-1	1,4-Dichlorobenzene-d4	923575		11.65		

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	
Project:	DDC albert road	Date Received:	
Client Sample ID:	VLCS03	SDG No.:	Y1974
Lab Sample ID:	BSI0322-01	Matrix:	WATER
Analytical Method:	8260	% Moisture:	100
Sample Wt/Wol:	5.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VI011937.D	1	3/22/2007	VI031307

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	17		5.0	0.28	ug/L
56-23-5	Carbon Tetrachloride	19		5.0	1.1	ug/L
67-66-3	Chloroform	22		5.0	0.33	ug/L
71-55-6	1,1,1-Trichloroethane	19		5.0	0.32	ug/L
71-43-2	Benzene	19		5.0	0.39	ug/L
108-88-3	Toluene	19		5.0	0.36	ug/L
127-18-4	Tetrachloroethene	24		5.0	0.48	ug/L
100-41-4	Ethylbenzene	21		5.0	0.45	ug/L
126777-61-2	m/p-Xylenes	41		5.0	1.2	ug/L
95-47-6	o-Xylene	21		5.0	0.46	ug/L
106-46-7	1,4-Dichlorobenzene	22		5.0	0.54	ug/L
120-82-1	1,2,4-Trichlorobenzene	23		5.0	0.46	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	57.21	114 %	72 - 119		SPK: 50
1868-53-7	Dibromofluoromethane	52.4	105 %	85 - 115		SPK: 50
2037-26-5	Toluene-d8	48.17	96 %	81 - 120		SPK: 50
460-00-4	4-Bromofluorobenzene	40.82	82 %	76 - 119		SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	764803		3.68		
540-36-3	1,4-Difluorobenzene	1476713		4.12		
3114-55-4	Chlorobenzene-d5	940646		7.15		
3855-82-1	1,4-Dichlorobenzene-d4	445005		9.49		

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	
Project:	DDC albert road	Date Received:	
Client Sample ID:	VLCS04	SDG No.:	Y1974
Lab Sample ID:	BSI0322-03	Matrix:	WATER
Analytical Method:	8260	% Moisture:	100
Sample Wt/Wol:	5.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VI011944.D	1	3/22/2007	VI031307

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	12		5.0	0.28	ug/L
56-23-5	Carbon Tetrachloride	13		5.0	1.1	ug/L
67-66-3	Chloroform	14		5.0	0.33	ug/L
71-55-6	1,1,1-Trichloroethane	13		5.0	0.32	ug/L
71-43-2	Benzene	13		5.0	0.39	ug/L
108-88-3	Toluene	12		5.0	0.36	ug/L
127-18-4	Tetrachloroethene	17		5.0	0.48	ug/L
100-41-4	Ethylbenzene	14		5.0	0.45	ug/L
126777-61-2	m/p-Xylenes	27		5.0	1.2	ug/L
95-47-6	o-Xylene	14		5.0	0.46	ug/L
106-46-7	1,4-Dichlorobenzene	15		5.0	0.54	ug/L
120-82-1	1,2,4-Trichlorobenzene	14		5.0	0.46	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	57.28	115 %	72 - 119		SPK: 50
1868-53-7	Dibromofluoromethane	51.59	103 %	85 - 115		SPK: 50
2037-26-5	Toluene-d8	46.11	92 %	81 - 120		SPK: 50
460-00-4	4-Bromofluorobenzene	38.31	77 %	76 - 119		SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	735232	3.67			
540-36-3	1,4-Difluorobenzene	1457032	4.12			
3114-55-4	Chlorobenzene-d5	885893	7.15			
3855-82-1	1,4-Dichlorobenzene-d4	396136	9.49			

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VELK01

Lab Name: Chemtech Contract: PARS01
 Lab Code: CTECH Case No.: Y1974 SAS No.: Y1974 SDG NO.: Y1974
 Lab File ID: VD009500.D Lab Sample ID: VBD0321W1
 Date Analyzed: 3/21/2007 Time Analyzed: 11:34
 GC Column: RTX502.2 ID: 0.18 (mm) Heated Purge: (Y/N) N
 Instrument ID: MSVOAD

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
VLCS01	BSD0321W1	VD009501.D	12:11
VLCS02	BSD0321W2	VD009502.D	12:42
B22	Y1974-01	VD009518.D	21:05
B8	Y1974-02	VD009519.D	21:36

COMMENTS:

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	
Project:	DDC albert road	Date Received:	
Client Sample ID:	VBLK01	SDG No.:	Y1974
Lab Sample ID:	VBD0321W1	Matrix:	WATER
Analytical Method:	8260	% Moisture:	100
Sample Wt/Wol:	5.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VD009500.D	1	3/21/2007	VD031907

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	0.28	U	5.0	0.28	ug/L
56-23-5	Carbon Tetrachloride	1.1	U	5.0	1.1	ug/L
67-66-3	Chloroform	0.33	U	5.0	0.33	ug/L
71-55-6	1,1,1-Trichloroethane	0.32	U	5.0	0.32	ug/L
71-43-2	Benzene	0.39	U	5.0	0.39	ug/L
108-88-3	Toluene	0.36	U	5.0	0.36	ug/L
127-18-4	Tetrachloroethene	0.48	U	5.0	0.48	ug/L
100-41-4	Ethylbenzene	0.45	U	5.0	0.45	ug/L
126777-61-2	m/p-Xylenes	1.2	U	5.0	1.2	ug/L
95-47-6	o-Xylene	0.46	U	5.0	0.46	ug/L
106-46-7	1,4-Dichlorobenzene	0.54	U	5.0	0.54	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.46	U	5.0	0.46	ug/L
1330-20-7	Total Xylenes	1.7	U	10.0	1.7	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	45.01	90 %	72 - 119		SPK: 50
1868-53-7	Dibromofluoromethane	50.49	101 %	85 - 115		SPK: 50
2037-26-5	Toluene-d8	51.25	103 %	81 - 120		SPK: 50
460-00-4	4-Bromofluorobenzene	47.11	94 %	76 - 119		SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	787489	4.17			
540-36-3	1,4-Difluorobenzene	1173078	4.85			
3114-55-4	Chlorobenzene-d5	1431589	9.25			
3855-82-1	1,4-Dichlorobenzene-d4	938008	11.63			

U = Not Detected
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 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK02

Lab Name: Chemtech Contract: PARS01
 Lab Code: CTECH Case No.: Y1974 SAS No.: Y1974 SDG NO.: Y1974
 Lab File ID: VI011935.D Lab Sample ID: VBI0322-01
 Date Analyzed: 3/22/2007 Time Analyzed: 10:41
 GC Column: RTXVMS ID: 0.18 (mm) Heated Purge: (Y/N) N
 Instrument ID: MSVOAI

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
VLCS03	BSI0322-01	VI011937.D	11:42
VLCS04	BSI0322-03	VI011944.D	15:16
B7	Y1974-03	VI011945.D	15:46

COMMENTS:

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	
Project:	DDC albert road	Date Received:	
Client Sample ID:	VBLK02	SDG No.:	Y1974
Lab Sample ID:	VBI0322-01	Matrix:	WATER
Analytical Method:	8260	% Moisture:	100
Sample Wt/Wol:	5.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VI011935.D	1	3/22/2007	VI031307

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
1634-04-4	Methyl tert-butyl Ether	0.28	U	5.0	0.28	ug/L
56-23-5	Carbon Tetrachloride	1.1	U	5.0	1.1	ug/L
67-66-3	Chloroform	0.33	U	5.0	0.33	ug/L
71-55-6	1,1,1-Trichloroethane	0.32	U	5.0	0.32	ug/L
71-43-2	Benzene	0.39	U	5.0	0.39	ug/L
108-88-3	Toluene	0.36	U	5.0	0.36	ug/L
127-18-4	Tetrachloroethene	0.48	U	5.0	0.48	ug/L
100-41-4	Ethylbenzene	0.45	U	5.0	0.45	ug/L
126777-61-2	m/p-Xylenes	1.2	U	5.0	1.2	ug/L
95-47-6	o-Xylene	0.46	U	5.0	0.46	ug/L
106-46-7	1,4-Dichlorobenzene	0.54	U	5.0	0.54	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.46	U	5.0	0.46	ug/L
1330-20-7	Total Xylenes	1.7	U	10.0	1.7	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	46.63	93 %	72 - 119		SPK: 50
1868-53-7	Dibromofluoromethane	51.32	103 %	85 - 115		SPK: 50
2037-26-5	Toluene-d8	46.47	93 %	81 - 120		SPK: 50
460-00-4	4-Bromofluorobenzene	40.08	80 %	76 - 119		SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	881152	3.67			
540-36-3	1,4-Difluorobenzene	1597675	4.11			
3114-55-4	Chlorobenzene-d5	993849	7.14			
3855-82-1	1,4-Dichlorobenzene-d4	422448	9.49			

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound

CHEMTECH

TABULATED ANALYTICAL RESULTS

GC/MS EXTRACTABLES

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B22	SDG No.:	Y1974
Lab Sample ID:	Y1974-01	Matrix:	WATER
Analytical Method:	625	% Moisture:	100
Sample Wt/Wol:	960.0 mL	Extract Vol:	1000 uL

File ID	Dilution	Date Extracted	Date Analyzed	Analytical Batch ID
BE039547.D	1	3/21/2007	3/22/2007	BE032207

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
108-95-2	Phenol	0.28	U	10	0.28	ug/L
91-20-3	Naphthalene	0.29	U	10	0.29	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	65.73	66 %	20 - 112		SPK: 10
13127-88-3	Phenol-d5	70.26	70 %	20 - 85		SPK: 10
4165-60-0	Nitrobenzene-d5	69.6	70 %	35 - 114		SPK: 10
321-60-8	2-Fluorobiphenyl	61.48	61 %	26 - 108		SPK: 10
118-79-6	2,4,6-Tribromophenol	78.4	78 %	20 - 107		SPK: 10
1718-51-0	Terphenyl-d14	68.01	68 %	20 - 110		SPK: 10
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	84595	4.68			
1146-65-2	Naphthalene-d8	288843	6.49			
15067-26-2	Acenaphthene-d10	160497	9.21			
1517-22-2	Phenanthrene-d10	267389	11.56			
1719-03-5	Chrysene-d12	269592	15.77			
1520-96-3	Perylene-d12	150164	17.88			

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found In Associated Method Blank
 N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B8	SDG No.:	Y1974
Lab Sample ID:	Y1974-02	Matrix:	WATER
Analytical Method:	625	% Moisture:	100
Sample Wt/Wol:	490.0 mL	Extract Vol:	1000 uL

File ID	Dilution	Date Extracted	Date Analyzed	Analytical Batch ID
BE039546.D	1	3/21/2007	3/22/2007	BE032207

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
108-95-2	Phenol	0.56	U	20	0.56	ug/L
91-20-3	Naphthalene	0.58	U	20	0.58	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	62.86	63 %	20 - 112		SPK: 10
13127-88-3	Phenol-d5	67.65	68 %	20 - 85		SPK: 10
4165-60-0	Nitrobenzene-d5	67.53	68 %	35 - 114		SPK: 10
321-60-8	2-Fluorobiphenyl	59.7	60 %	26 - 108		SPK: 10
118-79-6	2,4,6-Tribromophenol	73.11	73 %	20 - 107		SPK: 10
1718-51-0	Terphenyl-d14	65.99	66 %	20 - 110		SPK: 10
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	84660	4.68			
1146-65-2	Naphthalene-d8	288254	6.49			
15067-26-2	Acenaphthene-d10	161550	9.21			
1517-22-2	Phenanthrene-d10	264039	11.55			
1719-03-5	Chrysene-d12	265123	15.77			
1520-96-3	Perylene-d12	147887	17.88			

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found In Associated Method Blank
 N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample	B7	SDG No.:	Y1974
Lab Sample ID:	Y1974-03	Matrix:	WATER
Analytical Method:	625	% Moisture:	100
Sample Wt/Wol:	930.0 mL	Extract Vol:	1000 uL

File ID	Dilution	Date Extracted	Date Analyzed	Analytical Batch ID
BE039549.D	1	3/21/2007	3/23/2007	BE032207

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
108-95-2	Phenol	0.29	U	11	0.29	ug/L
91-20-3	Naphthalene	0.30	U	11	0.30	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	66.49	66 %	20 - 112		SPK: 10
13127-88-3	Phenol-d5	72.51	73 %	20 - 85		SPK: 10
4165-60-0	Nitrobenzene-d5	73.29	73 %	35 - 114		SPK: 10
321-60-8	2-Fluorobiphenyl	63.62	64 %	26 - 108		SPK: 10
118-79-6	2,4,6-Tribromophenol	77.39	77 %	20 - 107		SPK: 10
1718-51-0	Terphenyl-d14	72.14	72 %	20 - 110		SPK: 10
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	77865	4.68			
1146-65-2	Naphthalene-d8	259620	6.49			
15067-26-2	Acenaphthene-d10	145414	9.21			
1517-22-2	Phenanthrene-d10	235167	11.56			
1719-03-5	Chrysene-d12	237101	15.77			
1520-96-3	Perylene-d12	132416	17.87			

U = Not Detected
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 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found In Associated Method Blank
 N = Presumptive Evidence of a Compound

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**QUALITY CONTROL SUMMARY
REPORTS**

GC/MS EXTRACTABLES

Chemtech Consulting Group

Surrogate Summary SW-846

SDG No.: Y1974

Client: Parsons Brinckerhoff

Analytical Method: EPA SW-846 625

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery	Qual	Limits	
							Low	High
PB25705B	SBLK01	2-Fluorophenol	100	65.34	65		20.00	112.00
		Phenol-d5	100	70.04	70		20.00	85.00
		Nitrobenzene-d5	100	66.84	67		35.00	114.00
		2-Fluorobiphenyl	100	59.43	59		26.00	108.00
		2,4,6-Tribromophenol	100	72.61	73		20.00	107.00
		Terphenyl-d14	100	67.48	67		20.00	110.00
PB25705BS	SLCS01	2-Fluorophenol	100	64.2	64		20.00	112.00
		Phenol-d5	100	69.25	69		20.00	85.00
		Nitrobenzene-d5	100	66.83	67		35.00	114.00
		2-Fluorobiphenyl	100	60.21	60		26.00	108.00
		2,4,6-Tribromophenol	100	74.75	75		20.00	107.00
		Terphenyl-d14	100	67.16	67		20.00	110.00
Y1974-01	B22	2-Fluorophenol	100	65.73	66		20.00	112.00
		Phenol-d5	100	70.26	70		20.00	85.00
		Nitrobenzene-d5	100	69.6	70		35.00	114.00
		2-Fluorobiphenyl	100	61.48	61		26.00	108.00
		2,4,6-Tribromophenol	100	78.4	78		20.00	107.00
		Terphenyl-d14	100	68.01	68		20.00	110.00
Y1974-02	B8	2-Fluorophenol	100	62.86	63		20.00	112.00
		Phenol-d5	100	67.65	68		20.00	85.00
		Nitrobenzene-d5	100	67.53	68		35.00	114.00
		2-Fluorobiphenyl	100	59.7	60		26.00	108.00
		2,4,6-Tribromophenol	100	73.11	73		20.00	107.00
		Terphenyl-d14	100	65.99	66		20.00	110.00
Y1974-03	B7	2-Fluorophenol	100	66.49	66		20.00	112.00
		Phenol-d5	100	72.51	73		20.00	85.00
		Nitrobenzene-d5	100	73.29	73		35.00	114.00
		2-Fluorobiphenyl	100	63.62	64		26.00	108.00
		2,4,6-Tribromophenol	100	77.39	77		20.00	107.00
		Terphenyl-d14	100	72.14	72		20.00	110.00

Chemtech Consulting Group

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary
SW-846

SDG No.: Y1974

Client: Parsons Brinckerhoff

Analytical Method: EPA SW-846 625

Lab Sample ID	Parameter	Spike	Result	Rec	RPD	Qual	Low	Limits	
								High	RPD
PB25705BS	Phenol	20	12	60			21	97	
	Naphthalene	20	13	65			43	114	

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	
Project:	DDC albert road	Date Received:	
Client Sample ID:	SLCS01	SDG No.:	Y1974
Lab Sample ID:	PB25705BS	Matrix:	WATER
Analytical Method:	625	% Moisture:	100
Sample Wt/Wol:	1000.0 mL	Extract Vol:	1000 uL

File ID	Dilution	Date Extracted	Date Analyzed	Analytical Batch ID
BE039545.D	1	3/21/2007	3/22/2007	BE032207

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
108-95-2	Phenol	12		10	0.27	ug/L
91-20-3	Naphthalene	13		10	0.28	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	64.2	64 %	20 - 112		SPK: 10
13127-88-3	Phenol-d5	69.25	69 %	20 - 85		SPK: 10
4165-60-0	Nitrobenzene-d5	66.83	67 %	35 - 114		SPK: 10
321-60-8	2-Fluorobiphenyl	60.21	60 %	26 - 108		SPK: 10
118-79-6	2,4,6-Tribromophenol	74.75	75 %	20 - 107		SPK: 10
1718-51-0	Terphenyl-d14	67.16	67 %	20 - 110		SPK: 10
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	88052	4.68			
1146-65-2	Naphthalene-d8	312806	6.49			
15067-26-2	Acenaphthene-d10	172631	9.22			
1517-22-2	Phenanthrene-d10	290841	11.56			
1719-03-5	Chrysene-d12	282652	15.79			
1520-96-3	Perylene-d12	169907	17.88			

U = Not Detected
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SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK01

Lab Name: Chemtech Consulting GroupContract: PARS01Lab Code: CHEM Case No.: Y1974SAS No.: Y1974 SDG NO.: Y1974Lab File ID: BE039544.DLab Sample ID: PB25705BInstrument ID: BNAEDate Extracted: 3/21/2007Matrix: (soil/water) WATERDate Analyzed: 3/22/2007Level: (low/med) LOWTime Analyzed: 22:24

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SLCS01	PB25705BS	BE039545.D	3/22/2007
02	B8	Y1974-02	BE039546.D	3/22/2007
03	B22	Y1974-01	BE039547.D	3/22/2007
04	B7	Y1974-03	BE039549.D	3/23/2007

COMMENTS: _____

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	
Project:	DDC albert road	Date Received:	
Client Sample ID:	SBLK01	SDG No.:	Y1974
Lab Sample ID:	PB25705B	Matrix:	WATER
Analytical Method:	625	% Moisture:	100
Sample Wt/Wol:	1000.0 mL	Extract Vol:	1000 uL

File ID	Dilution	Date Extracted	Date Analyzed	Analytical Batch ID
BE039544.D	1	3/21/2007	3/22/2007	BE032207

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
108-95-2	Phenol	0.27	U	10	0.27	ug/L
91-20-3	Naphthalene	0.28	U	10	0.28	ug/L
SURROGATES						
367-12-4	2-Fluorophenol	65.34	65 %	20 - 112		SPK: 10
13127-88-3	Phenol-d5	70.04	70 %	20 - 85		SPK: 10
4165-60-0	Nitrobenzene-d5	66.84	67 %	35 - 114		SPK: 10
321-60-8	2-Fluorobiphenyl	59.43	59 %	26 - 108		SPK: 10
118-79-6	2,4,6-Tribromophenol	72.61	73 %	20 - 107		SPK: 10
1718-51-0	Terphenyl-d14	67.48	67 %	20 - 110		SPK: 10
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	85908	4.68			
1146-65-2	Naphthalene-d8	303283	6.49			
15067-26-2	Acenaphthene-d10	169906	9.21			
1517-22-2	Phenanthrene-d10	276795	11.56			
1719-03-5	Chrysene-d12	274113	15.77			
1520-96-3	Perylene-d12	159408	17.88			
TENTATIVE IDENTIFIED COMPOUNDS						
123-42-2	ACP2.83	110	JM	2.83		ug/L

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U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found In Associated Method Blank
 N = Presumptive Evidence of a Compound

CHEMTECH

TABULATED ANALYTICAL RESULTS

GC EXTRACTABLES

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B22	SDG No.:	Y1974
Lab Sample ID:	Y1974-01	Matrix:	WATER
Analytical Method:	608	% Moisture:	100
Sample Wt/Vol:	980 mL	Extract Vol:	1000 uL

File ID:	Dilution:	Date Prep	Date Analyzed	Analytical Batch ID
P602400.D	1	3/21/2007	3/22/2007	P6031507

CAS Number	Parameter	Conc	Qualifier	RL	MDL	Units
TARGETS						
12674-11-2	AROCLOR 1016	0.015	U	0.05	0.015	ug/L
11104-28-2	AROCLOR 1221	0.014	U	0.05	0.014	ug/L
11141-16-5	AROCLOR 1232	0.014	U	0.05	0.014	ug/L
53469-21-9	AROCLOR 1242	0.0052	U	0.05	0.0052	ug/L
12672-29-6	AROCLOR 1248	0.0045	U	0.05	0.0045	ug/L
11097-69-1	AROCLOR 1254	0.0036	U	0.05	0.0036	ug/L
11096-82-5	AROCLOR 1260	0.012	U	0.05	0.012	ug/L
SURROGATES						
877-09-8	Tetrachloro-m-xylene	18.34	92 %	40 - 135		SPK: 20
2051-24-3	Decachlorobiphenyl	24.02	120 %	42 - 133		SPK: 20

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found In Associated Method Blank
 N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B8	SDG No.:	Y1974
Lab Sample ID:	Y1974-02	Matrix:	WATER
Analytical Method:	608	% Moisture:	100
Sample Wt/Vol:	490 mL	Extract Vol:	1000 uL

File ID:	Dilution:	Date Prep	Date Analyzed	Analytical Batch ID
P602401.D	1	3/21/2007	3/22/2007	P6031507

CAS Number	Parameter	Conc	Qualifier	RL	MDL	Units
TARGETS						
12674-11-2	AROCLOR 1016	0.03	U	0.10	0.03	ug/L
11104-28-2	AROCLOR 1221	0.027	U	0.10	0.027	ug/L
11141-16-5	AROCLOR 1232	0.028	U	0.10	0.028	ug/L
53469-21-9	AROCLOR 1242	0.01	U	0.10	0.01	ug/L
12672-29-6	AROCLOR 1248	0.009	U	0.10	0.009	ug/L
11097-69-1	AROCLOR 1254	0.0071	U	0.10	0.0071	ug/L
11096-82-5	AROCLOR 1260	0.025	U	0.10	0.025	ug/L
SURROGATES						
877-09-8	Tetrachloro-m-xylene	18.33	92 %	40 - 135		SPK: 20
2051-24-3	Decachlorobiphenyl	23.87	119 %	42 - 133		SPK: 20

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found In Associated Method Blank
 N = Presumptive Evidence of a Compound

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B7	SDG No.:	Y1974
Lab Sample ID:	Y1974-03	Matrix:	WATER
Analytical Method:	608	% Moisture:	100
Sample Wt/Vol:	880 mL	Extract Vol:	1000 uL

File ID:	Dilution:	Date Prep	Date Analyzed	Analytical Batch ID
P602402.D	1	3/21/2007	3/22/2007	P6031507

CAS Number	Parameter	Conc	Qualifier	RL	MDL	Units
TARGETS						
12674-11-2	AROCLOR 1016	0.017	U	0.06	0.017	ug/L
11104-28-2	AROCLOR 1221	0.015	U	0.06	0.015	ug/L
11141-16-5	AROCLOR 1232	0.016	U	0.06	0.016	ug/L
53469-21-9	AROCLOR 1242	0.0058	U	0.06	0.0058	ug/L
12672-29-6	AROCLOR 1248	0.005	U	0.06	0.005	ug/L
11097-69-1	AROCLOR 1254	0.004	U	0.06	0.004	ug/L
11096-82-5	AROCLOR 1260	0.014	U	0.06	0.014	ug/L
SURROGATES						
877-09-8	Tetrachloro-m-xylene	17.82	89 %	40 - 135		SPK: 20
2051-24-3	Decachlorobiphenyl	24.26	121 %	42 - 133		SPK: 20

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range

J = Estimated Value
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CHEMTECH

**QUALITY CONTROL SUMMARY
REPORTS**

GC EXTRACTABLES

Surrogate Summary
SW-846

SDG No.: Y1974

Client: Parsons Brinckerhoff

Analytical Method: EPA SW-846 608 PCB

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery	Qual	Limits	
							Low	High
I.BLK	PIBLK01	Tetrachloro-m-xylene	20	22.73	114		40.00	135.00
		Decachlorobiphenyl	20	31.28	156	*	42.00	133.00
Y1974-01	B22	Tetrachloro-m-xylene	20	18.34	92		40.00	135.00
		Decachlorobiphenyl	20	24.02	120		42.00	133.00
Y1974-02	B8	Tetrachloro-m-xylene	20	18.33	92		40.00	135.00
		Decachlorobiphenyl	20	23.87	119		42.00	133.00
Y1974-03	B7	Tetrachloro-m-xylene	20	17.82	89		40.00	135.00
		Decachlorobiphenyl	20	24.26	121		42.00	133.00
PB25706B	PB25706B	Tetrachloro-m-xylene	20	21.08	105		40.00	135.00
		Decachlorobiphenyl	20	31.02	155	*	42.00	133.00
I.BLK	PIBLK02	Tetrachloro-m-xylene	20	21.97	110		40.00	135.00
		Decachlorobiphenyl	20	31.25	156	*	42.00	133.00
	PIBLK03	Tetrachloro-m-xylene	20	19.99	100		40.00	135.00
		Decachlorobiphenyl	20	19.66	98		42.00	133.00
PB25706BS	PB25706BS	Tetrachloro-m-xylene	20	16.84	84		40.00	135.00
		Decachlorobiphenyl	20	15.91	80		42.00	133.00
I.BLK	PIBLK04	Tetrachloro-m-xylene	20	21.47	107		40.00	135.00
		Decachlorobiphenyl	20	20.32	102		42.00	133.00

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary
SW-846

SDG No.: Y1974
Client: Parsons Brinckerhoff

Analytical Method: EPA SW-846 608.PCB

Lab Sample ID	Parameter	Spike	Result	Rec	RPD	Qual	Low	Limits	
								High	RPD
PB25706BS	AROCLOR 1016	0.05	0.05	100			50	114	
	AROCLOR 1260	0.05	0.05	100			8	127	

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	
Project:	DDC albert road	Date Received:	
Client Sample ID:	PB25706BS	SDG No.:	Y1974
Lab Sample ID:	PB25706BS	Matrix:	WATER
Analytical Method:	608	% Moisture:	100
Sample Wt/Vol:	1000 mL	Extract Vol:	1000 uL

File ID:	Dilution:	Date Prep	Date Analyzed	Analytical Batch ID
P602670.D	1	3/21/2007	3/30/2007	P6031507

CAS Number	Parameter	Conc	Qualifier	RL	MDL	Units
TARGETS						
12674-11-2	AROCLOR 1016	0.05	J	0.05	0.015	ug/L
11104-28-2	AROCLOR 1221	0.013	U	0.05	0.013	ug/L
11141-16-5	AROCLOR 1232	0.014	U	0.05	0.014	ug/L
53469-21-9	AROCLOR 1242	0.0051	U	0.05	0.0051	ug/L
12672-29-6	AROCLOR 1248	0.0044	U	0.05	0.0044	ug/L
11097-69-1	AROCLOR 1254	0.0035	U	0.05	0.0035	ug/L
11096-82-5	AROCLOR 1260	0.05	J	0.05	0.012	ug/L
SURROGATES						
877-09-8	Tetrachloro-m-xylene	16.84	84 %	40 - 135		SPK: 20
2051-24-3	Decachlorobiphenyl	15.91	80 %	42 - 133		SPK: 20

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PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

PB25706B

Lab Name: Chemtech Contract: Parsons Brinckerhoff
 Lab Code: CTECH Case No.: Y1974 SAS No.: Y1974 SDG No.: Y1974
 Lab Sample ID: PB25706B Lab File ID: P602407.D
 Matrix: (soil/water) WATER Extraction: (Type) SEPF
 Sulfur Cleanup: (Y/N) N Date Extracted: 3/21/2007
 Date Analyzed (1): 3/22/2007 Date Analyzed (2): 3/22/2007
 Time Analyzed (1): 20:12 Time Analyzed (2): 20:12
 Instrument ID (1): ECD6 Instrument ID (2): ECD6
 GC Column (1): RTX-CLPes ID: 0.32 (mm) GC Column (2): RTX-CLPest ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED 1	DATE ANALYZED 2
B22	Y1974-01	P602400.D	3/22/2007	3/22/2007
B8	Y1974-02	P602401.D	3/22/2007	3/22/2007
B7	Y1974-03	P602402.D	3/22/2007	3/22/2007
PB25706BS	PB25706BS	P602670.D	3/30/2007	3/30/2007

COMMENTS:

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	
Project:	DDC albert road	Date Received:	
Client Sample ID:	PB25706B	SDG No.:	Y1974
Lab Sample ID:	PB25706B	Matrix:	WATER
Analytical Method:	608	% Moisture:	100
Sample Wt/Vol:	1000 mL	Extract Vol:	1000 uL

File ID:	Dilution:	Date Prep	Date Analyzed	Analytical Batch ID
P602407.D	1	3/21/2007	3/22/2007	P6031507

CAS Number	Parameter	Conc	Qualifier	RL	MDL	Units
TARGETS						
12674-11-2	AROCLOR 1016	0.015	U	0.05	0.015	ug/L
11104-28-2	AROCLOR 1221	0.013	U	0.05	0.013	ug/L
11141-16-5	AROCLOR 1232	0.014	U	0.05	0.014	ug/L
53469-21-9	AROCLOR 1242	0.0051	U	0.05	0.0051	ug/L
12672-29-6	AROCLOR 1248	0.0044	U	0.05	0.0044	ug/L
11097-69-1	AROCLOR 1254	0.0035	U	0.05	0.0035	ug/L
11096-82-5	AROCLOR 1260	0.012	U	0.05	0.012	ug/L
SURROGATES						
877-09-8	Tetrachloro-m-xylene	21.08	105 %	40 - 135		SPK: 20
2051-24-3	Decachlorobiphenyl	31.02	155 %	42 - 133		SPK: 20

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CHEMTECH

TABULATED ANALYTICAL RESULTS
METALS ANALYSIS

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B22	SDG No.:	Y1974
Lab Sample ID:	Y1974-01	Matrix:	WATER
		% Solids:	0.00

CAS No.	Analyte	Conc.	Qualifier	Units	DL	Dilution	Date Prep	Date Anal.	Method
7440-43-9	Cadmium	1.460	J	ug/L	0.900	1	3/21/2007	3/23/2007	EPA SW-846 6010
7440-50-8	Copper	130		ug/L	0.500	1	3/21/2007	3/23/2007	EPA SW-846 6010
7439-92-1	Lead	30.2		ug/L	1.900	1	3/21/2007	3/23/2007	EPA SW-846 6010
7439-97-6	Mercury	0.1100	U	ug/L	0.110	1	3/20/2007	3/21/2007	EPA SW-846 7470
7440-02-0	Nickel	148		ug/L	1.800	1	3/21/2007	3/23/2007	EPA SW-846 6010
7440-66-6	Zinc	188		ug/L	2.900	1	3/21/2007	3/23/2007	EPA SW-846 6010

Comments:

U = Not Detected
DL = Method Detection Limit or Instrument Detection LimitJ = Estimated Value
B = Analyte Found In Associated Method Blank
N = Spiked sample recovery not within control limits

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B8	SDG No.:	Y1974
Lab Sample ID:	Y1974-02	Matrix:	WATER
		% Solids:	0.00

CAS No.	Analyte	Conc.	Qualifier	Units	DL	Dilution	Date Prep	Date Anal.	Method
7440-43-9	Cadmium	1.870	J	ug/L	0.900	1	3/21/2007	3/23/2007	EPA SW-846 6010
7440-50-8	Copper	173		ug/L	0.500	1	3/21/2007	3/23/2007	EPA SW-846 6010
7439-92-1	Lead	49.4		ug/L	1.900	1	3/21/2007	3/23/2007	EPA SW-846 6010
7439-97-6	Mercury	0.1100	U	ug/L	0.110	1	3/20/2007	3/21/2007	EPA SW-846 7470
7440-02-0	Nickel	443		ug/L	1.800	1	3/21/2007	3/23/2007	EPA SW-846 6010
7440-66-6	Zinc	257		ug/L	2.900	1	3/21/2007	3/23/2007	EPA SW-846 6010

Comments:

U = Not Detected
DL = Method Detection Limit or Instrument Detection LimitJ = Estimated Value
B = Analyte Found In Associated Method Blank
N = Spiked sample recovery not within control limits

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B7	SDG No.:	Y1974
Lab Sample ID:	Y1974-03	Matrix:	WATER
		% Solids:	0.00

CAS No.	Analyte	Conc.	Qualifier	Units	DL	Dilution	Date Prep	Date Anal.	Method
7440-43-9	Cadmium	6.710		ug/L	0.900	1	3/21/2007	3/23/2007	EPA SW-846 6010
7440-50-8	Copper	400		ug/L	0.500	1	3/21/2007	3/23/2007	EPA SW-846 6010
7439-92-1	Lead	139		ug/L	1.900	1	3/21/2007	3/23/2007	EPA SW-846 6010
7439-97-6	Mercury	0.1100	U	ug/L	0.110	1	3/20/2007	3/21/2007	EPA SW-846 7470
7440-02-0	Nickel	461		ug/L	1.800	1	3/21/2007	3/23/2007	EPA SW-846 6010
7440-66-6	Zinc	550		ug/L	2.900	1	3/21/2007	3/23/2007	EPA SW-846 6010

Comments:

U = Not Detected
DL = Method Detection Limit or Instrument Detection LimitJ = Estimated Value
B = Analyte Found In Associated Method Blank
N = Spiked sample recovery not within control limits

CHEMTECH

QUALITY CONTROL SUMMARY REPORTS

METALS ANALYSIS

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Parsons Brinckerhoff

SDG No.: Y1974

Contract: Parsons Brinckerhoff

Lab Code: CHEMED

Case No.: Y1974

SAS No.: Y1974

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	CRQL	M	Analysis Date	Analysis Time	Run
ICB01	Mercury	-0.12	+/-0.20	J	0.11	0.20	CV	3/21/2007	19:45	032107B
CCB01	Mercury	-0.13	+/-0.20	J	0.11	0.20	CV	3/21/2007	19:49	032107B
CCB02	Mercury	0.11	+/-0.20	U	0.11	0.20	CV	3/21/2007	20:10	032107B
CCB03	Mercury	0.11	+/-0.20	U	0.11	0.20	CV	3/21/2007	20:30	032107B
CCB04	Mercury	0.11	+/-0.20	U	0.11	0.20	CV	3/21/2007	20:51	032107B
CCB05	Mercury	0.11	+/-0.20	U	0.11	0.20	CV	3/21/2007	21:13	032107B
CCB06	Mercury	0.11	+/-0.20	U	0.11	0.20	CV	3/21/2007	21:34	032107B
CCB07	Mercury	-0.11	+/-0.20	J	0.11	0.20	CV	3/21/2007	21:48	032107B
ICB01	Cadmium	0.9	+/-3.0	U	0.9	3.0	P	3/23/2007	10:48	P1032307
	Copper	0.5	+/-10.0	U	0.5	10.0	P	3/23/2007	10:48	P1032307
	Lead	1.9	+/-6.0	U	1.9	6.0	P	3/23/2007	10:48	P1032307
	Nickel	1.8	+/-20.0	U	1.8	20.0	P	3/23/2007	10:48	P1032307
	Zinc	2.9	+/-20.0	U	2.9	20.0	P	3/23/2007	10:48	P1032307

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Parsons Brinckerhoff

SDG No.: Y1974

Contract: Parsons Brinckerhoff

Lab Code: CHEMED

Case No.: Y1974

SAS No.: Y1974

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	CRQL	M	Analysis Date	Analysis Time	Run
CCB01										
	Cadmium	0.9	+/-3.0	U	0.9	3.0	P	3/23/2007	11:07	P1032307
	Copper	0.5	+/-10.0	U	0.5	10.0	P	3/23/2007	11:07	P1032307
	Lead	1.9	+/-6.0	U	1.9	6.0	P	3/23/2007	11:07	P1032307
	Nickel	1.8	+/-20.0	U	1.8	20.0	P	3/23/2007	11:07	P1032307
	Zinc	2.9	+/-20.0	U	2.9	20.0	P	3/23/2007	11:07	P1032307
CCB02										
	Cadmium	-1.1	+/-3.0	J	0.9	3.0	P	3/23/2007	11:45	P1032307
	Copper	-0.7	+/-10.0	J	0.5	10.0	P	3/23/2007	11:45	P1032307
	Lead	1.9	+/-6.0	U	1.9	6.0	P	3/23/2007	11:45	P1032307
	Nickel	1.8	+/-20.0	U	1.8	20.0	P	3/23/2007	11:45	P1032307
	Zinc	-3.3	+/-20.0	J	2.9	20.0	P	3/23/2007	11:45	P1032307
CCB03										
	Cadmium	0.9	+/-3.0	U	0.9	3.0	P	3/23/2007	12:14	P1032307
	Copper	-0.7	+/-10.0	J	0.5	10.0	P	3/23/2007	12:14	P1032307
	Lead	1.9	+/-6.0	U	1.9	6.0	P	3/23/2007	12:14	P1032307
	Nickel	1.8	+/-20.0	U	1.8	20.0	P	3/23/2007	12:14	P1032307
	Zinc	-3.2	+/-20.0	J	2.9	20.0	P	3/23/2007	12:14	P1032307
CCB04										
	Cadmium	-0.9	+/-3.0	J	0.9	3.0	P	3/23/2007	12:41	P1032307
	Copper	0.5	+/-10.0	U	0.5	10.0	P	3/23/2007	12:41	P1032307
	Lead	1.9	+/-6.0	U	1.9	6.0	P	3/23/2007	12:41	P1032307
	Nickel	1.8	+/-20.0	U	1.8	20.0	P	3/23/2007	12:41	P1032307
	Zinc	2.9	+/-20.0	U	2.9	20.0	P	3/23/2007	12:41	P1032307
CCB05										
	Cadmium	0.9	+/-3.0	U	0.9	3.0	P	3/23/2007	14:03	P1032307
	Copper	-1.7	+/-10.0	J	0.5	10.0	P	3/23/2007	14:03	P1032307
	Lead	1.9	+/-6.0	U	1.9	6.0	P	3/23/2007	14:03	P1032307
	Nickel	-2.0	+/-20.0	J	1.8	20.0	P	3/23/2007	14:03	P1032307
	Zinc	2.9	+/-20.0	U	2.9	20.0	P	3/23/2007	14:03	P1032307

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Parsons Brinckerhoff

SDG No.: Y1974

Contract: Parsons Brinckerhoff

Lab Code: CHEMED

Case No.: Y1974

SAS No.: Y1974

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	CRQL	M	Analysis Date	Analysis Time	Run
CCB06										
	Cadmium	-1.1	+/-3.0	J	0.9	3.0	P	3/23/2007	14:33	P1032307
	Copper	-1.3	+/-10.0	J	0.5	10.0	P	3/23/2007	14:33	P1032307
	Lead	1.9	+/-6.0	U	1.9	6.0	P	3/23/2007	14:33	P1032307
	Nickel	-1.9	+/-20.0	J	1.8	20.0	P	3/23/2007	14:33	P1032307
	Zinc	-3.1	+/-20.0	J	2.9	20.0	P	3/23/2007	14:33	P1032307
CCB07										
	Cadmium	0.9	+/-3.0	U	0.9	3.0	P	3/23/2007	15:01	P1032307
	Copper	-1.5	+/-10.0	J	0.5	10.0	P	3/23/2007	15:01	P1032307
	Lead	1.9	+/-6.0	U	1.9	6.0	P	3/23/2007	15:01	P1032307
	Nickel	1.8	+/-20.0	U	1.8	20.0	P	3/23/2007	15:01	P1032307
	Zinc	2.9	+/-20.0	U	2.9	20.0	P	3/23/2007	15:01	P1032307
CCB08										
	Cadmium	0.9	+/-3.0	U	0.9	3.0	P	3/23/2007	15:36	P1032307
	Copper	-2.1	+/-10.0	J	0.5	10.0	P	3/23/2007	15:36	P1032307
	Lead	1.9	+/-6.0	U	1.9	6.0	P	3/23/2007	15:36	P1032307
	Nickel	1.8	+/-20.0	U	1.8	20.0	P	3/23/2007	15:36	P1032307
	Zinc	-3.0	+/-20.0	J	2.9	20.0	P	3/23/2007	15:36	P1032307
CCB09										
	Cadmium	0.9	+/-3.0	U	0.9	3.0	P	3/23/2007	16:22	P1032307
	Copper	-1.5	+/-10.0	J	0.5	10.0	P	3/23/2007	16:22	P1032307
	Lead	1.9	+/-6.0	U	1.9	6.0	P	3/23/2007	16:22	P1032307
	Nickel	-1.8	+/-20.0	J	1.8	20.0	P	3/23/2007	16:22	P1032307
	Zinc	2.9	+/-20.0	U	2.9	20.0	P	3/23/2007	16:22	P1032307

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Parsons Brinckerhoff

SDG No.: Y1974

Instrument: PI

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	MDL ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB25700BL		WATER			Batch Number: PB25700			Prep Date: 3/21/2007		
	Cadmium	-0.850	<3.000	U	0.900	3.000	P	3/23/2007	11:09	P1032307
	Copper	0.150	<10.000	U	0.500	10.000	P	3/23/2007	11:09	P1032307
	Lead	0.580	<6.000	U	1.900	6.000	P	3/23/2007	11:09	P1032307
	Nickel	-0.330	<20.000	U	1.800	20.000	P	3/23/2007	11:09	P1032307
	Zinc	-3.020	<20.000	J	2.900	20.000	P	3/23/2007	11:09	P1032307
PB25688BL		WATER			Batch Number: PB25688			Prep Date: 3/20/2007		
	Mercury	-0.056	<0.200	U	0.108	0.200	CV	3/21/2007	20:00	032107B

Metals

- 5a -

MATRIX SPIKE SUMMARY

Client: Parsons Brinckerhoff Level: LOW SDG No.: Y1974

Contract: Parsons Brinckerhoff Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974

Matrix: WATER Sample ID: Y1967-01 Client ID: MW-1DS

Percent Solids for Sample: 0.00 Spiked ID: Y1967-01S Percent Solids for Spike Sample: 0.00

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75 - 125	4.3700		0.1085	U	4.00	109.2		CV

Metals
- 5a -

MATRIX SPIKE DUPLICATE SUMMARY

Client: Parsons Brinckerhoff Level: LOW SDG No.: Y1974

Contract: Parsons Brinckerhoff Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974

Matrix: WATER Sample ID: Y1967-01 Client ID: MW-1DSD

Percent Solids for Sample: 0.00 Spiked ID: Y1967-01SD Percent Solids for Spike Sample: 0.00

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75 - 125	4.4500		0.1085	U	4.00	111.2		CV

Metals

- 5a -

MATRIX SPIKE SUMMARY

Client: Parsons Brinckerhoff Level: LOW SDG No.: Y1974

Contract: Parsons Brinckerhoff Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974

Matrix: WATER Sample ID: Y1937-01 Client ID: MW-2R(UNFILTERED)S

Percent Solids for Sample: 0.00 Spiked ID: Y1937-01S Percent Solids for Spike Sample: 0.00

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cadmium	ug/L	75 - 125	176.2100		0.9000	U	200.00	88.1		P
Copper	ug/L	75 - 125	279.9100		7.2100	J	300.00	90.9		P
Lead	ug/L	75 - 125	867.4300		2.6500	J	1000.00	86.5		P
Nickel	ug/L	75 - 125	456.8700		6.1100	J	500.00	90.2		P
Zinc	ug/L	75 - 125	1181.0800		1020.5400		200.00	80.3		P

Metals

- 5a -

MATRIX SPIKE DUPLICATE SUMMARY

Client: Parsons Brinckerhoff Level: LOW SDG No.: Y1974

Contract: Parsons Brinckerhoff Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974

Matrix: WATER Sample ID: Y1937-01 Client ID: MW-2R(UNFILTERED)SD

Percent Solids for Sample: 0.00 Spiked ID: Y1937-01SD Percent Solids for Spike Sample: 0.00

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cadmium	ug/L	75 - 125	178.2700		0.9000	U	200.00	89.1		P
Copper	ug/L	75 - 125	279.6000		7.2100	J	300.00	90.8		P
Lead	ug/L	75 - 125	881.9100		2.6500	J	1000.00	87.9		P
Nickel	ug/L	75 - 125	461.4700		6.1100	J	500.00	91.1		P
Zinc	ug/L	75 - 125	1192.9400		1020.5400		200.00	86.2		P

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: Parsons Brinckerhoff Level: LOW SDG No.: Y1974
Contract: Parsons Brinckerhoff Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974
Matrix: WATER Sample ID: Y1967-01 Client ID: MW-1DD
Percent Solids for Sample: 0.00 Duplicate ID: Y1967-01D Percent Solids for Duplicate: 0.00

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L		0.1085	U	0.1085	U			CV

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: Parsons Brinckerhoff Level: LOW SDG No.: Y1974
Contract: Parsons Brinckerhoff Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974
Matrix: WATER Sample ID: Y1967-01S Client ID: MW-1DSD
Percent Solids for Sample: 0.00 Duplicate ID: Y1967-01SD Percent Solids for Duplicate: 0.00

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L		4.3700		4.4500		1.8		CV

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: Parsons Brinckerhoff Level: LOW SDG No.: Y1974
 Contract: Parsons Brinckerhoff Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974
 Matrix: WATER Sample ID: Y1937-01 Client ID: MW-2R(UNFILTERED)D
 Percent Solids for Sample: 0.00 Duplicate ID: Y1937-01D Percent Solids for Duplicate: 0.00

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cadmium	ug/L		0.9000	U	0.9000	U			P
Copper	ug/L		7.2100	J	5.8600	J	20.7		P
Lead	ug/L		2.6500	J	2.0500	J	25.5		P
Nickel	ug/L		6.1100	J	5.0200	J	19.6		P
Zinc	ug/L		1020.5400		1024.1000		0.3		P

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: Parsons Brinckerhoff Level: LOW SDG No.: Y1974
 Contract: Parsons Brinckerhoff Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974
 Matrix: WATER Sample ID: Y1937-01S Client ID: MW-2R(UNFILTERED)SD
 Percent Solids for Sample: 0.00 Duplicate ID: Y1937-01SD Percent Solids for Duplicate: 0.00

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cadmium	ug/L		176.2100		178.2700		1.2		P
Copper	ug/L		279.9100		279.6000		0.1		P
Lead	ug/L		867.4300		881.9100		1.7		P
Nickel	ug/L		456.8700		461.4700		1.0		P
Zinc	ug/L		1181.0799		1192.9400		1.0		P

Metals

- 7 -

LABORATORY CONTROL SAMPLE SUMMARY

Client: Parsons Brinckerhoff

SDG No.: Y1974

Contract: Parsons Brinckerhoff

Lab Code: CHEMED

Case No.: Y1974

SAS No.: Y1974

Aqueous LCS Source: EPA-ICV

Solid LCS Source:

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB25688BS	Mercury	ug/L	4.100	4.210		102.7	80.0 - 120.0	CV

Metals

- 7 -

LABORATORY CONTROL SAMPLE SUMMARY

Client: Parsons Brinckerhoff

SDG No.: Y1974

Contract: Parsons Brinckerhoff

Lab Code: CHEMED

Case No.: Y1974

SAS No.: Y1974

Aqueous LCS Source: EPA-ICV

Solid LCS Source:

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB25700BS								
	Cadmium	ug/L	200.0	169.43		84.7	80.0 - 120.0	P
	Copper	ug/L	300.0	262.56		87.5	80.0 - 120.0	P
	Lead	ug/L	1000.0	831.91		83.2	80.0 - 120.0	P
	Nickel	ug/L	500.0	442.72		88.5	80.0 - 120.0	P
	Zinc	ug/L	200.0	188.56		94.3	80.0 - 120.0	P

Metals

- 9 -

SERIAL DILUTION SAMPLE SUMMARY

Client: Parsons Brinckerhoff SDG No.: Y1974
Contract: Parsons Brinckerhoff Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974
Matrix: WATER Level: LOW Client ID: MW-1DL
Sample ID: Y1967-01 Serial Dilution ID: Y1967-01L

Analyte	Initial Result ug/L	C	Serial Result ug/L	C	% Difference	Qual	Acceptance Limits	M
Mercury	0.11	U	0.11	U			10.00 %	CV

Metals

- 9 -

SERIAL DILUTION SAMPLE SUMMARY

Client: Parsons Brinckerhoff SDG No.: Y1974
 Contract: Parsons Brinckerhoff Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974
 Matrix: WATER Level: LOW Client ID: MW-2R(UNFILTERED)L
 Sample ID: Y1937-01 Serial Dilution ID: Y1937-01L

Analyte	Initial Result ug/L	C	Serial Result ug/L	C	% Difference	Qual	Acceptance Limits	M
Cadmium	0.90	U	0.90	U			10.00 %	P
Copper	7.21	J	0.50	U	100.0		10.00 %	P
Lead	2.65	J	1.90	U	100.0		10.00 %	P
Nickel	6.11	J	1.80	U	100.0		10.00 %	P
Zinc	1020.54		1067.25		4.6		10.00 %	P

Metals
14
ANALYSIS RUN LOG

Client: Parsons Brinckerhoff Contract: Parsons Brinckerhoff
 Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974 SDG No.: Y1974
 Instrument ID Number: CV2 Method: CV Run Number: 032107B
 Start Date: 3/21/2007 End Date: 3/21/2007

EPA Sample No.	D/F	Time	% R	Analytes																							
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	N A	T L	V L	Z N	C N
Std01Repl	1.00	1931															X										
Std02Repl	1.00	1933															X										
Std03Repl	1.00	1935															X										
Std04Repl	1.00	1937															X										
Std05Repl	1.00	1939															X										
Std06Repl	1.00	1941															X										
ICV01	1.00	1943															X										
ICB01	1.00	1945															X										
CCV01	1.00	1947															X										
CCB01	1.00	1949															X										
CRI01	1.00	1951															X										
ZZZZZZ	1.00	1953																									
ZZZZZZ	1.00	1955																									
ZZZZZZ	1.00	1957																									
PB25688BL	1.00	2000															X										
ZZZZZZ	1.00	2002																									
PB25688BS	1.00	2004															X										
ZZZZZZ	1.00	2006																									
CCV02	1.00	2008															X										
CCB02	1.00	2010															X										
ZZZZZZ	1.00	2012																									
ZZZZZZ	1.00	2014																									
ZZZZZZ	1.00	2016																									
ZZZZZZ	1.00	2018																									
ZZZZZZ	1.00	2020																									
ZZZZZZ	1.00	2022																									
ZZZZZZ	1.00	2024																									
ZZZZZZ	1.00	2026																									
CCV03	1.00	2028															X										
CCB03	1.00	2030															X										
ZZZZZZ	5.00	2032																									
ZZZZZZ	1.00	2034																									
ZZZZZZ	1.00	2036																									
ZZZZZZ	1.00	2039																									
ZZZZZZ	1.00	2041																									
ZZZZZZ	1.00	2043																									

Metals
14
ANALYSIS RUN LOG

Client: Parsons Brinckerhoff Contract: Parsons Brinckerhoff
 Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974 SDG No.: Y1974
 Instrument ID Number: P1 Method: P Run Number: P1032307
 Start Date: 3/23/2007 End Date: 3/23/2007

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	A L	N T	V	Z N	C N				
S0	1.00	1027							X			X	X				X										X				
S1	1.00	1029							X			X	X				X										X				
S2	1.00	1032							X			X	X				X										X				
S3	1.00	1034							X			X	X				X										X				
S4	1.00	1037							X			X	X				X										X				
S5	1.00	1039							X			X	X				X										X				
ICV01	1.00	1046							X			X	X				X										X				
ICB01	1.00	1048							X			X	X				X										X				
CRI01	1.00	1050							X			X	X				X										X				
ICS-A01	1.00	1055							X			X	X				X										X				
ICS-AB01	1.00	1102							X			X	X				X										X				
CCV01	1.00	1105							X			X	X				X										X				
CCB01	1.00	1107							X			X	X				X										X				
PB25700BL	1.00	1109							X			X	X				X										X				
PB25700BS	1.00	1115							X			X	X				X										X				
ZZZZZ	1.00	1125																													
MW-2R (UNFILTERED) D	1.00	1127							X			X	X				X										X				
MW-2R (UNFILTERED) L	5.00	1129							X			X	X				X										X				
MW-2R (UNFILTERED) S	1.00	1131							X			X	X				X										X				
MW-2R (UNFILTERED) SD	1.00	1133							X			X	X				X										X				
MW-2R (UNFILTERED) A	1.00	1135																													
ZZZZZ	1.00	1137																													
ZZZZZ	1.00	1139																													
CCV02	1.00	1143							X			X	X				X										X				
CCB02	1.00	1145							X			X	X				X										X				
B22	1.00	1149							X			X	X				X										X				
B8	1.00	1151							X			X	X				X										X				
B7	1.00	1155							X			X	X				X										X				
ZZZZZ	1.00	1157																													
ZZZZZ	1.00	1159																													
ZZZZZ	1.00	1201																													
ZZZZZ	1.00	1203																													
ZZZZZ	1.00	1206																													
ZZZZZ	1.00	1208																													
ZZZZZ	1.00	1209																													
CCV03	1.00	1212							X			X	X				X										X				

Metals
14
ANALYSIS RUN LOG

Client: Parsons Brinckerhoff Contract: Parsons Brinckerhoff
 Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974 SDG No.: Y1974
 Instrument ID Number: P1 Method: P Run Number: P1032307
 Start Date: 3/23/2007 End Date: 3/23/2007

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K S	A E	N G	T A	V L	Z N	C N					
CCB03	1.00	1214						X			X	X					X											X			
ZZZZZZ	1.00	1216																													
ZZZZZZ	1.00	1218																													
ZZZZZZ	1.00	1220																													
ZZZZZZ	1.00	1222																													
ZZZZZZ	1.00	1224																													
ZZZZZZ	1.00	1226																													
ZZZZZZ	1.00	1228																													
ZZZZZZ	1.00	1230																													
ZZZZZZ	1.00	1232																													
ZZZZZZ	1.00	1235																													
CCV04	1.00	1237					X				X	X					X										X				
CCB04	1.00	1241					X				X	X					X										X				
ZZZZZZ	1.00	1243																													
ZZZZZZ	1.00	1246																													
ZZZZZZ	1.00	1248																													
ZZZZZZ	1.00	1250																													
ZZZZZZ	1.00	1252																													
ZZZZZZ	1.00	1255																													
ZZZZZZ	1.00	1353																													
ZZZZZZ	1.00	1357																													
ZZZZZZ	1.00	1359																													
CCV05	1.00	1401					X				X	X					X										X				
CCB05	1.00	1403					X				X	X					X										X				
ZZZZZZ	1.00	1407																													
ZZZZZZ	1.00	1410																													
ZZZZZZ	1.00	1412																													
ZZZZZZ	1.00	1414																													
ZZZZZZ	1.00	1416																													
ZZZZZZ	5.00	1418																													
ZZZZZZ	1.00	1421																													
ZZZZZZ	1.00	1423																													
ZZZZZZ	1.00	1424																													
ZZZZZZ	1.00	1427																													
CCV06	1.00	1431					X				X	X					X										X				
CCB06	1.00	1433					X				X	X					X										X				

Metals
14
ANALYSIS RUN LOG

Client: Parsons Brinckerhoff Contract: Parsons Brinckerhoff
 Lab Code: CHEMED Case No.: Y1974 SAS No.: Y1974 SDG No.: Y1974
 Instrument ID Number: P1 Method: P Run Number: P1032307
 Start Date: 3/23/2007 End Date: 3/23/2007

EPA Sample No.	D/F	Time	% R	Analytes																						
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	N A	T L	V L	Z N
ZZZZZZ	1.00	1435																								
ZZZZZZ	1.00	1438																								
ZZZZZZ	1.00	1440																								
ZZZZZZ	1.00	1442																								
ZZZZZZ	1.00	1444																								
ZZZZZZ	1.00	1446																								
ZZZZZZ	1.00	1448																								
ZZZZZZ	1.00	1451																								
ZZZZZZ	1.00	1453																								
ZZZZZZ	1.00	1456																								
CCV07	1.00	1458					X			X	X					X									X	
CCB07	1.00	1501					X			X	X					X										X
ZZZZZZ	1.00	1503																								
ZZZZZZ	1.00	1505																								
ZZZZZZ	1.00	1508																								
ZZZZZZ	1.00	1510																								
ZZZZZZ	1.00	1513																								
ZZZZZZ	1.00	1515																								
ZZZZZZ	1.00	1517																								
ZZZZZZ	1.00	1520																								
ZZZZZZ	1.00	1522																								
ZZZZZZ	5.00	1525																								
CCV08	1.00	1534					X			X	X					X										X
CCB08	1.00	1536					X			X	X					X										X
ZZZZZZ	1.00	1539																								
ZZZZZZ	1.00	1541																								
ZZZZZZ	1.00	1543																								
ZZZZZZ	1.00	1545																								
ZZZZZZ	1.00	1548																								
CRI02	1.00	1554					X			X	X					X										X
ICS-A02	1.00	1610					X			X	X					X										X
ICS-AB02	1.00	1615					X			X	X					X										X
CCV09	1.00	1620					X			X	X					X										X
CCB09	1.00	1622					X			X	X					X										X

**TABULATED ANALYTICAL RESULTS
GENERAL CHEMISTRY**

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B22	SDG No.:	Y1974
Lab Sample ID:	Y1974-01	Matrix:	WATER
% Solids:	0.00		

Analyte	Result	Qualifier	RL	Units	DF	Date Analyzed	Method
TSS	4300		4.00	mg/L	1	3/22/2007	160.2 TSS
Nonpolar Material	6.900		0.735	mg/L	1	3/23/2007	1664 Nonpolar Material
TKN	0.559		0.500	mg/L	1	3/26/2007	351.3 TKN
CBOD5	2.00	U	2.00	mg/L	1	3/21/2007	405.1 CBOD5
Nitrate+Nitrite	2.0		0.10	mg/L	1	3/23/2007	300 Nitrate+Nitrate

Comment

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B8	SDG No.:	Y1974
Lab Sample ID:	Y1974-02	Matrix:	WATER
% Solids:	0.00		

Analyte	Result	Qualifier	RL	Units	DF	Date Analyzed	Method
TSS	2400		4.00	mg/L	1	3/22/2007	160.2 TSS
Nonpolar Material	5.200		0.685	mg/L	1	3/23/2007	1664 Nonpolar Material
TKN	0.518		0.500	mg/L	1	3/26/2007	351.3 TKN
CBOD5	2.00	U	2.00	mg/L	1	3/21/2007	405.1 CBOD5
Nitrate+Nitrite	8.7		0.10	mg/L	1	3/23/2007	300 Nitrate+Nitrate

Comment

Report of Analysis

Client:	Parsons Brinckerhoff	Date Collected:	3/15/2007
Project:	DDC albert road	Date Received:	3/19/2007
Client Sample ID:	B7	SDG No.:	Y1974
Lab Sample ID:	Y1974-03	Matrix:	WATER
% Solids:	0.00		

Analyte	Result	Qualifier	RL	Units	DF	Date Analyzed	Method
TSS	4500		4.00	mg/L	1	3/22/2007	160.2 TSS
Nonpolar Material	6.800		0.725	mg/L	1	3/23/2007	1664 Nonpolar Material
TKN	0.575		0.500	mg/L	1	3/26/2007	351.3 TKN
CBOD5	2.00	U	2.00	mg/L	1	3/21/2007	405.1 CBOD5
Nitrate+Nitrite	10.6		0.10	mg/L	1	3/23/2007	300 Nitrate+Nitrate

Comment

**QUALITY CONTROL SUMMARY
REPORTS
GENERAL CHEMISTRY**

Initial and Continuing Calibration Verification

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1						
Nitrate+Nitrite	mg/L	1.95	2.00	97.5	90-110	2/23/2007
Sample ID: CCV1						
TKN	mg/L	4.99	5.00	99.8	90-110	3/26/2007
Nitrate+Nitrite	mg/L	5.29	5.3	99.8	90-110	3/23/2007
Sample ID: CCV2						
TKN	mg/L	4.97	5.00	99.4	90-110	3/26/2007
Nitrate+Nitrite	mg/L	5.47	5.3	103.2	90-110	3/23/2007
Sample ID: CCV3						
TKN	mg/L	5.18	5.00	103.6	90-110	3/26/2007
Sample ID: CCV4						
TKN	mg/L	5.01	5.00	100.2	90-110	3/26/2007
Sample ID: LB33104ICV						
Nonpolar Materia	mg/L	19.40	20.00	98.0	90-110	3/23/2007
TKN	mg/L	4.95	5.00	99.0	90-110	3/26/2007
TKN	mg/L	5.20	5.00	104.0	90-110	3/26/2007

Initial and Continuing Calibration Blank Summary

Client: Parsons Brinckerhoff	SDG No.: Y1974
Project:	

Analyte	Units	Result	Acceptance Limits	Conc Qual	RDL	Analysis Date
Sample ID: ICB1						
TKN	mg/L	< 0.50	+/-0.50	U	0.50	3/26/2007
Nitrate+Nitrite	mg/L	< 0.1	+/-0.1	U	0.1	2/23/2007
Sample ID: CCB1						
TKN	mg/L	< 0.50	+/-0.50	U	0.50	3/26/2007
Nitrate+Nitrite	mg/L	< 0.1	+/-0.1	U	0.1	3/23/2007
Sample ID: CCB2						
TKN	mg/L	< 0.50	+/-0.50	U	0.50	3/26/2007
Nitrate+Nitrite	mg/L	< 0.1	+/-0.1	U	0.1	3/23/2007
Sample ID: CCB3						
TKN	mg/L	< 0.50	+/-0.50	U	0.50	3/26/2007
Sample ID: CCB4						
TKN	mg/L	< 0.50	+/-0.50	U	0.50	3/26/2007
Sample ID: LB33104ICB						
Nonpolar Material	mg/L	< 0.500	+/-0.500	U	0.500	3/23/2007
TKN	mg/L	< 0.50	+/-0.50	U	0.50	3/26/2007

Preparation Blank Summary

Client: Parsons Brinckerhoff	SDG No.: Y1974
Project:	

Analyte	Units	Result	Acceptance Limits	Conc Qual	RDL	Analysis Date
Sample ID: LB33102B						
TSS	mg/L	< 4.00	+/-4.00	U	4.00	3/22/2007
Sample ID: LB33104B						
Nonpolar Material	mg/L	< 0.50	+/-0.50	U	0.50	3/23/2007
Sample ID: LB33118B						
Nitrate+Nitrite	mg/L	< 0.100	+/-0.100	U	0.100	3/23/2007
Sample ID: MBW						
CBOD5	mg/L	< 2.00	+/-2.00	U	2.00	3/21/2007
CBOD5	mg/L	< 2.00	+/-2.00	U	2.00	3/21/2007
Sample ID: MBW03-21-07						
TKN	mg/L	< 0.50	+/-0.50	U	0.50	3/26/2007
Sample ID: MBW03-23-07						
TKN	mg/L	< 0.50	+/-0.50	U	0.50	3/26/2007

Matrix Spike Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID: Y1974-01

Client ID: B22S

Percent Solids for Spike Sample: 0.0

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	Dilution Factor	% Rec	Qual	Date Analyzed
TKN	mg/L	75-125	5.6		0.6		5.00	1	100.0		3/26/2007
Nitrate+Nitrite	mg/L	75-125	6.81		2.00		5.30	1	90.75		3/23/2007

Duplicate Sample Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID: LB33102BSD

Client ID: LCSWD

Percent Solids for Spike Sample: 0.0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	Dilution Factor	RPD/ AD	Qual	Date Analyzed
TSS	mg/L	+/-20	546.00		546.00		1	0		3/22/2007

Duplicate Sample Summary

Client: Parsons Brinckerhoff	SDG No.: Y1974
Project:	Sample ID: LB33104BSD
Client ID: LCSWD	Percent Solids for Spike Sample: 0.0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	Dilution Factor	RPD/AD	Qual	Date Analyzed
Nonpolar Material	mg/L	+/-20	38.60		38.60		1	0		3/23/2007

Duplicate Sample Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID: LB33118BSD

Client ID: LCSWD

Percent Solids for Spike Sample: 0.0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	Dilution Factor	RPD/ AD	Qual	Date Analyzed
Nitrate+Nitrite	mg/L	+/-20	5.42		5.42		1	0		3/23/2007

Duplicate Sample Summary**Client:** Parsons Brinckerhoff**SDG No.:** Y1974**Project:****Sample ID:** LCSW**Client ID:** LCSWD**Percent Solids for Spike Sample:** 0.0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	Dilution Factor	RPD/ AD	Qual	Date Analyzed
CBOD5	mg/L	+/-20	202.00		212.00		1	4.8		3/21/2007

Duplicate Sample Summary

Client: Parsons Brinckerhoff	SDG No.: Y1974
Project:	Sample ID: Y1948-01
Client ID: MANHOLE-COMPOSITED	Percent Solids for Spike Sample: 0.0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	Dilution Factor	RPD/AD	Qual	Date Analyzed
TSS	mg/L	+/-20	4.00	0	4.00	0	1	0		3/22/2007

Duplicate Sample Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID: Y1974-01

Client ID: B22D

Percent Solids for Spike Sample: 0.0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	Dilution Factor	RPD/AD	Qual	Date Analyzed
TKN	mg/L	+/-20	0.56		0.55		1	1.8		3/26/2007
Nitrate+Nitrite	mg/L	+/-20	2.00		2.01		1	0.5		3/23/2007

Duplicate Sample Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID: Y1974-03

Client ID: B7D

Percent Solids for Spike Sample: 0.0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	Dilution Factor	RPD/AD	Qual	Date Analyzed
CBOD5	mg/L	+/-20	2.00	U	2.00	U	1	0		3/21/2007

Laboratory Control Sample Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Dilution Factor	Acceptance Limit %R	Date Analyzed
LB33102BS									
	TSS	mg/L	550.00	546.00		99.3	1	75-125	3/22/2007



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Laboratory Control Sample Summary

Client: Parsons Brinckerhoff	SDG No.: Y1974
Project:	

Sample ID Analyte	Units	True Value	Result	C	% Recovery	Dilution Factor	Acceptance Limit %R	Date Analyzed
LB33102BSD TSS	mg/L	550.00	546.00		99.3	1	75-125	3/22/2007

Laboratory Control Sample Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID Analyte	Units	True Value	Result	C	% Recovery	Dilution Factor	Acceptance Limit %R	Date Analyzed
LB33104BS								
Nonpolar Material	mg/L	40.00	40.50		101.25	1	80-120	3/23/2007

Laboratory Control Sample Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID	Units	True Value	Result	C	% Recovery	Dilution Factor	Acceptance Limit %R	Date Analyzed
LB33104BSD								
Nonpolar Material	mg/L	40.00	38.60		96.500	1	80-120	3/23/2007

Laboratory Control Sample Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID Analyte	Units	True Value	Result	C	% Recovery	Dilution Factor	Acceptance Limit %R	Date Analyzed
LB33118BS								
Nitrate+Nitrite	mg/L	5.3	5.30		100.0	1	75-125	3/23/2007

Laboratory Control Sample Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID	Units	True Value	Result	C	% Recovery	Dilution Factor	Acceptance Limit %R	Date Analyzed
LB33118BSD								
Nitrate+Nitrite	mg/L	5.3	5.42		102.3	1	75-125	3/23/2007

Laboratory Control Sample Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID Analyte	Units	True Value	Result	C	% Recovery	Dilution Factor	Acceptance Limit %R	Date Analyzed
LCSW								
Nitrate+Nitrite	mg/L	5.3	5.43		102.5	1	80-120	3/23/2007
CBOD5	mg/L	200.00	202.00		101.0	1	80-120	3/21/2007

Laboratory Control Sample Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID	Units	True Value	Result	C	% Recovery	Dilution Factor	Acceptance Limit %R	Date Analyzed
LCSW03-21-07								
TKN	mg/L	5.00	4.98		99.6	1	80-120	3/26/2007

Laboratory Control Sample Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID	Units	True Value	Result	C	% Recovery	Dilution Factor	Acceptance Limit %R	Date Analyzed
LCSW03-23-07								
TKN	mg/L	5.00	5.11		102.2	1	80-120	3/26/2007

Laboratory Control Sample Summary

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Sample ID Analyte	Units	True Value	Result	C	% Recovery	Dilution Factor	Acceptance Limit %R	Date Analyzed
LCSWD CBOD5	mg/L	200.00	212.00		106.0	1	80-120	3/21/2007

Method Detection Limits

Client: Parsons Brinckerhoff

SDG No.: Y1974

Project:

Analyte	Units	MDL	RDL
Method: 160.2 TSS MDL Date: 1/15/2006			
Matrix Category: LIQUID			
TSS	mg/L	4.00	4.00
Method: 1664 Nonpolar Materi MDL Date: 1/15/2006			
Matrix Category: LIQUID			
Nonpolar Material	mg/L	5.00	5.00
Method: 300 Nitrate+Nitrate MDL Date: 1/15/2006			
Matrix Category: LIQUID			
Nitrate+Nitrite	mg/L	0.00	0.00
Method: 351.3 TKN MDL Date: 1/15/2006			
Matrix Category: LIQUID			
TKN	mg/L	0.50	0.50
Method: 405.1 CBOD5 MDL Date: 1/15/2006			
Matrix Category: LIQUID			
CBOD5	mg/L	2.00	2.00

CHEMTECH

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END OF ANALYTICAL RESULTS

END OF ADDENDUM NO. 5

This addendum consists of three hundred and fifty-seven (357) pages

NO TEXT ON THIS PAGE

THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
INFRASTRUCTURE DIVISION
BUREAU OF DESIGN

PROJECT ID: HWQ411B

RECONSTRUCTION OF ALBERT ROAD AREA
INCLUDING SEWER, WATERMAIN, STREET LIGHTING,
AND TRAFFIC SIGNAL WORK

Together With All Work Incidental Thereto

BOROUGH OF QUEENS
CITY OF NEW YORK

ADDENDUM NO.6

DATED: August 28, 2013

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. The Contractor shall be responsible for compliance with all the provisions of the following Sections and Schedules, which are hereby made a part of the original contract documents:
 - A. "SECTION U: Additional Contract Requirements Applying to Work Performed in the Presence of Privately Owned Utility Facilities" (Pages A6-3 through A6-13)
 - B. Schedule U-1 (Page A6-14)
 - C. Schedule U-2 (one for each Utility Company) (Pages A6-15 through A6-50)
 - D. Section U-3 Page A6-51 (as per the Private Utilities reference document for SECTION U called "CET SPECIFICATIONS AND SKETCHES", dated November 2010), Test Pits and Sketches, Pages (A6-52 through A6-69) in this Addendum; and,
 - E. Utility drawings (49 Sheets), consisting of:
 - * Overhead Condition Report (36 Sheets), (Con Edison)
 - * Conduits and Ducts Occupancy Plate (3 Sheets), (Con Edison)
 - * Low Tension Main and Service Plate (3 Sheets), (Con Edison)
 - * CET-700 Locations Plate (1 Sheet), (Con Edison)
 - * Special Care Excavation Plan (1 Sheet), (Verizon)
 - * Existing Facilities Plans (5 Sheets), (Verizon)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.

3. In addition, the following statements are made to provide clarification of various paragraphs under Section U:
- A. Section U, ¶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. Section U, ¶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. Section U informs the Contractor that the City has entered into a Utility 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 Addendum, a sample of the Utility Agreement letter as executed by the Companies is annexed on page A6-13, as an Exhibit to the Contract. Signed copies of those Utility Agreement letters are on file with NYCDDC.
 - 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 Section U, ¶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. Section U, ¶14, provides that the provisions of Section U are material provisions of the Contract and that the Contractor's failure to comply with the procedures set forth in Section U are sufficient for the Commissioner to declare the Contractor in default pursuant to Article 48 of the Contract. Pursuant to this Addendum, the Contractor is informed that the Performance Bond required of the Contractor pursuant to the Contract is not deemed to guarantee performance of any of the Interference Work.

Section U: Additional Contract Requirements Applicable to Work Performed in the Presence of Privately Owned Utility Facilities

The Contractor is hereby notified that pursuant to the law and franchise agreements issued by the City, certain private utility and public service companies named in Schedule U-1 ("the Companies") own and/or operate surface and/or subsurface facilities within the limits of this contract. The existence of these facilities impacts the productivity of the City work called for in the contract. In order to improve coordination of the City construction with the private utility facilities owned and/or operated by the Companies named in Schedule U-1, Article 1.06.30 of the Standard Highway Specifications of the New York City Department of Transportation, Dated November 1, 2010; Articles 1.06.14 through 1.06.17 of the General Provisions of the Standard Water Main Specifications of the New York City Department of Environmental Protection, dated August 1, 2009; and/or Articles 1.06.14 through 1.06.17 of the Standard Sewer Specifications of the New York City Department of Environmental Protection, Dated August 1, 2009; 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 Section 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 electric system, the contractor understands and by bidding for this contract agrees that he/she has reviewed the section 'U' package and

that he/she will be required to perform the public work in the presence of energized electrical overhead lines and appurtenances located in areas adjacent and/or within the project area. As a consequence he/she will select means and method of construction appropriate to maintain the safety clearances required or as permitted by 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, relocate, 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, lost profit, increased overhead, or any other impact costs. Upon receipt of a Notice of Award from the City, the Contractor shall immediately commence negotiations with each of the Companies concerning the manner in which and the price for which the Contractor,

through its own forces or by others hired by it, will perform and be paid by the Company for all necessary Interference Work as defined above that the Company(ies) choose(s) not to perform with its(their) own forces or by specialty Contractors hired by it (them) (as per "Interference Agreement"). (Specialty contractors' work is limited to (i) insulation installation and removal, (ii) live gas and steam work, (iii) cleanup and disposal of hazardous materials, (iv) splicing live electrical and telecommunications facilities, and (v) work not traditionally performed by general construction contractors.

5. *Interference Agreement:*

1. The Companies have provided estimate of the quantity of each of the types of interferences expected to be encountered in the contract in Schedule U-2. Although the parties may negotiate an Interference Agreement in any format or manner they deem fit, the Contractor is hereby advised that the Companies have indicated to the City that they will agree to compensate the Contractor on a unit price basis according to the Quantity and Types of Interferences expected to be encountered on this Contract as stated in Schedule U-2.
2. Furthermore, in Section 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 Interference Agreement, otherwise the unit of work measurement, and payment provisions set forth in Section 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 construction will proceed as ordered and the Contractor will be directed by the Resident Engineer to perform the City work on Time, Material and Equipment basis (T&M) as specified in standard City contract agreement Article 26.2. T&M records will include identification of types of utility facilities interfering with City work, utility facility owners, specifying the nature and quantity of any materials, plant and equipment furnished or used in connection with the performance of such work and crew size, such as: name and number of each worker employed on such work. T&M records will also indicate the hours of active time, standby time and idle time. The Company (ies) and the Contractor will maintain separate records of the actual quantity and cost of labor, materials,

and equipment expended, and will provide copies of this information to the other party on a daily basis for reconciliation. These T&M records along with cost evaluations will be submitted daily to the Resident Engineer for review and approval. The total cost of City work will be based on quantity of work performed multiplied by unit price contract bid items. The total interference cost will be calculated as the difference between the total T&M cost and total cost for City work. The Resident Engineer will conduct a monthly reconciliation session of the daily T&M records with the affected Company (ies) and contractor. If the contractor and affected utility companies cannot reconcile their T&M records, by the last day of each month, then the Resident Engineer will submit the approved City's T&M records along with total cost evaluations to the DDC Director of Construction who will review these records and recommend approval and validity certification by the DDC Deputy Commissioner.

1. Copies of the DDC approved and certified T&M records will then be transmitted by the DDC to the contractor and the utility companies. These certified records may be used by the contractor for compensation claims against the responsible private facility owners, or may be used by any party as supporting documentation in dispute regarding compensation for performing Interference Work 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 contractor and affected company (ies) are submitted to Binding Arbitration process described in Paragraph 10.
2. All issues related to utility work and/ or delays due to compensation disputes or claims against utility companies are not allowable as justification for granting contract time extensions. The City may assess liquidated damages specified in the contract for net overall delays suffered by City contract work as a result of utility issues, disputes and claims.
3. The standard City contract dispute resolution process specified in Article 27 "Presentation of disputes to Commissioner", of the standard City contract agreement is not applicable to any disputes related to utility work and/ or compensation for such work or claim against utility companies. Utility work issues, disputes and claims may only be submitted to Binding Arbitration process described in Paragraph 10.
4. The contractor will notify the Resident Engineer when utility capital work not specified in Schedule U2 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 Deputy Commissioner regarding the issuance of a "48 hours notice" to the concerned utility company as authorized by the New York City administrative Code Section 19-143 and/or Section 24-521 as applicable.

5. Utility delays caused by utility capital work not listed in Schedule U2 and/ or by unavailability of utility specialty crews cannot be discounted for earning any contractual bonus when such bonus clause is included in a contract. However, if such specified bonus is not earned or disallowed by the City or if the City assesses specified liquidated damages as a result of such excessive delays, the contractor may seek damages from the responsible utility company (ies).

7. *Extra utility work with Utility Agreement:*

If during construction the Contractor encounters utility facilities interferences or utility scope of work that it believes is not covered by the Interference Agreement as described above, then the Contractor shall immediately notify the Company in writing, with a copy to the City, describing the nature and location of the extra work in question. The Company then has five (5) business days to investigate the conditions and then:

1. Advise the Contractor and the City in writing that no interference with its facilities exists at the location in question, and hence that the Contractor may proceed with City work without providing for any impact from Company facilities;
2. Advise the Contractor and the City in writing that the Interference Agreement negotiated pursuant to Paragraph (6), above, provides for the scope of work encountered, specifying the exact unit items and/or terms of the agreement that cover the work;
3. Advise the Contractor and the City in writing that it intends to perform the necessary utility Work with company forces or with its own contractor including, but not limited to, relocating its facility out of the way of the proposed City work. In this case, the Company shall provide a written schedule for the performance of the utility work it proposes to perform, which shall be subject to approval by the City based on its impact to the Contractor's currently approved progress schedule. Upon approval of the Company's schedule by the City, the Contractor shall provide access to the worksite to the Company and/or any contractors hired by it to perform this utility work. If necessary, the City may

grant a contract time extension for delays caused by the performance of such utility work by the company.

4. Reasonably specify in writing the scope of work to be performed by the Contractor on behalf of the Company that is not covered under the Interference Agreement negotiated pursuant to Paragraph (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 7.2, or 7.4, above, the Contractor shall determine reasonable means and methods of performing the work defined by the Company. These means and methods are subject to approval of the Company, which shall not be unreasonably withheld. If, however, the Company objects to the Contractor's proposed means and methods then it shall define an alternate method of construction. Upon receipt of the Company's approval or its proposed alternate method of construction, the Contractor shall commence performance of the work defined by the Company as soon as possible, and shall perform the work in a good, workmanlike, and efficient manner, using the means and methods approved by the Company, in order to permit the City work to proceed in the most expeditious manner possible, but without imposing unreasonable and/or unnecessary costs on the Company. It is expressly understood by all parties that the City's rights pursuant to Article 4 of the Contract apply to Utility Work performed pursuant to this section.

9. *Disputed utility work covered by a utility 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 maintained by either party for Utility work performed pursuant to a Utility Agreement. While the arbitration is pending, the Company shall pay the Contractor on a monthly basis, based on the price offered by the Company to the Contractor for the performance of the work.

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 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, Contractor and/or representatives shall have 3 ½ hrs to make a presentation of its claim to the arbitrator. During its presentation, Contractor shall not be permitted to produce any documents or cost records which have not already been provided to the Company. Contractor shall be permitted to produce any analysis or description of its claim which has been prepared for the purpose of its presentation.
- (e) After lunch, Company and/or its representatives shall have two hours to ask Contractor questions about its claim and its presentation. Thereafter the arbitrator(s) shall have two hours to ask Contractor questions about its claim and its presentation.

- (f) On the morning of the second day of the arbitration, Company and/or its representatives shall have 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) After lunch, Contractor and/or its representatives shall have two hours to ask Company questions about its claim and its presentation. Thereafter the arbitrator(s) shall have two hours to ask Company questions about its claim and its presentation.
- (h) Subject to the above time limitations, the arbitrator(s) may conduct the arbitration in such manner as the arbitrator(s) deems reasonable.
- (i) The arbitrator(s) shall then have one week to select in writing, as the arbitrator ('s) award, that party's Final Offer which appears to be more reasonable, based on the presentations at the arbitration hearings.
- (j) The arbitrator shall have no discretion to grant an award other than one of the two Final Offers submitted by the parties.
- (k) Any award for work that has already been performed shall be paid on the 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.
- (l) The arbitrator's fees and any other costs of the arbitration shall be initially shared equally by Company and Contractor. The non-prevailing party shall then pay all arbitrator's fees and costs of the arbitration and shall reimburse the prevailing party for its share of such fees and costs theretofore paid.
- (m) The parties may, at any time, settle any matter submitted to arbitration.

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 a prior agreement with the City, have agreed to perform their obligations described in this section. It is expressly understood that the cost of Utility Work shall not be a charge against the City, but shall be a matter for adjustment between the Contractor and the Company or Companies concerned. The City and the Contractor agree that the Companies are third party beneficiaries of this section of the contract, if a Utility Agreement is executed between the contractor and utility company (ies). The provisions of this section shall govern in all cases where Company property interferes with or is about to be disturbed by the City work, notwithstanding any other provision of the Contract, except for Natural Gas transmission/distribution facilities covered subject to the Gas Facility Cost Allocation Act (GFCAA) and covered separately in this contract.

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 applies to public work. The work described in this Section U of the contract performed by utility company (ies) with their own forces or vendors hired by such company (ies) is not public work.

16. Facility operators:

The insurance requirements in Paragraph 12 of this Section U apply to: (i) additional Companies, if any, who were not named in Schedule "A" but which have executed a Utility Agreement with the contractor for utility work; and (ii) additional coverage, if any, paid for by Utility Companies whose utility facilities are located within the project limits, that they may require for the utility work pursuant to an utility agreement between the contractor and such utility companies.

[End]

"STANDARD UTILITY LETTER OF AGREEMENT"

(Name)
Deputy Commissioner, Infrastructure Division
Department of Design and Construction
30-30 Thomson Avenue
Long Island City, NY 11101

RE: City Work Performed in the Presence of Private Utility Facilities
Project No: _____

Dear (Name):

This letter is to certify that _____, has requested the inclusion of the attached "Section U: Additional contract requirements applying to work performed in the presence of privately owned utility." The company agrees to abide by the terms of this Section U and to submit a schedule listing the scope of work, including the items and estimated quantities, and types of utility facilities to be supported and protected at the company's own expenses due to interferences with the Public work.

Sincerely,

By: Authorized Company Representative

Title

NOTARY PUBLIC

CERTIFIED AS TO FORM
AND LEGAL AUTHORITY:

By: _____

SCHEDULE U-1

HWQ411B

RECONSTRUCTION OF ALBERT ROAD AREA

SCHEDULE U-1

LISTING OF COMPANIES NAMED FOR THIS CONTRACT

<u>COMPANY NAME</u>	<u>CONTACT NAME</u>	<u>CONTACT TELEPHONE</u>
CON EDISON	THERESA KONG	212-460-4834
VERIZON	JOSEPH MARESCA	718-977-8165
TIME WARNER	JOHN PIAZZA	718-888-4261
NATIONAL GRID	NEVILLE JACOBS	718-963-5612

SCHEDULE U-2
 FOR INFORMATION ONLY
 ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE
 FOR CONSOLIDATED EDISON

HWQ-411B

CET ITEM	DESCRIPTION	UNITS	ESTIMATED QUANTITY
CET 100.1	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TESTPIT (TYPE .1)	EA	1
CET 100.2	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TESTPIT (TYPE .2)	EA	7
CET 100.3	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TESTPIT (TYPE .3)	EA	4
CET 101.1	UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCL. 24" DIAMETER (TYPE .1)	EA	30
CET 101.2	UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCL. 24" DIAMETER (TYPE .2)	EA	1
CET 101.3	UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCL. 24" DIAMETER (TYPE .3)	EA	5
CET 102.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .1)	EA	3
CET 103.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMETER (TYPE .1)	EA	5
CET 103.3	UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMETER (TYPE .3)	EA	1
CET 108.1	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .1)	EA	38
CET 108.2	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .2)	EA	7
CET 108.3	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .3)	EA	2
CET 200.1	EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTIONSS (INVERT DEPTH 4'-6" TO 5' FOR TYPE 2 OR UP TO 5'-6 FOR TYPE 3)	L.F.	124
CET 200.2	EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTIONSS (INVERT DEPTH 5' TO 6' FOR TYPE 2 OR > 5'-6" TO 6'-6" FOR TYPE 3)	L.F.	20
CET 225.1A	INSTALLATION AND REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	EA	5
CET 225.1B	INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES	EA	7
CET 225.1C	REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	EA	1

SCHEDULE U-2
 FOR INFORMATION ONLY
 ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE
 FOR CONSOLIDATED EDISON

HWQ-411B

CET ITEM	DESCRIPTION	UNITS	ESTIMATED QUANTITY
CET 300	SPECIAL CARE EXCAVATION AND BACKFILING	C.Y.	15
CET 304 A	FURNISH, DELIVER AND INSTALL CONCRETE ROAD BASE	C.Y.	12
CET 305	FURNISH AND INSTALL ASPHALT PAVING MIXTURE	TONS	8
CET 330E-B.2	SUPPORT & PROTECT ELEC, GAS & STEAM FAC. DURING EXCAVATION OF CITY TRENCH WHEN FAC. LIE W/IN TRENCH LIMITS W/ SHEETING (TYPE 2)	L.F.	10
CET 350	OVERHEAD ACCOMMODATION, PROTECTION OF OVERHEAD FACILITIES AND APPURTENANCES	L.S.	1
CET 351	INSTALL AND REMOVE "A" FRAME ON UTILITY POLES	EA	4
CET 353E	SPECIAL CARE OPERATION - TREE PRUNING	EA	130
CET 400	TEST PITS FOR UTILITY FACILITIES	C.Y.	40
CET 401	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITIES	C.Y.	91
CET 402.2	EXISTING OCCUPIED NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION W/O CONCRETE ENCASEMENT	L.F.	740
CET 500	REMOVAL OF ABANDONED UTILITY CONDUITS (NON-CONCRETE ENCASED)	L.F.	1,080
CET 501	REMOVAL OF ABANDONED MASONRY FOR ELEC. AND TEL FACILITIES	C.Y.	99
CET 600.1	INSTALL CONDUIT IN UNPAVED AREA (1 EA. 2", 4" OR 5" CONDUIT - ALL TYPES)	L.F.	500
CET 601.1	INSTALL CONDUIT IN PAVED AREA (1 EA. 2", 4" OR 5" CONDUIT - ALL TYPES)	L.F.	200
CET 636 EC RD	ADJUSTMENT OF UTILITY HARDWARE IN ROADWAY (14" TO UNDER 30" WIDTH)	EA	5
CET 636 ED RD	ADJUSTMENT OF UTILITY HARDWARE IN ROADWAY (30" TO UNDER 34" WIDTH)	EA	14
CET 636 ED SW	ADJUSTMENT OF UTILITY HARDWARE IN SIDEWALK (30" TO UNDER 34" WIDTH)	EA	3

SCHEDULE U-2
FOR INFORMATION ONLY
ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE
FOR CONSOLIDATED EDISON
HWQ-411B

CET ITEM	DESCRIPTION	UNITS	ESTIMATED QUANTITY
CET 636 EE RD	ADJUSTMENT OF UTILITY HARDWARE IN ROADWAY (34" TO UNDER 41" WIDTH)	EA	8
CET 636 EE SW	ADJUSTMENT OF UTILITY HARDWARE IN SIDEWALK (34" TO UNDER 41" WIDTH)	EA	1
CET 700	SPECIAL MOD. OF WORK METHODS TO ACCOMM./ PROTECT U.G. FACILITIES WITH LIMITED COVER	C.Y.	571
CET 781	REMOVABLE CURB SIDEWALK PANEL FOR ACCESS TO UTILITY STRUCTURE OPENINGS	EA	5
CET 802A	SPECIAL MODIFICATION OF WORK FOR INSTALLATION OF NEW SIDEWALKS	S.F.	780
CET 802B	SPECIAL MODIFICATION OF WORK FOR INSTALLATION OF NEW CURBS	L.F.	1,184
CET 1006V	6" VERTICAL OR ROLLED WATER MAIN OFFSET	EA	5
CET 1008V	8" VERTICAL OR ROLLED WATER MAIN OFFSET	EA	4

CON EDISON SCOPE OF WORK
SUPPORT AND PROTECTION
HWQ-411B

CET 100.1 UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TESTPIT (TYPE .1) EA

At the following locations:

N/S Linden Blvd., E/O Crossbay Blvd.

Total quantity for CET 100.1 = 1

CET 100.2 UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TESTPIT (TYPE .2) EA

At the following locations:

N/S Linden Blvd., Opp. 94 St.

N/S Linden Blvd., E/O 95 St.

S/S Albert Road and Raleigh Street

N/S Albert Rd., W/O 94 St.

W/S Hawtree, N/O 135 Rd.

W/S Hawtree, S/O 135 Rd.

S/S Albert Road and Raleigh Street

Total quantity for CET 100.2 = 7

CET 100.3 UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TESTPIT (TYPE .3) EA

At the following locations:

N/E/C Albert Rd. & Huron St.

N/E/C Albert Rd. & 99 Pl.

W/S Centreville St., N/O North Conduit Ave

W/S Centreville St., N/O 150 Rd.

Total quantity for CET 100.3 = 4

CON EDISON SCOPE OF WORK
SUPPORT AND PROTECTION
HWQ-411B

CET 101.1 UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCL. 24" DIAMETER (TYPE .1) EA

At the following locations:

F/O #94-02 Pitkin Ave.
F/O #94-10 Pitkin Ave.
F/O #96-12 Pitkin Ave.
F/O #96-38 Pitkin Ave.
F/O #96-08 149 St.
F/O #96-16 149 St.
F/O #96-36 149 St.
F/O #137-33 94 St.
F/O #137-38 95 St.
F/O #137-30 95 St.
F/O #137-31 96 St.
F/O #137-15 96 St.
F/O #135-07 96 St.
F/O #135-03 96 St.
F/O #137-32 96 Pl.
F/O #137-16 96 Pl.
F/O #137-28 96 Pl.
F/O #137-36 97 St.
F/O #137-34 97 St.
F/O #137-26 97 St.
F/O #137-20 97 St.
F/O #135-12 97 St.
F/O #135-02 97 St.
F/O #150-21 Centreville St.
F/O #150-15 Centreville St.
F/O #150-09 Centreville St.
F/O #150-05 Centreville St.
F/O #149-17 Centreville St.
F/O #138-39 Centreville St.
F/O #150-20 99 Pl.

Total quantity for CET 101.1 = 30

CON EDISON SCOPE OF WORK
SUPPORT AND PROTECTION
HWQ-411B

CET 101.2	UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCL. 24" DIAMETER (TYPE .2) <i>At the following locations:</i> N/W/C Linden Blvd., 96 St. Total quantity for CET 101.2 = 1	EA
CET 101.3	UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCL. 24" DIAMETER (TYPE .3) <i>At the following locations:</i> Int. @ Linden Blvd & Hawtree St. 135 Rd., 90' W/W/C Hawtree St. S/S Int. Of Albert Rd. 95 St. Int. @ Albert Rd. & 99 Pl. Int. @ Albert Rd. & Centreville St. Total quantity for CET 101.3 = 5	EA
CET 102.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .1) <i>At the following locations:</i> Int. @ Centreville St. & 150 Rd F/O #135-31 Hawtree St. F/O #135-09 Hawtree St. Total quantity for CET 102.1 = 3	EA
CET 103.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMETER (TYPE .1) <i>At the following locations:</i> N/S Linden Blvd., 190' W/W/C Hawtree St. N/S Linden Blvd., 80' W/W/C Hawtree St. Int. @ Linden Blvd & Hawtree St. F/O #97-55 Eckford Ave. F/O #150-17 Tahoe St. Total quantity for CET 103.1 = 5	EA
CET 103.3	UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMETER (TYPE .3) <i>At the following locations:</i> Int. @ Albert Rd. & Tahoe St. Total quantity for CET 103.3 = 1	EA

CON EDISON SCOPE OF WORK
SUPPORT AND PROTECTION
HWQ-411B

CET 108.1 UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .1)

EA

At the following locations:

N/S Linden Blvd., 25' W/W/C 95 St.
N/S Linden Blvd., 60' W/W/C 96 Pl.
N/S Linden Blvd., 20' E/E/C 96 Pl.
N/S Linden Blvd., 80' E/E/C 96 Pl.
N/S Linden Blvd., 190' W/W/C Hawtree St.
N/S Linden Blvd., 80' W/W/C Hawtree St.
N/S 135 Rd., 90' W/W/C Hawtree St.
N/S Pitkin Ave., 48' E/E/C Crossbay Blvd.
F/O #94-02 Pitkin Ave.
F/O #94-10 Pitkin Ave.
F/O #96-12 Pitkin Ave.
F/O #96-38 Pitkin Ave.
F/O #96-08 149 St.
F/O #96-08 149 St.
F/O #96-16 149 St.
F/O #96-36 149 St.
F/O #97-55 Eckford Ave.
F/O #137-33 94 St.
F/O #137-38 95 St.
F/O #137-30 95 St.
F/O #137-31 96 St.
F/O #137-15 96 St.
F/O #135-07 96 St.
F/O #135-03 96 St.
F/O #137-32 96 Pl.
F/O #137-16 96 Pl.
F/O #137-28 96 Pl.
F/O # 150-42 Centreville St.
F/O #150-10 Centreville St.
Int. @ Centreville St. & 150 Rd
F/O #150-21 Centreville St.
F/O #150-17 Centreville St.
F/O #150-15 Centreville St.
F/O #150-09 Centreville St.
F/O #150-05 Centreville St.
F/O #150-17 Tahoe St.
F/O #150-20 99 Pl.

CON EDISON SCOPE OF WORK
SUPPORT AND PROTECTION
HWQ-411B

Total quantity for CET 108.1 = 38

CET 108.2 UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE 2) EA

At the following locations:

- N/W/C Linden Blvd., 95 St.
- N/S Linden Blvd., 100' E/E/C 95 St.
- N/W/C Linden Blvd., 96 St.
- N/S Linden Blvd., 25' E/E/C 96 St.
- N/S Linden Blvd., Opp. 96 St.
- N/S Linden Blvd., 140' W/W/C Hawtree St.
- W/S Hawtree, 160' S/S/C 135th Rd.

Total quantity for CET 108.2 = 7

CET 108.3 UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE 3) EA

At the following locations:

- N/S Albert Rd., 115' E/E/C Crossbay Blvd.
- Int. @ Albert Rd. & 94 St.

Total quantity for CET 108.3 = 2

CET 200.1 EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTIONSS (INVERT DEPTH 4'-6" TO 5' FOR TYPE 2 OR UP TO 5'-6" FOR TYPE 3) L.F.

At the following locations:

- N/S Linden Blvd., E/O Crossbay Blvd.
- N/S Linden Blvd., Opp. 94 St.
- N/S Linden Blvd., E/O 95 St.
- W/S Hawtree, S/O 135 Rd.

Total quantity for CET 200.1 = 124

CET 200.2 EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTIONSS (INVERT DEPTH 5' TO 6' FOR TYPE 2 OR > 5'-6" TO 6'-6" FOR TYPE 3) L.F.

At the following locations:

- N/S Albert Rd., W/O 94 St.

Total quantity for CET 200.2 = 20

**CON EDISON SCOPE OF WORK
SUPPORT AND PROTECTION
HWQ-411B**

CET 225.1A INSTALLATION AND REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES EA

At the following locations:

N/C Linden Blvd., E/O Crossbay Blvd.
N/C Linden Blvd., Opp. 94 St.
N/C Linden Blvd., E/O 95 St
W/C Hawtree, N/O 135 Rd.
S/S Albert Rd., W/O Centreville Rd

Total quantity for CET 225.1A = 5

CET 225.1B INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES EA

At the following locations:

N/C Albert Rd., W/O 94 St.
S/C Albert Rd., W/O 94 St.
S/C Albert Rd., W/O 95 St.
S/C Albert Rd., E/O 95 St.
N/C Albert Rd., E/O 99 Pl.
W/C Centreville St., N/O North Conduit Ave
W/C Centreville St., N/O 150 Rd

Total quantity for CET 225.1B = 7

CET 225.1C REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES EA

At the following locations:

S/C Linden Blvd., Opp. 94 St

Total quantity for CET 225.1C = 1

**CON EDISON SCOPE OF WORK
SUPPORT AND PROTECTION
HWQ-411B**

CET 300	SPECIAL CARE EXCAVATION AND BACKFILING <i>At the following locations:</i> N/S Linden Blvd., 20' E/E/C Crossbay Blvd. N/S Linden Blvd, 60' E/E/C Crossbay Blvd N/S Linden Blvd., 38' W/W/C 95th St. N/W/C Linden Blvd. & 95th St. F/O #96-03 Linden Blvd. 4'-2" E/W/C Centreville St., 73' S/S/C Albert Rd. W/S Hawtree, N/O 135 Rd. W/S Hawtree, S/O 135 Rd. N/S Pitkin Ave., 48' E/E/C Crossbay Blvd. N/S Pitkin Ave., 110' E/E/C Crossbay Blvd. Total quantity for CET 300 = 15	C.Y.
CET 304 A	FURNISH, DELIVER AND INSTALL CONCRETE ROAD BASE <i>At the following locations:</i> N/S Linden Blvd, E/O 95 St. W/S Centreville St., N/O North Conduit Ave. W/S Centreville St., N/O 150 Rd. Total quantity for CET 304 A = 12	C.Y.
CET 305	FURNISH AND INSTALL ASPHALT PAVING MIXTURE <i>At the following locations:</i> N/S Linden Blvd., E/O 95 St. W/S Centreville St., N/O North Conduit Ave. W/S Centreville St., N/O 150 Rd. Total quantity for CET 305 = 8	TONS
CET 330E-B.2	SUPPORT & PROTECT ELEC, GAS & STEAM FAC. DURING EXCAVATION OF CITY TRENCH WHEN FAC. LIE W/IN TRENCH LIMITS W/ SHEETING (TYPE .2) <i>At the following locations:</i> N/S Linden Blvd., 20' E/E/C Crossbay Blvd. Total quantity for CET 330E-B.2 = 10	L.F.

CON EDISON SCOPE OF WORK
SUPPORT AND PROTECTION
HWQ-411B

CET 350	OVERHEAD ACCOMMODATION, PROTECTION OF OVERHEAD FACILITIES AND APPURTENANCES	L.S.
	<i>At the following locations:</i>	
	Various Locations	
	AS SHOWN ON CONTRACT DOCUMENTS	
	Total quantity for CET 350	= 1
CET 351	INSTALL AND REMOVE "A" FRAME ON UTILITY POLES	EA
	<i>At the following locations:</i>	
	F/O #97-24 Tahoe St.	
	F/O #137-32 94 St.	
	N/E/C Albert Rd. & 95 St.	
	Opp. #150-09 Huron St.	
	Total quantity for CET 351	= 4
CET 353E	SPECIAL CARE OPERATION - TREE PRUNING	EA
	<i>At the following locations:</i>	
	Various Locations	
	Total quantity for CET 353E	= 130
CET 400	TEST PITS FOR UTILITY FACILITIES	C.Y.
	<i>At the following locations:</i>	
	Various Locations	
	Total quantity for CET 400	= 40
CET 401	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITIES	C.Y.
	<i>At the following locations:</i>	
	N/S Linden Blvd., E/O 95 St.	
	5' E/W/C Centreville St., 57' N/N/C North Conduit Ave.	
	N/S Linden Blvd., E/O Crossbay Blvd.	
	N/S Albert Rd., W/O 94 St.	
	W/S Centreville St., N/O North Conduit Ave	
	W/S Centreville St., N/O 150 Rd.	
	AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE	
	Total quantity for CET 401	= 91

**CON EDISON SCOPE OF WORK
SUPPORT AND PROTECTION
HWQ-411B**

CET 402.2 **EXISTING OCCUPIED NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION W/O CONCRETE ENCASEMENT** **L.F.**

At the following locations:

N/S Linden Blvd., E/O 95 St.
5" E/W/C Centreville St., 57' N/N/C North Conduit Ave.
N/S Linden Blvd., E/O Crossbay Blvd.
N/S Albert Rd., W/O 94 St.
W/S Centreville St., N/O North Conduit Ave
W/S Centreville St., N/O 150 Rd.
AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE

Total quantity for CET 402.2 = 740

CET 500 **REMOVAL OF ABANDONED UTILITY CONDUITS (NON-CONCRETE ENCASED)** **L.F.**

At the following locations:

Int. @ Linden Blvd & 97th St.
Int. @ Albert Rd. & Huron Street
AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE

Total quantity for CET 500 = 1,080

CET 501 **REMOVAL OF ABANDONED MASONRY FOR ELEC. AND TEL. FACILITIES** **C.Y.**

At the following locations:

5'-4" S/N/C Linden Blvd., 10' W/W/C 96th Pl.
W/C 95th Street, N/O Linden Blvd
W/C 96th Street, N/O Linden Blvd
N/C Linden Blvd, W/O 97th Street
W/C 97th Street, N/O Linden Blvd
W/C Hawtree Street, N/O Linden Blvd
N/C Albert Rd., Btwn 99th Place and Cohancy Street
N/C Albert Rd., Btwn 99th Place and Cohancy Street
N/C Linden Blvd., E/O 96th Place
N/W/C Linden Blvd. & 96th Place
N/C Albert Rd., W/O Huron Street
N/C Albert Rd., Btwn 99th Place and Cohancy Street
AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE

Total quantity for CET 501 = 99

CON EDISON SCOPE OF WORK
SUPPORT AND PROTECTION
HWQ-411B

CET 600.1	INSTALL CONDUIT IN UNPAVED AREA (1 EA. 2", 4" OR 5" CONDUIT - ALL TYPES)	L.F.
	<i>At the following locations:</i>	
	Various Locations	
	AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE	
	Total quantity for CET 600.1 = 500	
CET 601.1	INSTALL CONDUIT IN PAVED AREA (1 EA. 2", 4" OR 5" CONDUIT - ALL TYPES)	L.F.
	<i>At the following locations:</i>	
	Various Locations	
	AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE	
	Total quantity for CET 601.1 = 200	
CET 636 EC RD	ADJUSTMENT OF UTILITY HARDWARE IN ROADWAY (14" TO UNDER 30" WIDTH)	EA
	<i>At the following locations:</i>	
	5" E/W/C Centreville St., 57' N/N/C North Conduit Ave.	
	4'-2" E/W/C Centreville St., 73' S/S/C Albert Rd.	
	N/W/C Hawtree St. & 135th Rd.	
	N/W/C Albert Rd & Cohancy St	
	3'-2" E/W/C Centreville St., 90' N/N/C 150th Rd.	
	AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE	
	Total quantity for CET 636 EC R = 5	

CON EDISON SCOPE OF WORK
SUPPORT AND PROTECTION
HWQ-411B

CET 636 ED RD ADJUSTMENT OF UTILITY HARDWARE IN ROADWAY (30" TO UNDER 34" WIDTH)

EA

At the following locations:

3' S/N/C Linden Blvd, 46' E/E/C Cross Bay Blvd.
3'-8" S/N/C Linden Blvd., 38' W/W/C 95 St.
N/W/C Linden Blvd & 95th St.
N/W/C Linden Blvd & 96th St.
2'-6" S/N/C Linden Blvd., 32' E/E/C 96th St.
2'-7" E/W/C Hawtree St., 80' N/N/C 135th Rd
N/S Albert Rd., 55' W/W/C 99th Place
5'-9" S/N/C Linden Blvd, 160' E/E/C 97th St.
3' S/N/C Pitkin Ave, 50' E/E/C Cross Bay Blvd.
3' S/N/C Pitkin Ave, 110' E/E/C Cross Bay Blvd.
N/W/C Centreville & 150th Rd.
3'-8" E/W/C Hawtree St., 25' S/S/C 135th Rd.
W/S Hawtree St, S/O Linden Blvd
N/E/C North Conduit Ave & Centreville St
AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE

Total quantity for CET 636 ED R = 14

CET 636 ED SW ADJUSTMENT OF UTILITY HARDWARE IN SIDEWALK (30" TO UNDER 34" WIDTH)

EA

At the following locations:

Crossbay Blvd & Albert Road
S/S/C Albert Rd., E/O 95th St.
1'-8" S/S/C Albert Road, W/W/C Tahoe Street
AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE

Total quantity for CET 636 ED S = 3

**CON EDISON SCOPE OF WORK
SUPPORT AND PROTECTION
HWQ-411B**

CET 636 EE RD ADJUSTMENT OF UTILITY HARDWARE IN ROADWAY (34" TO UNDER 41" WIDTH)

EA

At the following locations:

N/E/C Linden Blvd. & Cross Bay Blvd.
2' S/N/C Linden Blvd., 2' E/W/C 94 St.
6'-6" S/N/C Linden Blvd., 38' E/E/C Hawtree St.
N/W/C Linden Blvd. & Hawtree St.
7'-7" S/N/C Albert Rd., 118' E/E/C 95th St.
2'-4" S/N/C Albert Rd., 72' W/W/C Centreville St.
1'-8" S/N/C Albert Rd., 95' W/W/C Huron St.
5'-4" S/N/C Linden Blvd., 10' 96th Pl.

AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE

Total quantity for CET 636 EE R = 8

CET 636 EE SW ADJUSTMENT OF UTILITY HARDWARE IN SIDEWALK (34" TO UNDER 41" WIDTH)

EA

At the following locations:

3'-6" S/S/C Albert Rd., 60' E/E/C 94th St.

AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE

Total quantity for CET 636 EE S = 1

CET 700 SPECIAL MOD. OF WORK METHODS TO ACCOMM./ PROTECT U.G. FACILITIES WITH LIMITED COVER

C.Y.

At the following locations:

N/S Linden Blvd., Btwn 95 St & 96 St.
S/S Albert Rd. Btwn Tahoe St & Huron St.
3' S/N/C Linden Blvd, 46' E/E/C Cross Bay Blvd.
7'-7" S/N/C Albert Rd., 118' W/W/C 95th St.
3'-3" E/W/C Hawtree Street, 40' S/S/C Linden Blvd
N/S Linden Blvd., 40' W/W/C Hawtree St.

N/S Pitkin Avenue, Between Cross Bay Blvd and 94th Street

AS SHOWN ON CONTRACT DRAWINGS AND DIRECTED BY A CON EDISON REP.

Total quantity for CET 700 = 571

CON EDISON SCOPE OF WORK
SUPPORT AND PROTECTION
HWQ-411B

CET 781 REMOVABLE CURB SIDEWALK PANEL FOR ACCESS TO UTILITY STRUCTURE OPENINGS EA

At the following locations:

N/S Linden Blvd., E/O Crossbay Blvd.

N/S Linden Blvd., E/O 96 St.

N/S Linden Blvd, W/O 95th St

N/S Linden Blvd., W/O Hawtree Street

W/C Hawtree Street, S/O Linden Blvd

AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE

Total quantity for CET 781 = 5

CON EDISON SCOPE OF WORK
SUPPORT AND PROTECTION
HWQ-411B

CET 802A

SPECIAL MODIFICATION OF WORK FOR INSTALLATION OF NEW SIDEWALKS

S.F.

At the following locations:

F/O #94-20 Linden Blvd.
F/O #96-10 Linden Blvd.
F/O #96-30 Linden Blvd.
F/O #96-36 Linden Blvd.
F/O #97-16 Linden Blvd.
F/O #97-18 Linden Blvd.
F/O# 97-28 135 Rd.
F/O Gas Station On Pitkin Ave, E/O Cross Bay Blvd.
Opp. Station On Pitkin Ave, E/O Cross Bay Blvd.
F/O#94-03 Pitkin Ave
F/O#94-02 Pitkin Ave
F/O#94-09 Pitkin Ave
F/O#94-10 Pitkin Ave
F/O#96-39 Pitkin Ave
F/O#96-07 149 Ave.
F/O#96-08 149 Ave.
F/O#96-15 149 Ave.
F/O#96-16 149 Ave.
F/O#96-35 149 Ave.
F/O#93-36 149 Ave.
F/O #97-55 Eckford Ave
Opp #94-20 Albert Rd.
F/O #94-20 Albert Rd.
Opp # 94-08 Albert Rd.
F/O# 137-32 94 St.
F/O#137-33 94 St.
F/O#137-13 94 St.
F/O#137-38 95 St.
F/O#137-30 95 St.
F/O#137-31 96 St.
F/O#137-15 96 St.
F/O#137-32 96 Pl.
F/O#136-16 96 Pl.
F/O#135-28 96 Pl.
F/O #137-36 97 St.
F/O #137-34 97 St.
F/O #137-26 97 St.

CON EDISON SCOPE OF WORK
SUPPORT AND PROTECTION
HWQ-411B

F/O #137-20 97 St.
S/W/C 150 Rd. & Centreville St.
Opp #150-21 Centreville St.
F/O # 150-21 Centreville St.
F/O #150-17 Centreville St.
F/O #150-15 Centreville St.
F/O #150-09 Centreville St.
F/O #150-05 Centreville St.
Opp #149-19 Centreville St.
Opp. #138-39 Centreville St.
F/O # 150-16 Tahoe St.
F/O # 150-17 Tahoe St.
Opp #135-31 Hawtree St.
F/O #135-31 Hawtree St.
F/O #135-09 Hawtree St.

AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE

Total quantity for CET 802A = 780

CON EDISON SCOPE OF WORK
SUPPORT AND PROTECTION
HWQ-411B

CET 802B

SPECIAL MODIFICATION OF WORK FOR INSTALLATION OF NEW CURBS

L.F.

At the following locations:

F/O # 94-21 Linden Blvd.
F/O #94-20 Linden Blvd.
F/O #93-11 Linden Blvd.
F/O #96-11 Linden Blvd.
F/O #96-10 Linden Blvd.
F/O #96-17 Linden Blvd.
F/O #96-30 Linden Blvd.
F/O #96-25 Linden Blvd.
F/O #96-36 Linden Blvd.
F/O #97-17 Linden Blvd.
F/O #97-16 Linden Blvd.
F/O #97-18 Linden Blvd.
F/O #97-27 Linden Blvd.
F/O # 97-28 Linden Blvd.
F/O# 97-27 135 Rd.
F/O# 97-28 135 Rd.
F/O Gas Station On Pitkin Ave, E/O Cross Bay Blvd.
Opp. Station On Pitkin Ave, E/O Cross Bay Blvd.
F/O#94-03 Pitkin Ave
F/O#94-02 Pitkin Ave
F/O#94-09 Pitkin Ave
F/O#94-10 Pitkin Ave
F/O#96-39 Pitkin Ave
F/O#13-38 Linden Blvd.
F/O#96-07 149 Ave.
F/O#96-08 149 Ave.
F/O#96-15 149 Ave.
F/O#96-16 149 Ave.
F/O#96-35 149 Ave.
F/O#93-36 149 Ave.
Proposed Cul-de-sace On Albert Rd.
Proposed Cul-de-sace On Albert Rd.
S/C Albert Rd., Opp. 94 St.
Opp #94-20 Albert Rd.
F/O #94-20 Albert Rd.
Int @ S/C Albert Rd. & 95 St.
Opp # 94-08 Albert Rd.

CON EDISON SCOPE OF WORK
SUPPORT AND PROTECTION
HWQ-411B

Int @ S/C Albert Rd. & Centreville St.
N/C Albert Rd., 70' W/W/C Centreville St.
N/C Albert Rd., 90' W/W/C Huron St.
Int @ S/C Albert Rd. & Tahoe St.
Int @ S/C Albert Rd. & Raleigh St.
N/C Albert Rd., 105' E/E/C 99 Pl.
F/O# 97-31 Linden Blvd.
F/O# 93-14 Albert Rd.
F/O# 137-32 94 St.
F/O#137-33 94 St.
F/O#137-14 94 St.
F/O#137-13 94 St.
F/O#135-46 94 St.
F/O#137-39 95 St.
F/O#137-38 95 St.
F/O#137-33 95 St.
F/O#137-30 95 St.
F/O#137-25 95 St.
F/O#137-31 96 St.
F/O#137-32 96 St.
F/O#137-14 96 St.
F/O#137-15 96 St.
F/O#137-33 96 Pl.
F/O#137-32 96 Pl.
F/O#137-17 96 Pl.
F/O#136-16 96 Pl.
F/O#135-29 96 Pl.
F/O#135-28 96 Pl.
F/O#135-19 96 Pl.
Opp. #137-36 97 St.
Opp. #137-28 97 St.
Opp. #137-20 97 St.
F/O #137-36 97 St.
F/O #137-34 97 St.
F/O #137-26 97 St.
F/O #137-20 97 St.
S/W/C 150 Rd. & Centreville St.
Opp #150-21 Centreville St.
F/O # 150-21 Centreville St.

CON EDISON SCOPE OF WORK
SUPPORT AND PROTECTION
HWQ-411B

F/O #150-17 Centreville St.
F/O #150-15 Centreville St.
F/O #150-09 Centreville St.
F/O #150-05 Centreville St.
F/O #149-19 Centreville St.
Opp #149-19 Centreville St.
Opp. #138-39 Centreville St.
F/O # 150-16 Tahoe St.
F/O # 150-17 Tahoe St.
F/O # 150-31 99 Pl.
F/O #150-23 99 Pl.
Opp #135-31 Hawtree St.
F/O #135-31 Hawtree St.
F/O #135-09 Hawtree St.
Opp #135-09 Hawtree St.
N/W/C Linden Blvd. & 97 St.
N/W/C Linden Blvd & Hawtree St.
Opp. #97-55 Eckford Ave
F/O #97-55 Eckford Ave
AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE

Total quantity for CET 802B = 1,184

CET 1006V 6" VERTICAL OR ROLLED WATER MAIN OFFSET EA

At the following locations:

N/S Linden Blvd., 53' E/E/C Crossbay Blvd
F/O #94-09 Linden Blvd
F/O # 95-09 Linden Blvd
Albert Rd & 94th St
F/O #97-23 Linden Blvd

AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE

Total quantity for CET 1006V = 5

CON EDISON SCOPE OF WORK
SUPPORT AND PROTECTION
HWQ-411B

CET 1008V

8" VERTICAL OR ROLLED WATER MAIN OFFSET

EA

At the following locations:

N/S Albert Rd., 115' E/E/C Crossbay Blvd.

N/W/C Linden Blvd & 95th St.

N/W/C Linden Blvd & 97th St.

Int. @ Linden Blvd & 96th Street

AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE

Total quantity for CET 1008V = 4

SECTION U WORKSHEET**HWQ411B****FOR INFORMATION ONLY****ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE****FOR VERIZON****ALBERT ROAD****BOROUGH OF QUEENS**

CET ITEM NUMBER	DESCRIPTION	Unit of Measure	Estimated Quantity
CET 100.1	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .1)	EA.	4.00
CET 100.2	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .2)	EA.	4.00
CET 100.3	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .3)	EA.	1.00
CET 101.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .1)	EA.	2.00
CET 101.2	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .2)	EA.	4.00
CET 101.3	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .3)	EA.	1.00
CET 102.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .1)	EA.	1.00
CET 108.1	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .1)	EA.	11.00
CET 108.2	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .2)	EA.	1.00
CET 108.3	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .3)	EA.	1.00
CET 200.1	EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTION PIPES	L.F.	145.00
CET 225.1B	INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES	EA.	7.00
CET 225.1C	REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	EA.	1.00
CET 300	SPECIAL CARE EXCAVATION & BACKFILLING	C.Y.	20.00
CET 330T	SUPPORT & PROTECTION OF COMMUNICATION UTILITY FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE IN OR CLOSE PROXIMITY TO TRENCH LIMITS	L.F.	160.00
CET 350	OVERHEAD ACCOMMODATION, PROTECTION OF OH FACILITIES & APPURTENANCES	L.S.	1.00
CET 351	INSTALL AND REMOVE "A" FRAMES ON UTILITY POLES	EA.	1.00
CET 400	TEST PITS	C.Y.	30.00
CET 401	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITIES	C.Y.	430.00
CET 402T.1A	EXIST. OCCUPIED CONCR. ENCASED CONDUITS PLCD. IN FINAL POS. WITH CONCR. ENCSMNT.	L.F.	540.00
CET 402T.V1A	EXIST. VACANT CONCR. ENCASED CONDUITS PLCD. IN FINAL POS. WITH CONCR. ENCSMNT.	L.F.	50.00

SECTION U WORKSHEET

HWQ411B

FOR INFORMATION ONLY

ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE

FOR VERIZON

ALBERT ROAD

BOROUGH OF QUEENS

CET ITEM NUMBER	DESCRIPTION	Unit of Measure	Estimated Quantity
CET 402T.2	EXIST. OCCUPIED NON-CONCR. ENCASED CONDUITS PLCD. IN FINAL POS. WITHOUT CONCR. ENCSMNT.	L.F.	750.00
CET 402T.2A	EXIST. OCCUPIED NON-CONCR. ENCASED CONDUITS PLCD. IN FINAL POS. WITH CONCR. ENCSMNT.	L.F.	50.00
CET 403	PLACING STEEL PROTECTION PLATES FOR UTILITIES	S.F.	50.00
CET 500	REMOVAL OF ABANDONED UTILITY CONDUITS (NON-CONCRETE ENCASED)	L.F.	50.00
CET 636 EE RD	ADJUSTMENT OF UTILITY HARWARE (34" TO UNDER 41" WIDTH) IN ROADWAY	EA.	3.00
CET 636 MD	ADJUSTMENT OF UTILITY HARWARE (34" TO UNDER 41" WIDTH) IN SIDEWALK	EA.	2.00
CET 700	SPECIAL MOD. OF WORK MTHDS TO ACCOM./PROTECT U.G. FACIL. W. LMTD CVR.	C.Y.	220.00
CET 711	USE SHEETING LINE AS FORM	L.F.	20.00
CET 802A	SPECIAL CARE EXCAVATION AND RESTORATION FOR SIDEWALK	S.F.	480.00
CET 802B	SPECIAL CARE EXCAVATION AND RESTORATION FOR CURB WORK	L.F.	60.00
CET 1008V	8" VERTICAL OR ROLLED WATER MAIN OFFSET	EA.	5.00
CET 1012V	12" VERTICAL OR ROLLED WATER MAIN OFFSET	EA.	1.00

VERIZON CET SCOPE OF WORK

SUPPORT & PROTECTION

HWO411B

ALBERT ROAD

BOROUGH OF QUEENS

CET 100.1 UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .1) EA.

At the following locations:

LINDEN BLVD. BETWEEN CROSS BAY BLVD. AND 94TH STREET 2.00
E/S 94TH STREET S/O LINDEN BLVD. 1.00
LINDEN BLVD. BETWEEN 94TH STREET AND 95TH STREET 1.00

Total quantity for CET 100.1 = 4.00

CET 100.2 UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .2) EA.

At the following locations:

LINDEN BLVD. BETWEEN CROSS BAY BLVD. AND 94TH STREET 3.00
LINDEN BLVD. BETWEEN 94TH STREET AND 95TH STREET 1.00

Total quantity for CET 100.2 = 4.00

CET 100.3 UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .3) EA.

At the following locations:

AS ENCOUNTERED OR DIRECTED BY VERIZON FIELD REPRESENTATIVE 1.00

Total quantity for CET 100.3 = 1.00

CET 101.1 UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .1) EA.

At the following locations:

E/S 94TH STREET S/O LINDEN BLVD. 1.00
ALBERT ROAD INT. OF 97TH STREET 1.00

Total quantity for CET 101.1 = 2.00

CET 101.2 UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .2) EA.

At the following locations:

INTERSECTION OF LINDEN BLVD. AND 95TH STREET 1.00
INTERSECTION OF LINDEN BLVD. AND 96TH STREET 1.00
INTERSECTION OF LINDEN BLVD. AND 96TH PLACE 1.00
INTERSECTION OF LINDEN BLVD. AND 97TH STREET 1.00

Total quantity for CET 101.2 = 4.00

VERIZON CET SCOPE OF WORK
SUPPORT & PROTECTION
HWQ411B
ALBERT ROAD
BOROUGH OF QUEENS

CET 101.3 UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .3) EA.

At the following locations:

INTERSECTION OF LINDEN BLVD. AND 94TH STREET 1.00

Total quantity for CET 101.3 = 1.00

CET 102.1 UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .1) EA.

At the following locations:

INTERSECTION OF LINDEN BLVD. AND HAWTREE STREET 1.00

Total quantity for CET 102.1 = 1.00

CET 108.1 UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .1) EA.

At the following locations:

LINDEN BLVD. BETWEEN CROSS BAY BLVD. AND 94TH STREET 2.00

LINDEN BLVD. BETWEEN 96TH PLACE AND 97TH STREET 1.00

INTERSECTION OF ALBERT ROAD AND CROSS BAY BLVD. 1.00

ALBERT ROAD BETWEEN CROSS BAY BLVD. AND 94TH STREET 2.00

ALBERT ROAD BETWEEN 95TH STREET AND 96TH STREET 1.00

ALBERT ROAD INT. OF 97TH STREET 3.00

149TH AVENUE E/O CROSS BAY BOULEVARD 1.00

Total quantity for CET 108.1 = 11.00

CET 108.2 UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .2) EA.

At the following locations:

AS ENCOUNTERED OR DIRECTED BY VERIZON FIELD REPRESENTATIVE 1.00

Total quantity for CET 108.2 = 1.00

CET 108.3 UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .3) EA.

At the following locations:

INTERSECTION OF PITKIN AVENUE AND CROSS BAY BOULEVARD 1.00

Total quantity for CET 108.3 = 1.00

CET 200.1 EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTION PIPES L.F.

At the following locations:

LINDEN BLVD. BETWEEN CROSS BAY BLVD. AND 94TH STREET 45.00

LINDEN BLVD. BETWEEN 94TH STREET AND 95TH STREET 35.00

VERIZON CET SCOPE OF WORK

SUPPORT & PROTECTION

HWQ411B

ALBERT ROAD

BOROUGH OF QUEENS

LINDEN BLVD. BETWEEN 96TH STREET AND 96TH PLACE	25.00
LINDEN BLVD. BETWEEN 96TH PLACE AND 97TH STREET	20.00
LINDEN BLVD. BETWEEN 97TH STREET AND HAWTREE STREET	20.00

Total quantity for CET 200.1 = 145.00

CET 225.1B INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES **EA.**

At the following locations:

LINDEN BLVD. BETWEEN CROSS BAY BLVD. AND 94TH STREET	1.00
LINDEN BLVD. BETWEEN 94TH STREET AND 95TH STREET	1.00
LINDEN BLVD. BETWEEN 95TH STREET AND 96TH STREET	1.00
LINDEN BLVD. BETWEEN 96TH STREET AND 96TH PLACE	1.00
LINDEN BLVD. BETWEEN 96TH PLACE AND 97TH STREET	1.00
LINDEN BLVD. BETWEEN 97TH STREET AND HAWTREE STREET	1.00
ALBERT ROAD INT. OF 97TH STREET	1.00

Total quantity for CET 225.1B = 7.00

CET 225.1C REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES **EA.**

At the following locations:

LINDEN BLVD. BETWEEN 96TH STREET AND 96TH PLACE	1.00
---	------

Total quantity for CET 225.1C = 1.00

CET 300 SPECIAL CARE EXCAVATION & BACKFILLING **C.Y.**

At the following locations:

AS ENCOUNTERED OR DIRECTED BY VERIZON FIELD REPRESENTATIVE	20.00
--	-------

Total quantity for CET 300 = 20.00

CET 330T SUPPORT & PROTECTION OF COMMUNICATION UTILITY FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE IN OR CLOSE PROXIMITY TO TRENCH LIMITS **L.F.**

At the following locations:

INTERSECTION OF CROSS BAY BLVD. AND LINDEN BLVD.	10.00
INTERSECTION OF CROSS BAY BLVD. AND PITKIN AVENUE	10.00
ALBERT ROAD INT. OF 97TH STREET	140.00

Total quantity for CET 330T = 160.00

VERIZON CET SCOPE OF WORK
SUPPORT & PROTECTION
HWQ411B
ALBERT ROAD
BOROUGH OF QUEENS

CET 350	OVERHEAD ACCOMMODATION, PROTECTION OF OH FACILITIES & APPURTENANCES	L.S.
	At the following locations:	
	AS ENCOUNTERED OR DIRECTED BY VERIZON FIELD REPRESENTATIVE	1.00
	Total quantity for CET 350 = 1.00	
CET 351	INSTALL AND REMOVE "A" FRAMES ON UTILITY POLES	EA.
	At the following locations:	
	AS ENCOUNTERED OR DIRECTED BY VERIZON FIELD REPRESENTATIVE	1.00
	Total quantity for CET 351 = 1.00	
CET 400	TEST PITS	C.Y.
	At the following locations:	
	AS ENCOUNTERED OR DIRECTED BY VERIZON FIELD REPRESENTATIVE	30.00
	Total quantity for CET 400 = 30.00	
CET 401	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITIES	C.Y.
	At the following locations:	
	LINDEN BOULEVARD BETWEEN 94TH STREET AND 95TH STREET	50.00
	LINDEN BOULEVARD BETWEEN 95TH STREET AND 96TH STREET	140.00
	ALBERT ROAD BETWEEN CROSS BAY BLVD. AND 94TH STREET	170.00
	ALBERT ROAD INT. OF 97TH STREET	40.00
	AS ENCOUNTERED OR DIRECTED BY VERIZON FIELD REPRESENTATIVE	30.00
	Total quantity for CET 401 = 430.00	
CET 402T.1A	EXIST. OCCUPIED CONCR. ENCASED CONDUITS PLCD. IN FINAL POS. WITH CONCR. ENCSMNT.	L.F.
	At the following locations:	
	LINDEN BOULEVARD BETWEEN 95TH STREET AND 96TH STREET	540.00
	Total quantity for CET 402T.1A = 540.00	
ET 402T.V1A	EXIST. VACANT CONCR. ENCASED CONDUITS PLCD. IN FINAL POS. WITH CONCR. ENCSMNT.	L.F.
	At the following locations:	
	AS ENCOUNTERED OR DIRECTED BY VERIZON FIELD REPRESENTATIVE	50.00
	Total quantity for CET 402T.V1A = 50.00	

VERIZON CET SCOPE OF WORK

SUPPORT & PROTECTION

HWQ411B

ALBERT ROAD

BOROUGH OF QUEENS

CET 402T.2 EXIST. OCCUPIED NON-CONCR. ENCASED CONDUITS PLCD. IN FINAL POS. WITHOUT CONCR. ENCSMNT. L.F.

At the following locations:

LINDEN BOULEVARD BETWEEN 94TH STREET AND 95TH STREET 60.00
ALBERT ROAD BETWEEN CROSS BAY BLVD. AND 94TH STREET 600.00
ALBERT ROAD INT. OF 97TH STREET 90.00

Total quantity for CET 402T.2 = 750.00

CET 402T.2A EXIST. OCCUPIED NON-CONCR. ENCASED CONDUITS PLCD. IN FINAL POS. WITH CONCR. ENCSMNT. L.F.

At the following locations:

AS ENCOUNTERED OR DIRECTED BY VERIZON FIELD REPRESENTATIVE 50.00

Total quantity for CET 402T.2A = 50.00

CET 403 PLACING STEEL PROTECTION PLATES FOR UTILITIES S.F.

At the following locations:

AS ENCOUNTERED OR DIRECTED BY VERIZON FIELD REPRESENTATIVE 50.00

Total quantity for CET 403 = 50.00

CET 500 REMOVAL OF ABANDONED UTILITY CONDUITS (NON-CONCRETE ENCASED) L.F.

At the following locations:

AS ENCOUNTERED OR DIRECTED BY VERIZON FIELD REPRESENTATIVE 50.00

Total quantity for CET 500 = 50.00

CET 636 ED RD ADJUSTMENT OF UTILITY HARWARE (34" TO UNDER 41" WIDTH) IN ROADWAY EA.

At the following locations:

LINDEN BLVD. BETWEEN 94TH STREET AND 95TH STREET 1.00
LINDEN BLVD. BETWEEN 95TH STREET AND 96TH STREET 1.00
LINDEN BLVD. BETWEEN 96TH PLACE AND 97TH STREET 1.00

Total quantity for CET 636 ED RD = 3.00

VERIZON CET SCOPE OF WORK

SUPPORT & PROTECTION

HWQ411B

ALBERT ROAD

BOROUGH OF QUEENS

CET 636 MD	MOD. OF METHODS TO ACCOMM. UTILITY STREET HRDW. DURING PAVE. MILL. AND RESURF. OPS (30" TO UNDER 34" WIDTH)	EA.
	At the following locations:	
	INTERSECTION OF CROSS BAY BLVD. AND LINDEN BLVD.	2.00
	Total quantity for CET 636 MD =	2.00
CET 700	SPECIAL MOD. OF WORK MTHDS TO ACCOM./PROTECT U.G. FACIL. W. LMTD CVR.	C.Y.
	At the following locations:	
	LINDEN BLVD. BETWEEN CROSS BAY BLVD. AND 94TH STREET	200.00
	LINDEN BLVD. BETWEEN 96TH PLACE AND 97TH STREET	20.00
	Total quantity for CET 700 =	220.00
CET 711	USE SHEETING LINE AS FORM	L.F.
	At the following locations:	
	AS ENCOUNTERED OR DIRECTED BY VERIZON FIELD REPRESENTATIVE	20.00
	Total quantity for CET 711 =	20.00
CET 802A	SPECIAL CARE EXCAVATION AND RESTORATION FOR SIDEWALK	S.F.
	At the following locations:	
	LINDEN BLVD. BETWEEN CROSS BAY BLVD. AND 94TH STREET	15.00
	W/S 94TH STREET S/O LINDEN BLVD.	15.00
	LINDEN BLVD. BETWEEN 94TH STREET AND 95TH STREET	100.00
	LINDEN BLVD. BETWEEN 96TH PLACE AND 97TH STREET	25.00
	ALBERT ROAD BETWEEN CROSS BAY BLVD. AND 94TH STREET	125.00
	ALBERT ROAD BETWEEN 94TH STREET AND 95TH STREET	100.00
	ALBERT ROAD BETWEEN 95TH STREET AND 96TH STREET	100.00
	Total quantity for CET 802A =	480.00
CET 802B	SPECIAL CARE EXCAVATION AND RESTORATION FOR CURB WORK	L.F.
	At the following locations:	
	LINDEN BLVD. BETWEEN CROSS BAY BLVD. AND 94TH STREET	10.00
	W/S 94TH STREET S/O LINDEN BLVD.	5.00
	LINDEN BLVD. BETWEEN 94TH STREET AND 95TH STREET	5.00
	LINDEN BLVD. BETWEEN 96TH PLACE AND 97TH STREET	5.00
	ALBERT ROAD BETWEEN CROSS BAY BLVD. AND 94TH STREET	15.00
	ALBERT ROAD BETWEEN 94TH STREET AND 95TH STREET	10.00
	ALBERT ROAD BETWEEN 95TH STREET AND 96TH STREET	10.00
	Total quantity for CET 802B =	60.00

VERIZON CET SCOPE OF WORK
SUPPORT & PROTECTION
HWO411B
ALBERT ROAD
BOROUGH OF QUEENS

CET 1008V 8" VERTICAL OR ROLLED WATER MAIN OFFSET EA.

At the following locations:

AS ENCOUNTERED OR DIRECTED BY VERIZON FIELD REPRESENTATIVE 5.00

Total quantity for CET 1008V = 5.00

CET 1012V 12" VERTICAL OR ROLLED WATER MAIN OFFSET EA.

At the following locations:

AS ENCOUNTERED OR DIRECTED BY VERIZON FIELD REPRESENTATIVE 1.00

Total quantity for CET 1012V = 1.00

FOR INFORMATION ONLY
ENGINEER'S ESTIMATE OF QUANTITIES AND TYPES OF INTERFERENCE
TIME WARNER CABLE OF NEW YORK CITY
HWQ411B
Reconstruction of Albert Road Area
Borough of Queens

CET ITEM	DESCRIPTION	UNITS	ESTIMATED QUANTITY
100.1	UTILITIES CROSSING TRENCH FOR CB CHUTE CONNECTION	EA	2
101.1	UTILITIES CROSSING TRENCH FOR SEWERS UP TO & INCLUDING 24" DIAMETER	EA	2
108.1	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO & INCLUDING 12" DIAMETER	EA	6
330	SUPPORT AND PROTECTION OF UTILITY IN CITY TRENCH	LF	220
350	OVERHEAD ACCOMMODATION, PROTECTION OF OVERHEAD FACILITIES, POLES & APPURTENANCES	LS	1
500	REMOVAL OF ABANDONED UTILITY CONDUITS	LF	744
700	SPECIAL MODIFICATION OF WORK METHODS TO ACCOMMODATE/PROTECT UNDERGROUND FACILITIES WITH LIMITED COVER	CY	217
802A	SPECIAL CARE EXCAVATION & RESTORATION FOR SIDEWALK WORK	SF	80
802B	SPECIAL CARE EXCAVATION & RESTORATION FOR CURB WORK	LF	12

**TIME WARNER CABLE
SUPPORT & PROTECTION
HWQ411B
Reconstruction of Albert Road Area
Borough of Queens**

CET 100.1 UTILITIES CROSSING TRENCH FOR CB CHUTE CONNECTION	EA
At the following locations:	
SEC Pitkin Ave. & 94th Street	1
SEC Crossbay Blvd. & Pitkin Ave.	1
Total quantity for CET 100.1	2
 CET 101.1 UTILITIES CROSSING TRENCH FOR SEWERS UP TO & INCLUDING 24" DIAMETER	 EA
At the following locations:	
SEC Crossbay Blvd. & Pitkin Ave.	1
Pitkin Ave. Between 94th Street & 95th Street	1
Total quantity for CET 101.1	2
 CET 108.1 UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO & INCLUDING 12" DIAMETER	 EA
At the following locations:	
NEC Crossbay Blvd. & Pitkin Ave.	1
SWC Pitkin Ave. & 94th Street	1
N/S 149th Ave. Between Crossbay Blvd. & 94th Street	2
NWC North Conduit & Cohancy	1
NWC Pitkin Ave. & 95th Street	1
Total quantity for CET 108.1	6
 CET 330 SUPPORT AND PROTECTION OF UTILITY IN CITY TRENCH	 LF
At the following locations:	
N/S 149th Ave. Between Crossbay Blvd. & 94th Street	95
E/S Crossbay Blvd. N/O Albert Road	115
NWC North Conduit & Cohancy	10
Total quantity for CET 330	220
 CET 350 OVERHEAD ACCOMMODATION, PROTECTION OF OVERHEAD FACILITIES, POLES & APPURTENANCES	 LS
At the following locations:	
AS ENCOUNTERED	1
Total quantity for CET 350	1
 CET 500 REMOVAL OF ABANDONED UTILITY CONDUITS	 LF
At the following location:	
Linden Blvd. Between 97th Street & Hawtree Street	744
Total quantity for CET 500	744

Please contact John Piazza: 718-888-4261 or Jack Devine: 718-888-4242
prior to removal

CET 700	SPECIAL MODIFICATION OF WORK METHODS TO ACCOMMODATE/PROTECT UNDERGROUND FACILITIES WITH LIMITED COVER	CY
	At the following location:	
	Pitkin Ave. Between Crossbay Blvd. & 95th Street	148
	N/S 149th Ave. Between Crossbay Blvd. & 94th Street	33
	E/S Crossbay Blvd. N/O Albert Road	36
	Total quantity for CET 700	217

CET 802A	SPECIAL CARE EXCAVATION & RESTORATION FOR SIDEWALK WORK	SF
	At the following locations:	
	F/O 94-17 Pitkin Ave.	16
	SEC Crossbay Blvd. & Pitkin Ave.	64
	Total quantity for CET 802A	80

CET 802B	SPECIAL CARE EXCAVATION & RESTORATION FOR CURB WORK	LF
	At the following locations:	
	F/O 94-17 Pitkin Ave.	4
	SEC Crossbay Blvd. & Pitkin Ave.	4
	N/S 149th Ave. Between Crossbay Blvd. & 94th Street	4
	Total quantity for CET 802B	12

nationalgrid

287 Maspeth Avenue
Brooklyn, N.Y. 11211-1788

**Support & Protection
CONTRACT NO. HWQ411B
Albert Road
Borough of Queens**

CET Item Number	Description	Unit	Estimated Quantity
400	Test Pits	CY	100
636EA	Adjustment Of Utility Hardware (Under 7")	Each	300
636EB	Adjustment Of Utility Hardware (7" To 14")	Each	10
636EC	Adjustment Of Utility Hardware (14" To 30")	Each	10
700	Special Modification Of Work To Accommodate Utilities	CY	500
710.1	Removal of Abandoned Utility Steel/Cast Iron Pipes	LF	1000
802A	Special Care For Installation Of New Sidewalks	SF	1000
802B	Special Care For Installation Of New Curbs	LF	300

nationalgrid

287 Maspeth Avenue
Brooklyn, N.Y. 11211-1788

CET Item Number	Description
400	Excavation of Test Pits At the following locations: AS ENCOUNTERED AND REQUIRED BY NATIONAL GRID Quantity - 100 CY
636EA	Adjustment Of Utility Hardware (under 7" width) At the following locations: AS ENCOUNTERED AND REQUIRED BY NATIONAL GRID Quantity - 300 Ea.
636EB	Adjustment Of Utility Hardware (7" To 14") At the following locations: AS ENCOUNTERED AND REQUIRED BY NATIONAL GRID Quantity -10 Ea.
636EC	Adjustment Of Utility Hardware (14" To 30") At the following locations: AS ENCOUNTERED AND REQUIRED BY NATIONAL GRID Quantity -10 Ea
700	Special Modification Of Work To Accommodate Underground Utilities with Limited Cover At the following locations: AS ENCOUNTERED AND REQUIRED BY NATIONAL GRID Quantity - 500 CY
710.1	Removal of Abandoned Utility Steel/Cast Iron Pipes At the following locations: AS ENCOUNTERED AND REQUIRED BY NATIONAL GRID Quantity - 1000 LF
802A	Special Care For Installation Of New Sidewalks At the following locations: AS ENCOUNTERED AND REQUIRED BY NATIONAL GRID Quantity - 1000 SF
802B	Special Care For Installation Of New Curbs At the following locations: AS ENCOUNTERED AND REQUIRED BY NATIONAL GRID Quantity - 300 LF

SECTION U-3

(NO TEXT IN THIS SECTION)

TEST PITS

- (1) THESE TEST PITS DETAIL EXISTING CONDITIONS (AS OF BID DATE) OF UTILITIES AND OTHER SUBSURFACE FACILITIES AT LOCATIONS AS SHOWN ON THE TEST PIT LOCATIONS PLAN OF THE CONTRACT DRAWINGS.

- (2) DEPTHS OF FACILITIES ARE FROM EXISTING ROADWAY AND SIDEWALK ELEVATIONS AS SHOWN, OFFSETS ARE FROM EXISTING CURB, PROPERTY AND BUILDING LINES, AS SHOWN.

- (3) RELEVANT ITEMS ARE NOTED ON EACH TEST PIT DIAGRAM.

(NO TEXT IN THIS SECTION)



conEdison

JOB NO: HWQ-411B

TEST PIT # 1

PREPARED BY: C. ALUNAN

DATE: 10/14/10

CHECKED BY: A. IANNI

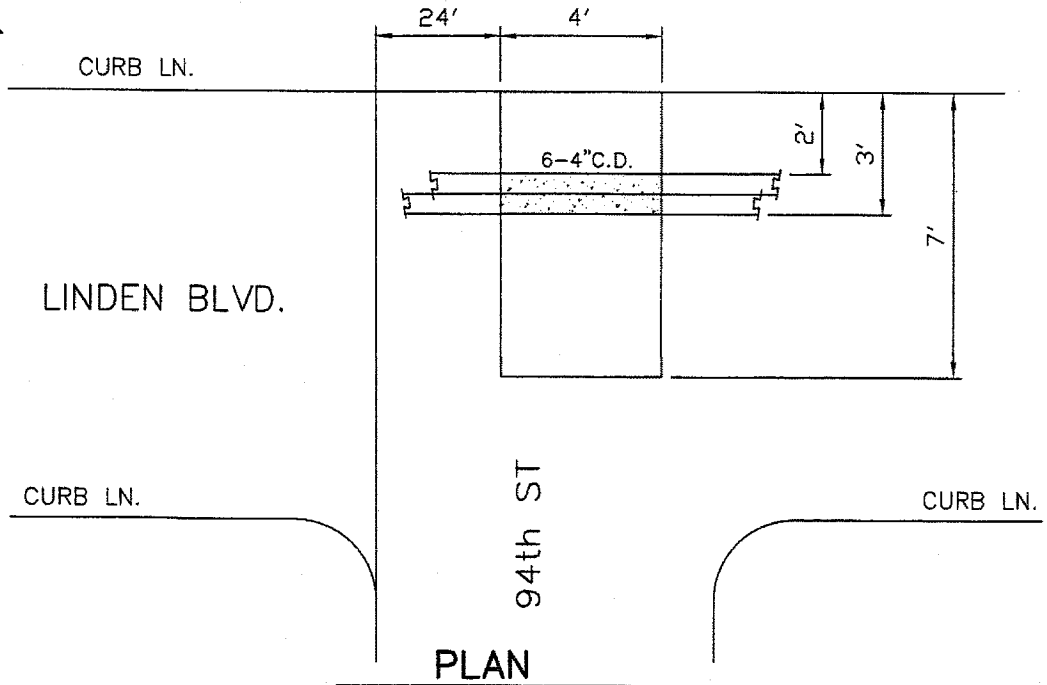
DATE: 10/14/10

JOB NAME: ALBERT ROAD

LOCATION: N/S LINDEN BLVD
& 94th STREET.

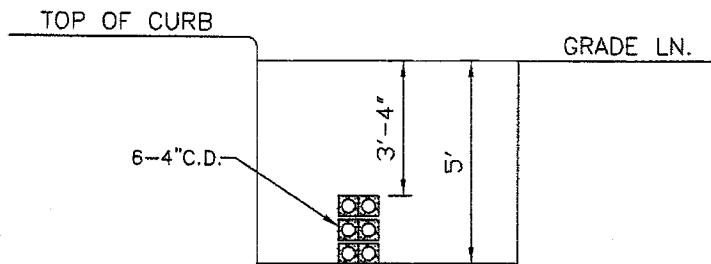
PURPOSE: CATCH BASIN

CONTRACT SHEET NO: 1 OF 33



PLAN

N.T.S.



PROFILE - LOOKING EAST

N.T.S.



JOB NO: HWQ-411B

TEST PIT # 1A

PREPARED BY: S. SOPAPHUN

DATE: 9/24/10

CHECKED BY: A. IANNI

DATE: 9/27/10

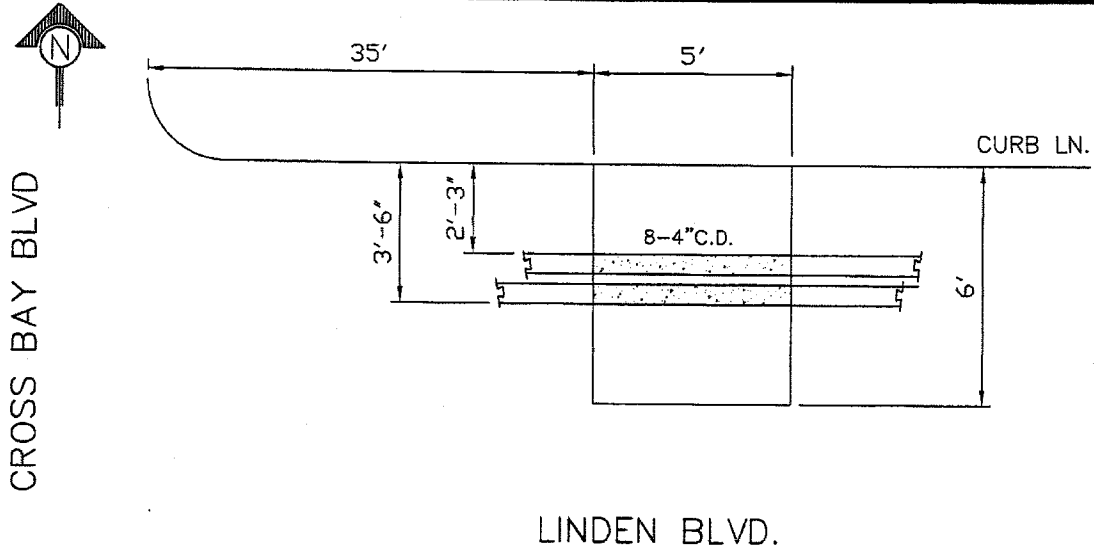
JOB NAME: ALBERT ROAD

LOCATION: N/S LINDEN BLVD

PURPOSE: CATCH BASIN

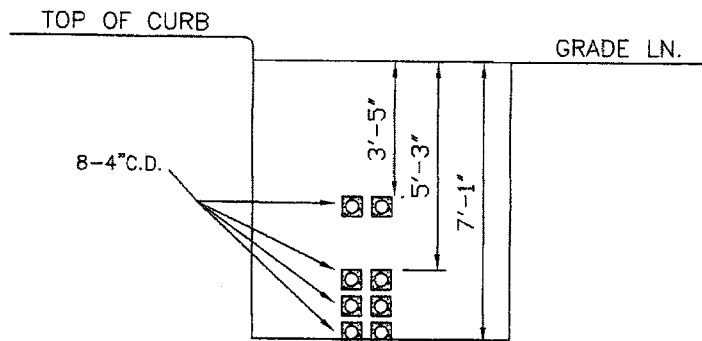
35' E/E/C CROSS BAY BLVD.

CONTRACT SHEET NO: 1 OF 33



PLAN

N.T.S.



PROFILE - LOOKING EAST

N.T.S.



JOB NO: HWQ-411B

TEST PIT # 7

PREPARED BY: C. ALUNAN

DATE: 10/14/10

CHECKED BY: A. IANNI

DATE: 10/14/10

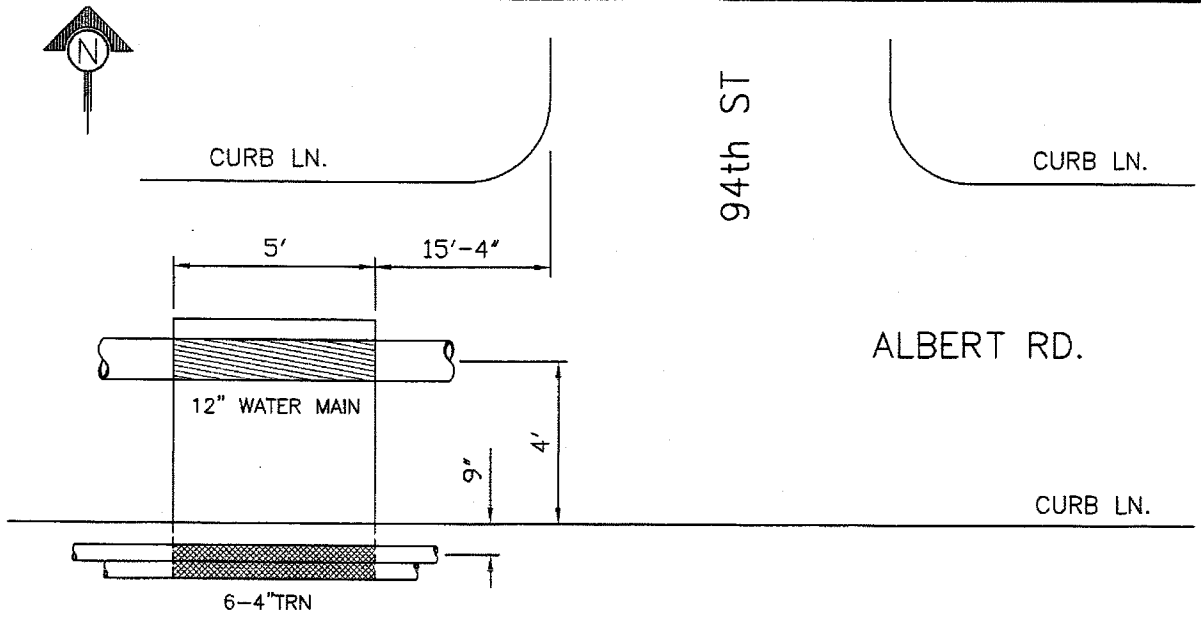
JOB NAME: ALBERT ROAD

LOCATION: S/S ALBERT RD.,

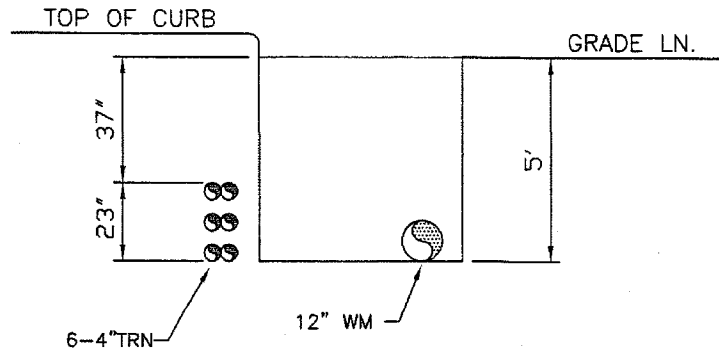
PURPOSE: CATCH BASIN

W/O 94th ST.

CONTRACT SHEET NO: 11 OF 33



PLAN
N.T.S.



PROFILE - LOOKING WEST
N.T.S.



JOB NO: HWQ-411B

TEST PIT # 8

PREPARED BY: C. ALUNAN

DATE: 10/14/10

CHECKED BY: A. IANNI

DATE: 10/14/10

JOB NAME: ALBERT ROAD

LOCATION: S/S ALBERT RD.,

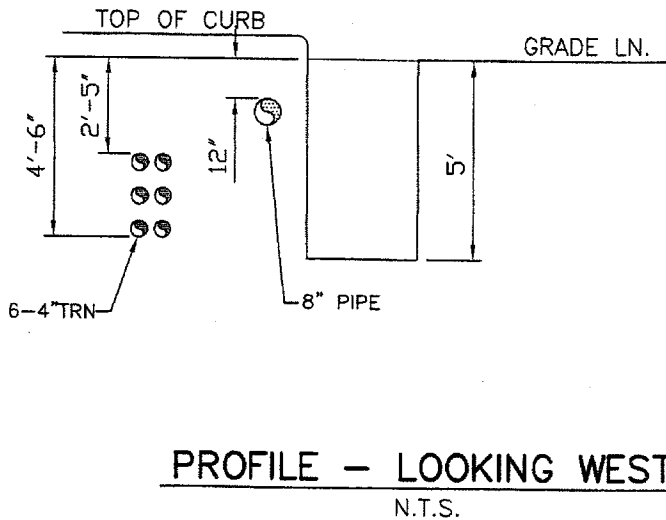
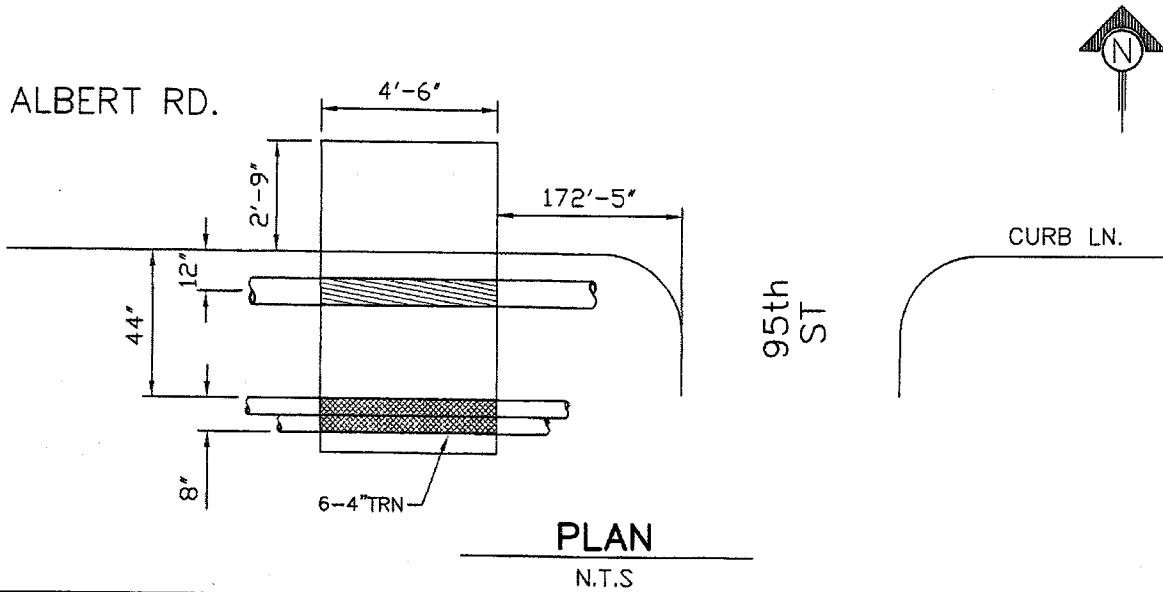
PURPOSE: CATCH BASIN

W/O 95th STREET

CONTRACT SHEET NO: 11 OF 33

CURB LN.

CURB LN.





JOB NO: HWQ-411B

TEST PIT # 18

PREPARED BY: C. ALUNAN

DATE: 10/14/10

CHECKED BY: A. IANNI

DATE: 10/14/10

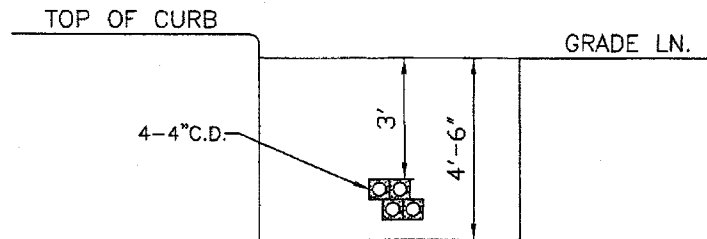
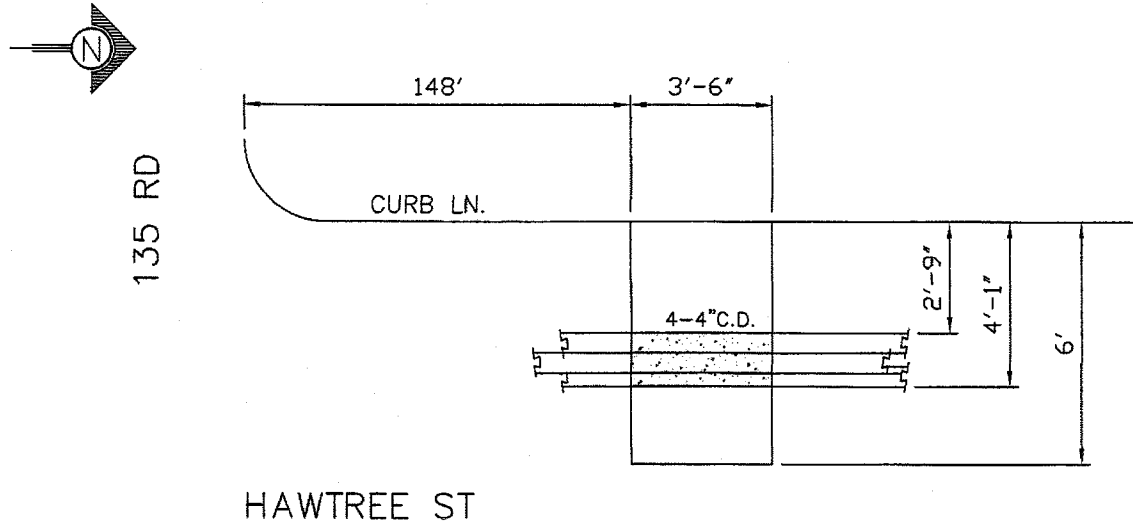
JOB NAME: ALBERT ROAD

LOCATION: W/S HAWTREE ST

PURPOSE: CATCH BASIN

N/O 135th RD.

CONTRACT SHEET NO: 8 OF 33





JOB NO: HWQ-411B

TEST PIT # 18A

PREPARED BY: S. SOPAPHUN

DATE: 9/27/10

CHECKED BY: A. IANNI

DATE: 9/27/10

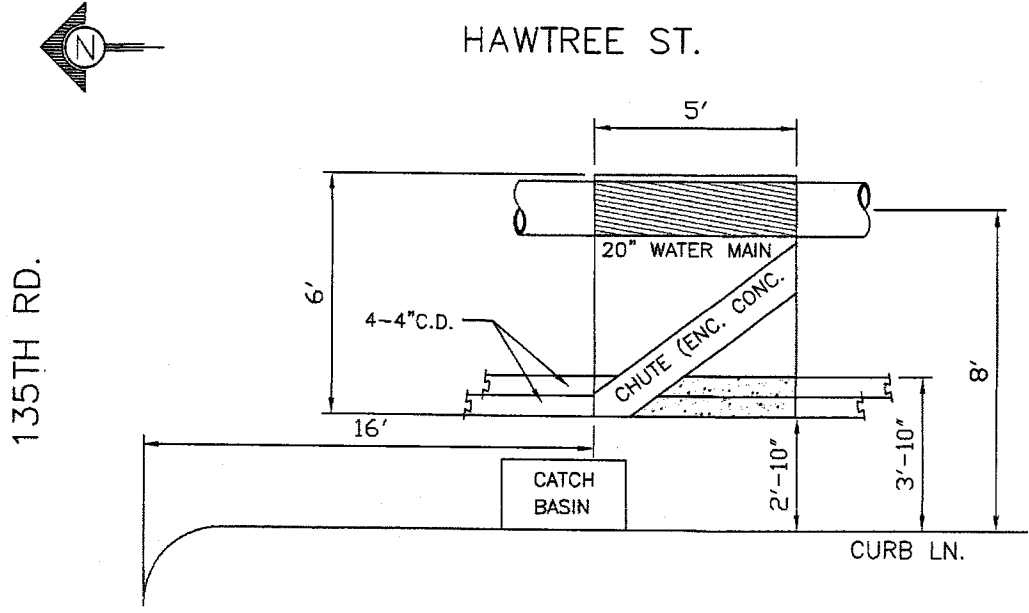
JOB NAME: ALBERT ROAD

LOCATION: W/S HAWTREE ST.

PURPOSE: CATCH BASIN

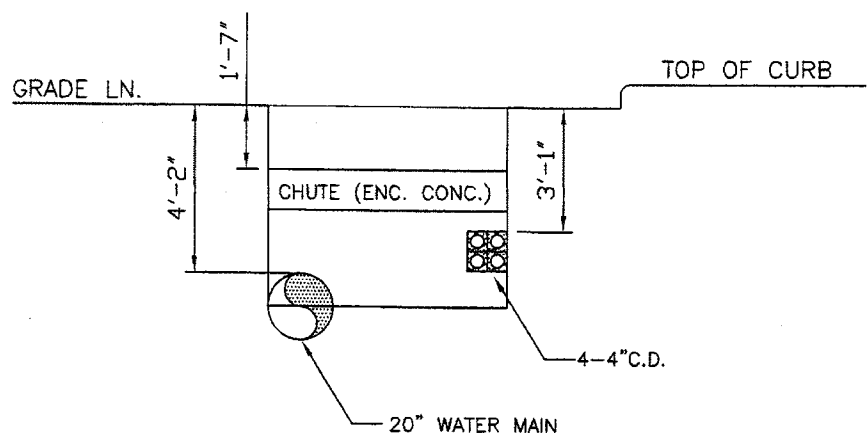
16' S/S/C 135TH RD.

CONTRACT SHEET NO: 8 OF 33



PLAN

N.T.S.



PROFILE - LOOKING NORTH

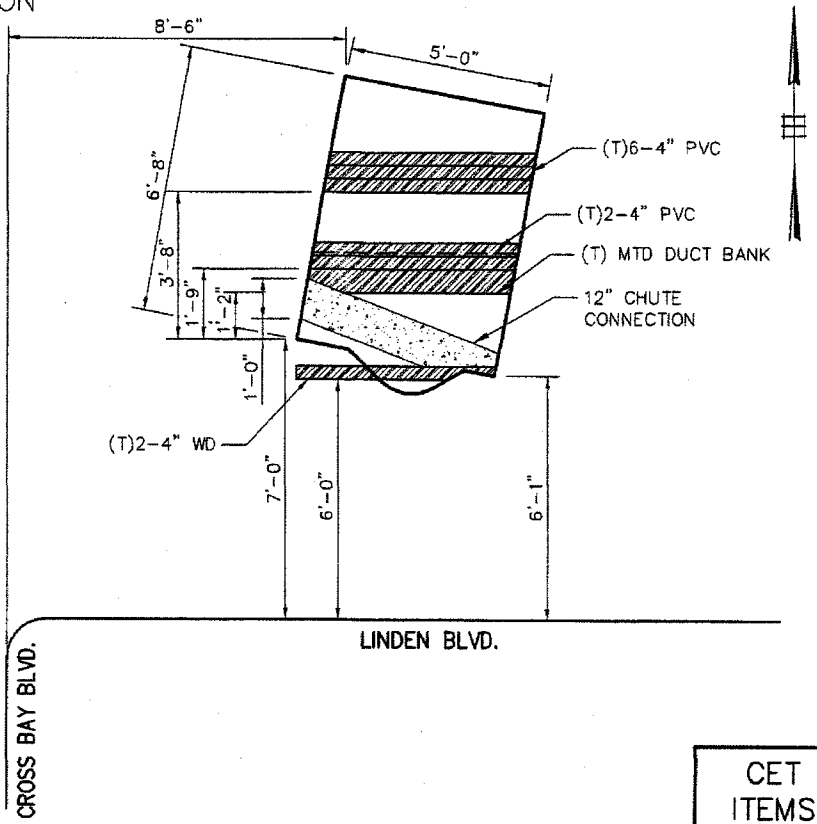
N.T.S.



JOB: RECONSTRUCTION OF ALBERT ROAD PREPARED BY: JEB DATE: 11/03/2010
JOB NO: HWQ-411B CHECKED BY: ML DATE: 11/09/2010

TEST PIT # 1 LOCATION: S/S LINDEN BLVD. EAST OF CROSS BAY BLVD.
PURPOSE: LOCATE FACILITIES

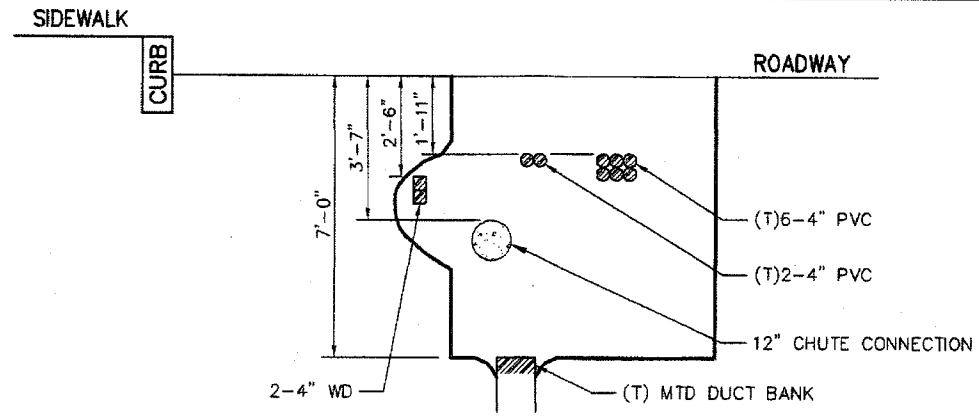
TEST PIT DIMENSION
5'-0" X 6'-8" X 7'-0"



NOTE:
1. ALL DRAWINGS SHOWING UTILITY SUPPORT AND PROTECT WORK ARE FOR REFERENCE ONLY.

PLAN

CET
ITEMS



SECTION LOOKING WEST



SHEET NO. 2 OF 6

JOB: RECONSTRUCTION OF ALBERT ROAD PREPARED BY: JEB DATE: 11/03/2010

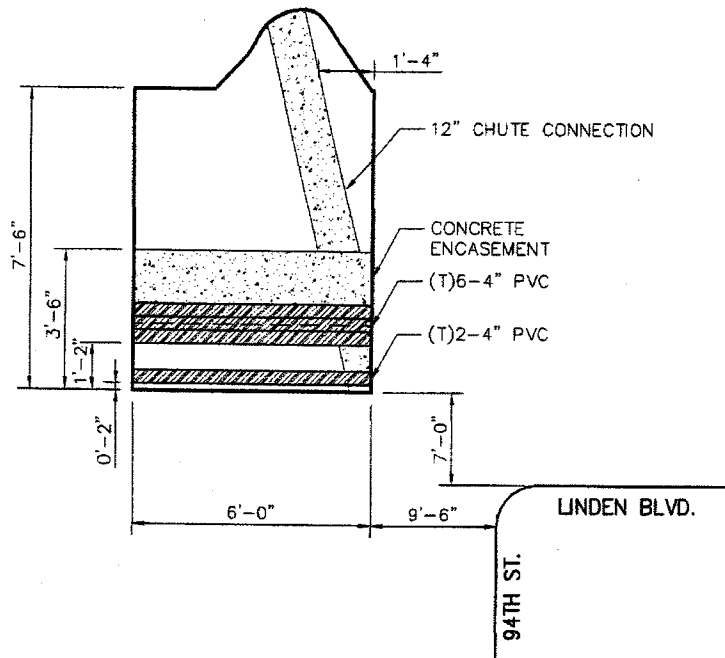
JOB NO: HWQ-411B CHECKED BY: ML DATE: 11/05/2010

TEST PIT # 2 LOCATION: INT. OF LINDEN BLVD. & 94TH STREET

PURPOSE: LOCATE FACILITIES

TEST PIT DIMENSION

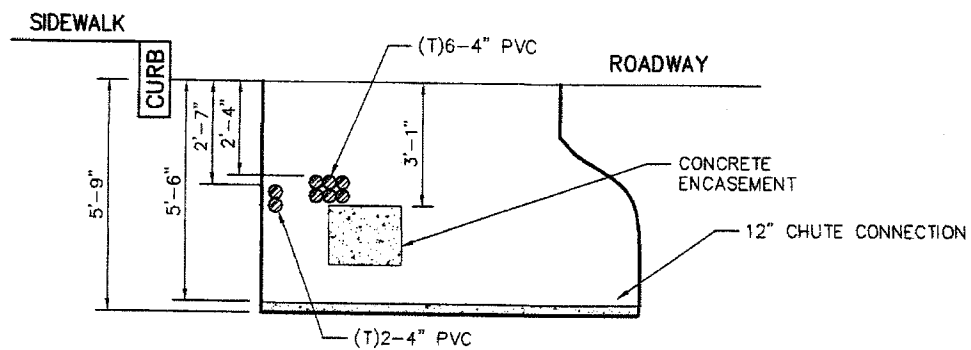
6'-0" X 7'-6" X 5'-9"



NOTE:
1. ALL DRAWINGS SHOWING UTILITY
SUPPORT AND PROTECT WORK ARE
FOR REFERENCE ONLY.

PLAN

CET
ITEMS



SECTION LOOKING WEST



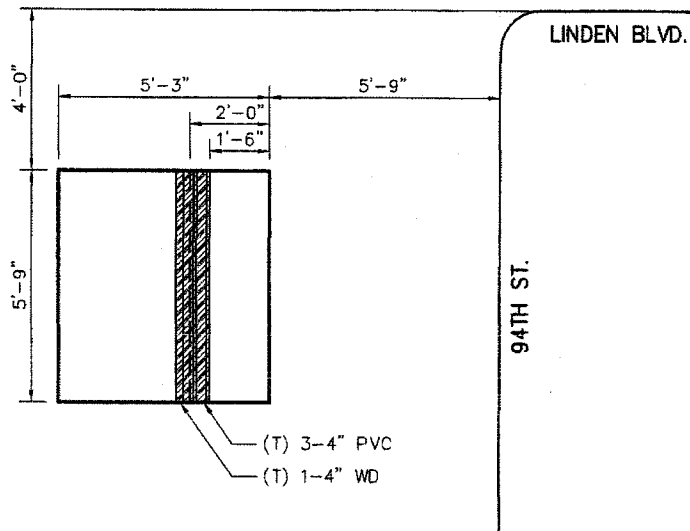
JOB: RECONSTRUCTION OF ALBERT ROAD PREPARED BY: JEB DATE: 11/05/2010

JOB NO: HWQ-411B CHECKED BY: ML DATE: 11/08/2010

TEST PIT # 3 LOCATION: E/S 94TH STREET S/O LINDEN BLVD.

PURPOSE: LOCATE FACILITIES

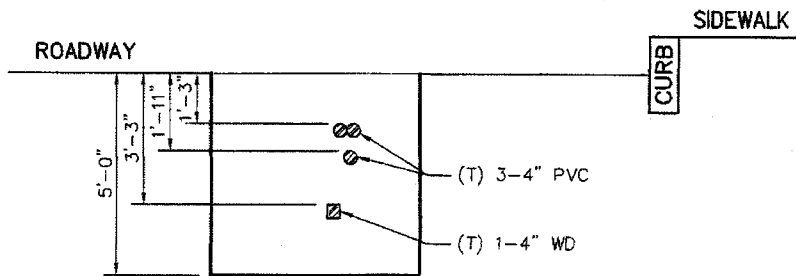
TEST PIT DIMENSION
5'-3"X5'-9"X5'-0"



NOTE:
1. ALL DRAWINGS SHOWING UTILITY
SUPPORT AND PROTECT WORK ARE
FOR REFERENCE ONLY.

PLAN

CET
ITEMS



SECTION LOOKING NORTH

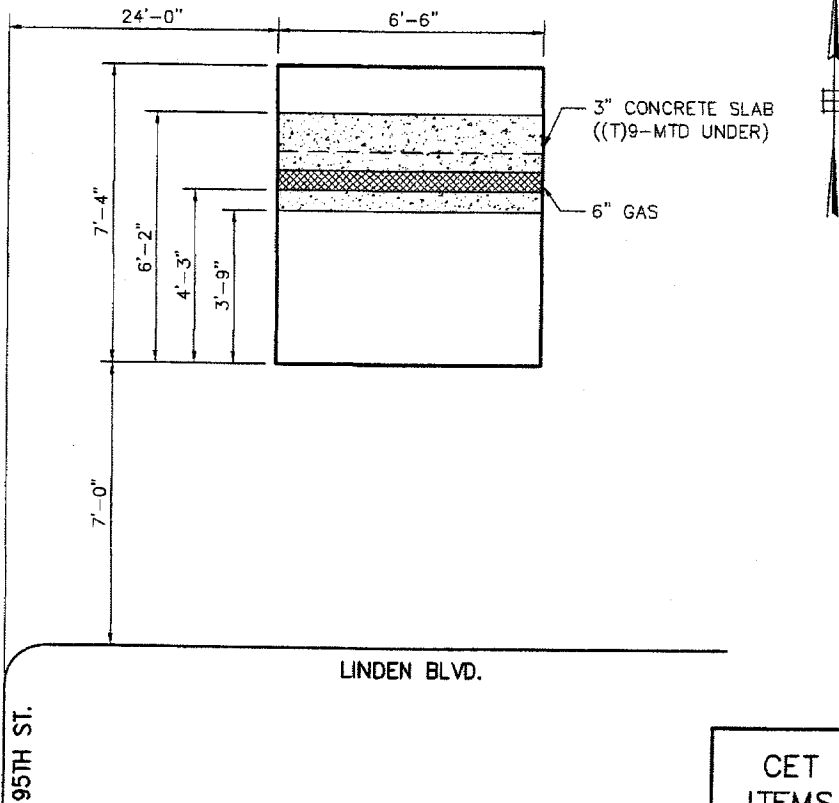


SHEET NO. 4 OF 6

JOB: RECONSTRUCTION OF ALBERT ROAD PREPARED BY: JEB DATE: 11/04/2010
JOB NO: HWQ-411B CHECKED BY: ML DATE: 11/05/2010

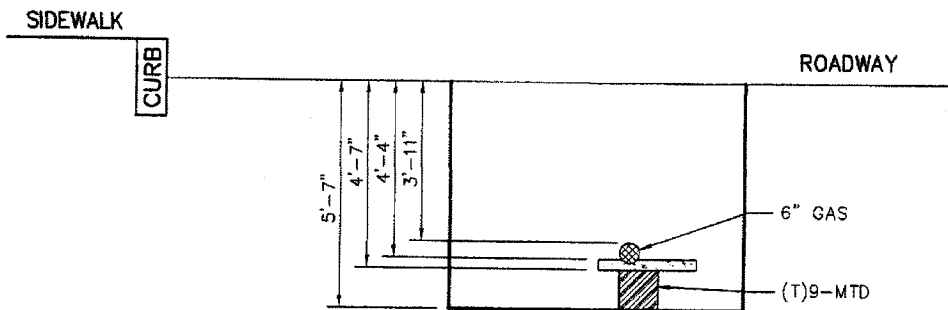
TEST PIT # 4 LOCATION: S/S LINDEN BLVD. E/O OF 95TH STREET
PURPOSE: LOCATE FACILITIES

TEST PIT DIMENSION
6'-6" X 7'-4" X 5'-7"



NOTE:
1. ALL DRAWINGS SHOWING UTILITY SUPPORT AND PROTECT WORK ARE FOR REFERENCE ONLY.

PLAN



SECTION LOOKING WEST



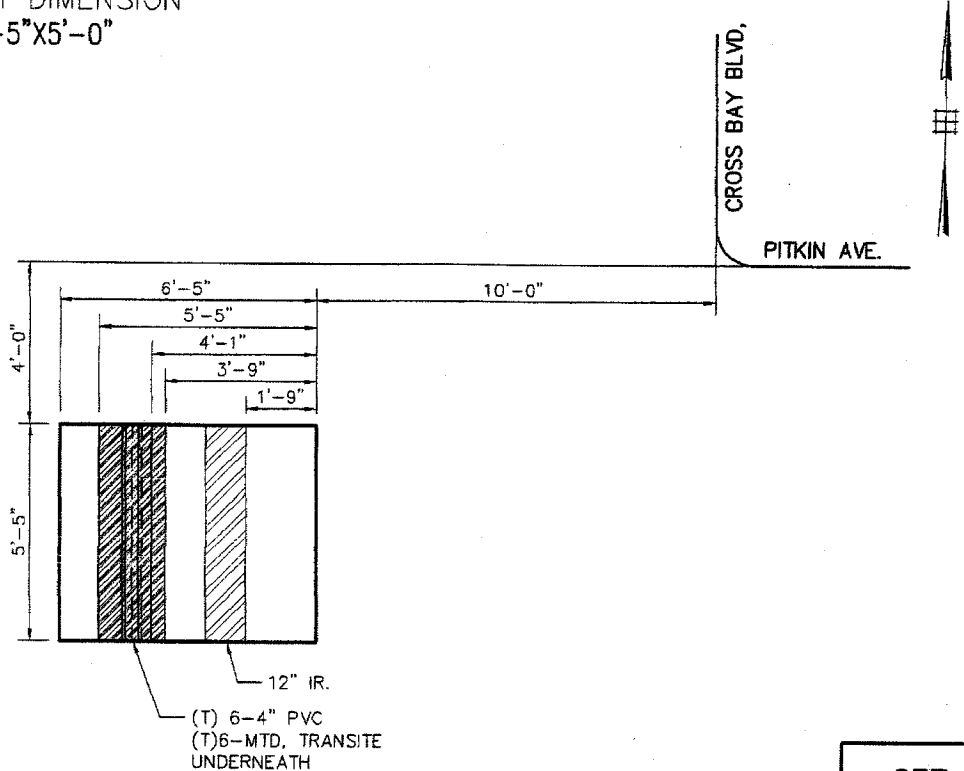
JOB: RECONSTRUCTION OF ALBERT ROAD PREPARED BY: JEB DATE: 11/08/2010

JOB NO: HWQ-411B CHECKED BY: ML DATE: 11/09/2010

TEST PIT # 5 LOCATION: INT. OF CROSS BAY BLVD. AND PITKIN AVENUE

PURPOSE: LOCATE FACILITIES

TEST PIT DIMENSION
6'-5" X 5'-5" X 5'-0"

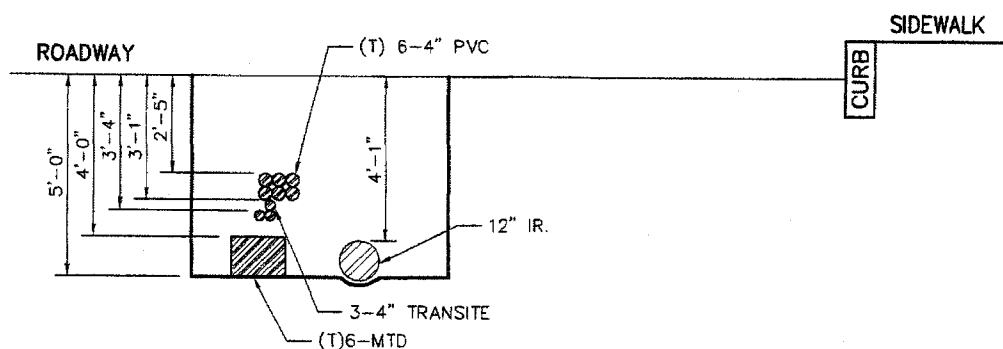


12" IR.
(T) 6-4" PVC
(T) 6-MTD, TRANSITE
UNDERNEATH

NOTE:
1. ALL DRAWINGS SHOWING UTILITY
SUPPORT AND PROTECT WORK ARE
FOR REFERENCE ONLY.

PLAN

CET
ITEMS



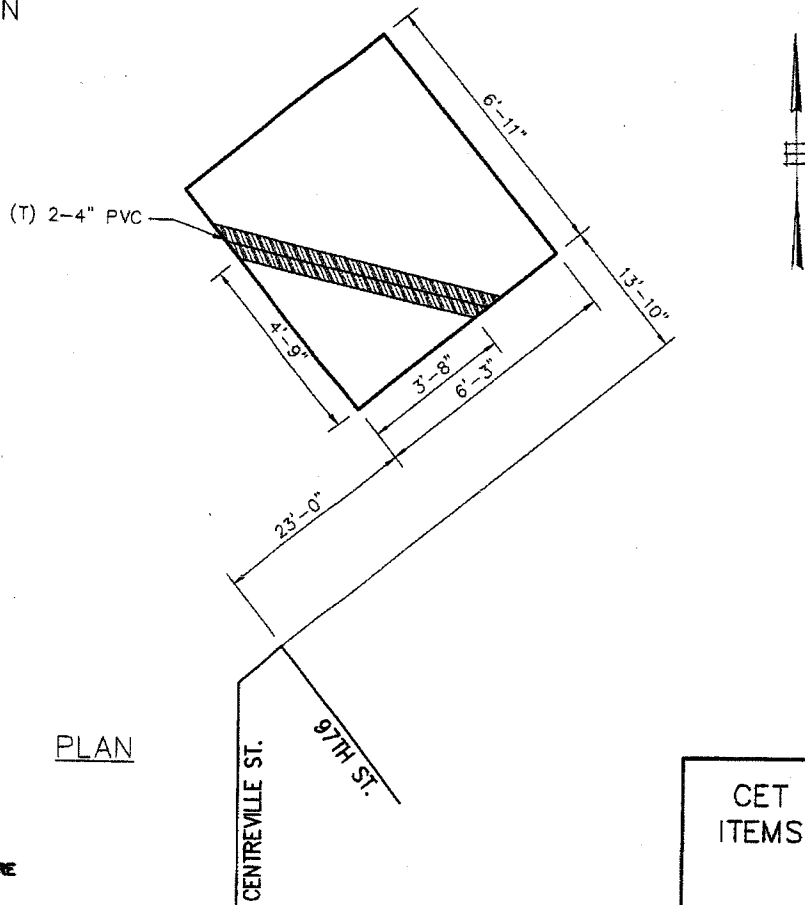
SECTION LOOKING NORTH



JOB: RECONSTRUCTION OF ALBERT ROAD PREPARED BY: JEB DATE: 11/04/2010
JOB NO: HWQ-411B CHECKED BY: ML DATE: 11/08/2010

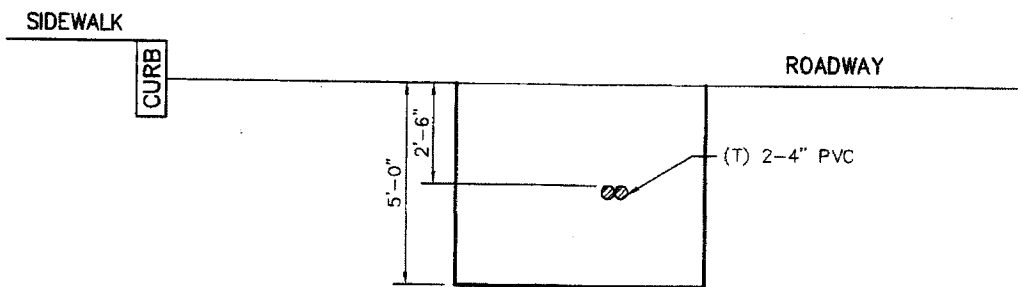
TEST PIT # 6 LOCATION: INT. OF CENTREVILLE ST. AND 97TH ST.
PURPOSE: LOCATE FACILITIES

TEST PIT DIMENSION
6'-3" X 6'-11" X 5'-0"



NOTE:
1. ALL DRAWINGS SHOWING UTILITY
SUPPORT AND PROTECT WORK ARE
FOR REFERENCE ONLY.

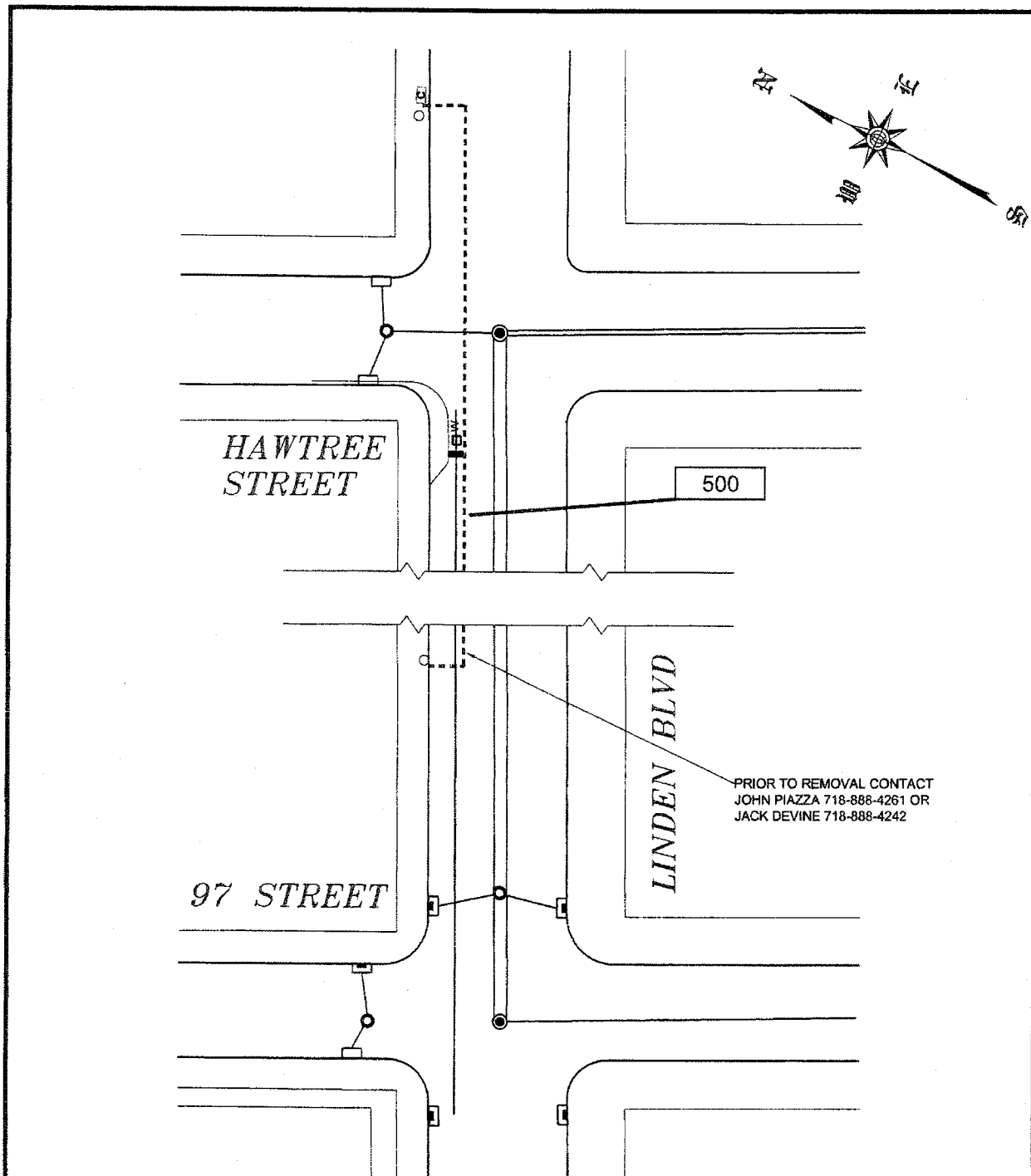
CET
ITEMS



SECTION LOOKING NORTHWEST

SKETCHES

(NO TEXT IN THIS SECTION)



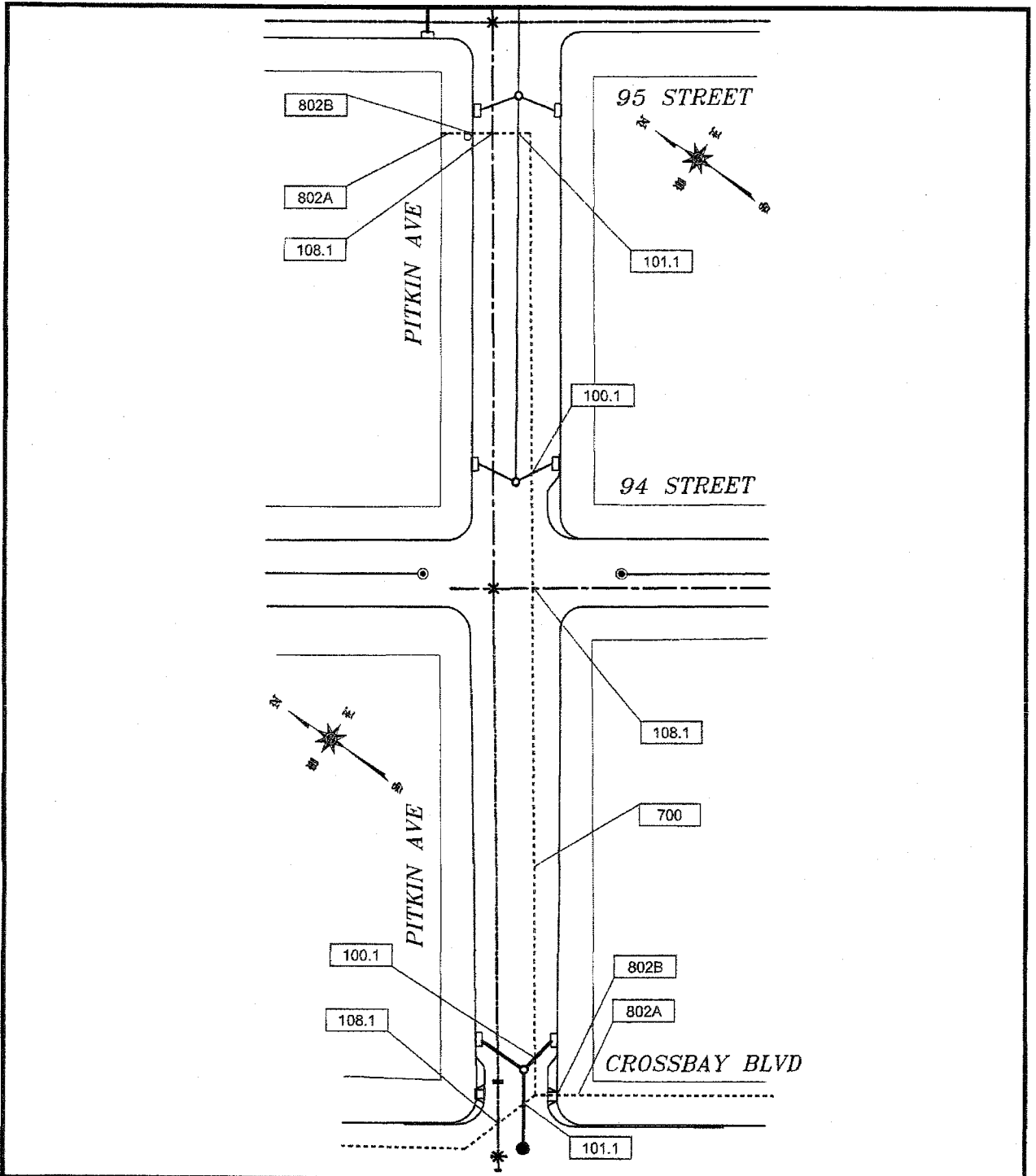
06/05/13

 **TIMEWARNER**
CABLE OF NEW YORK CITY

HWQ411B ALBERT ROAD U2

LINDEN BLVD BETWEEN 97 STREET & HAWTREE STREET

01
04



06/05/13

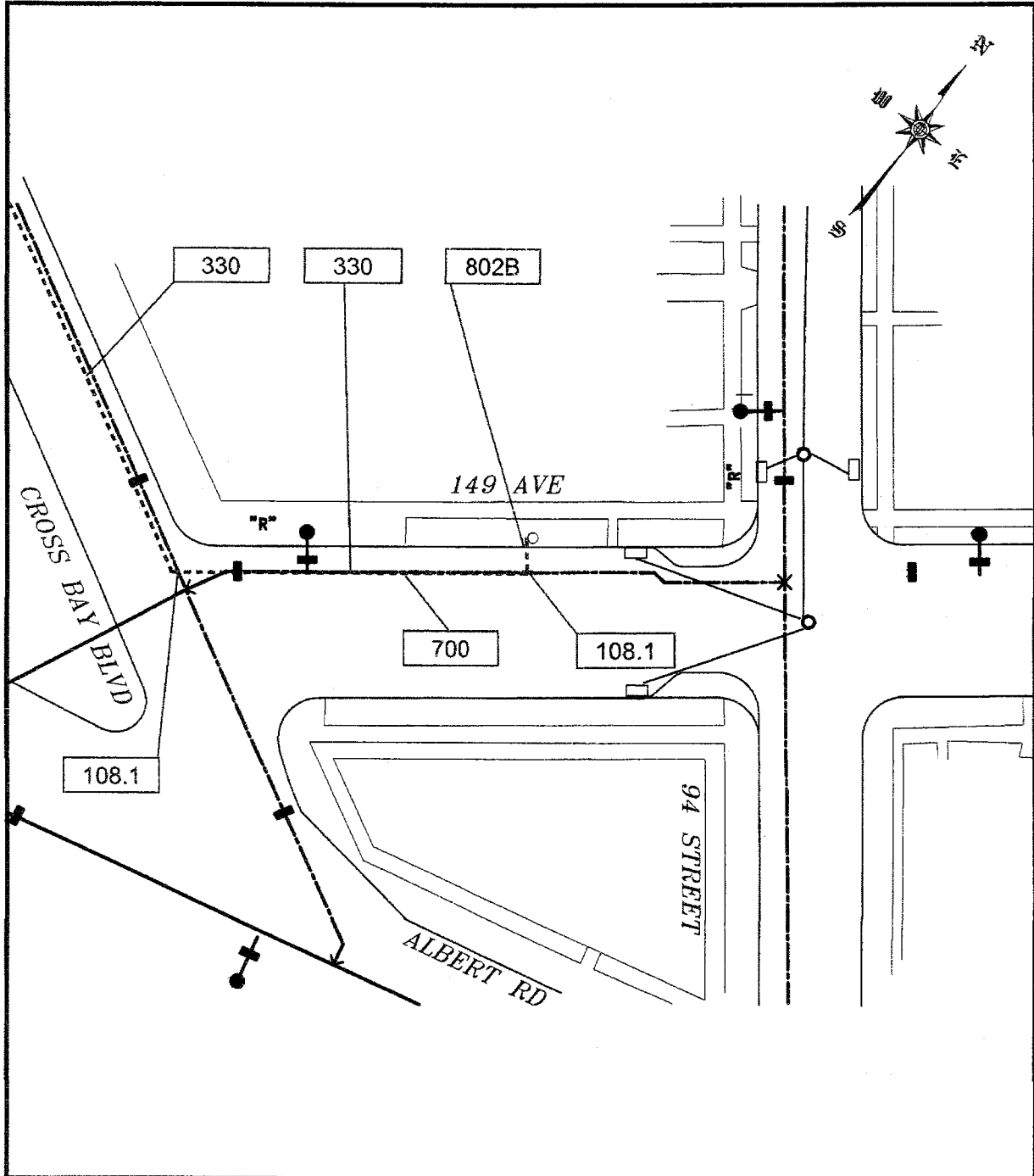


HWQ411B ALBERT ROAD U4

PITKIN AVE BETWEEN CROSSBAY
BLVD & 95 ST

02

04



06/05/13

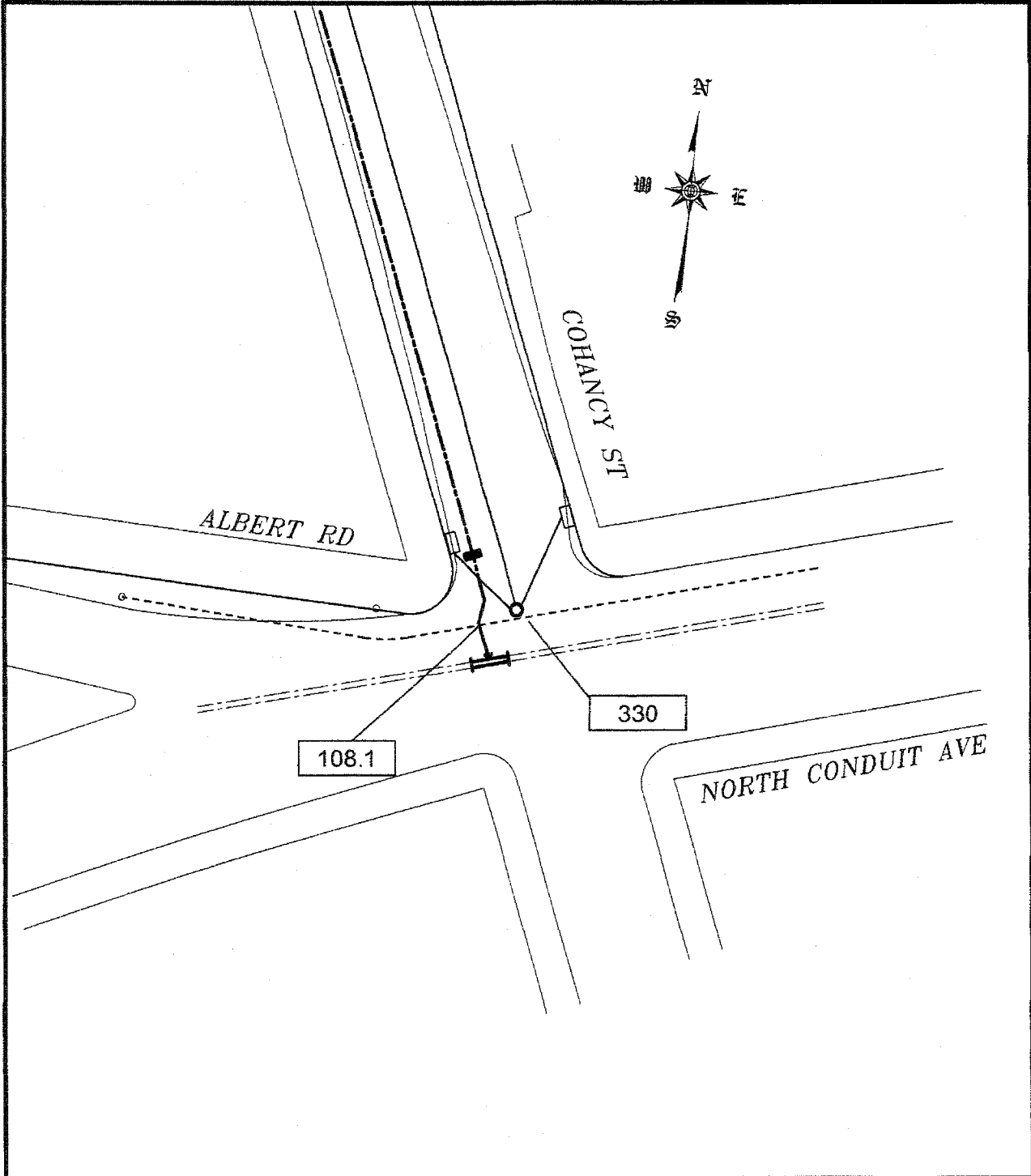



HWQ411B ALBERT ROAD U7

149 AVE BETWEEN CROSS BAY
BLVD & 94 ST

03

04



06/05/13	 TIMEWARNER CABLE OF NEW YORK CITY			
	HWQ411B ALBERT ROAD U17			
	COHANCY ST & NORTH CONDUIT AVE	<table border="1"> <tr> <td>04</td> </tr> <tr> <td>04</td> </tr> </table>	04	04
04				
04				

PROJECT ID: HWQ411B

END OF ADDENDUM No.6
This Addendum consists of Seventy (70) pages
And Forty-Nine (49) sheets of Contract Drawings

ATTACH TO CONTRACT DOCUMENTS

THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
INFRASTRUCTURE DIVISION
BUREAU OF DESIGN

PROJECT ID: HWQ411B

RECONSTRUCTION OF ALBERT ROAD AREA
INCLUDING SEWER, WATER MAIN, STREET LIGHTING AND TRAFFIC SIGNAL WORK
Together With All Work Incidental Thereto

BOROUGH OF QUEENS

ADDENDUM NO. 7

DATED: April 29, 2014

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

- 1. See attached Questions Submitted by Bidders and DDC's Responses.

By signing in the space provided below, the bidder acknowledges receipt of this Addendum consisting of one (1) page and one (1) page of attachment.

THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BID

Maspeth Supply
Name of Bidder
By: [Signature]

G. Saini
GURDIP SAINI, P.E.
Assistant Commissioner/Design



ATTACH TO CONTRACT DOCUMENTS

THE CITY OF NEW YORK
DEPARTMENT OF DESIGN AND CONSTRUCTION
INFRASTRUCTURE DIVISION
BUREAU OF DESIGN

PROJECT ID: HWQ411B

RECONSTRUCTION OF ALBERT ROAD AREA
INCLUDING SEWER, WATER MAIN, STREET LIGHTING AND TRAFFIC SIGNAL WORK

Together With All Work Incidental Thereto

BOROUGH OF QUEENS

ADDENDUM NO. 8

DATED: April 29, 2014

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. Refer to Addendum No. 7, Dated April 29, 2014, attached Questions Submitted by Bidders and DDC's Responses on page 1 of 1, Answer to Question No. 5;
Change "ITEM NUMBER 6.28 AA (SEQUENCE NO. 105)" to read "ITEM NUMBER 6.34 AA (SEQUENCE NO. 106)".

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

Maspet Supply LLC
Name of Bidder

By: [Signature]

[Signature]

GURDIP SAINI, P.E.
Assistant Commissioner/Design







NEW YORK CITY DEPARTMENT OF
DESIGN + CONSTRUCTION

**INFRASTRUCTURE DIVISION
BUREAU OF DESIGN**

VOLUME 3 OF 3

PROJECT ID: HWQ411B

RECONSTRUCTION OF ALBERT ROAD AREA

INCLUDING SEWER, WATERMAIN, STREET LIGHTING,
AND TRAFFIC SIGNAL WORK

Together With All Work Incidental Thereto

BOROUGH OF QUEENS
CITY OF NEW YORK

Contractor.

Dated _____, 20____
