



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
BID BOOKLET

AUDIT ENGINEER

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED FOR:

PROJECT ID: SE818

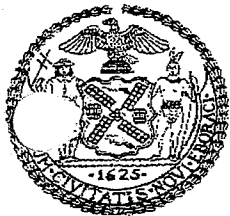
FOR THE CONSTRUCTION OF SANITARY AND STORM SEWERS IN: SHELDON AVENUE BETWEEN ELLSWORTH AVENUE AND BMP-SB1 A POINT APPROXIMATELY 1,000-FEET EAST OF DELMAR AVENUE; SINCLAIR AVENUE BETWEEN ELLSWORTH AVENUE AND DEAD END; STAFFORD AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; VINELAND AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; CROWN AVENUE BETWEEN NIPPON AVENUE AND BELFIELD AVENUE; WOODROW ROAD BETWEEN POWELL STREET AND BELFIELD AVENUE; CASTOR PLACE BETWEEN HUGUENOT AVENUE AND ANACONDA STREET; SPERRY PLACE BETWEEN ANACONDA STREET AND EVERTON AVENUE; POWELL STREET BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; WALKER PLACE BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; DAHLIA STREET BETWEEN WOODROW ROAD AND SHIFT PLACE; HUGUENOT AVENUE BETWEEN RENSSELAER AVENUE AND SHIFT PLACE; CARDIFF STREET BETWEEN CASTOR PLACE AND ROSEDALE AVENUE; BOULDER STREET BETWEEN WOODROW ROAD AND ROSEDALE AVENUE; NIPPON AVENUE BETWEEN RENSSELAER AVENUE AND WOODROW ROAD; ANACONDA STREET BETWEEN SPERRY PLACE AND DELMAR AVENUE; BALLARD AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; DELMAR AVENUE BETWEEN RENSSELAER AVENUE AND ANACONDA STREET; CROWN PLACE BETWEEN CROWN AVENUE AND DEAD END; EVERTON AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; AND, HEENAN AVENUE BETWEEN VINELAND AVENUE AND DEAD END

INCLUDING WATER MAIN WORK

Together With All Work Incidental Thereto
BOROUGH OF STATEN ISLAND
CITY OF NEW YORK

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

March 13, 2013



13-037





NEW YORK CITY DEPARTMENT OF
DESIGN + CONSTRUCTION

DAVID J. BURNEY, FAIA
Commissioner

December 31, 2013

CERTIFIED MAIL - RETURN RECEIPT REQUEST

DIFAZIO INDUSTRIES, INC.

38 Kinsey Place

Staten Island, NY 10303

RE: FMS ID: SE818
E-PIN: 85013B0093001
DDC PIN: 8502011SE0027C
CONSTRUCTION OF SANITARY AND
STORM SEWERS IN: SHELDON AVENUE
BETWEEN ELLSWORTH AVENUE AND
BMP-SB1 A POINT APPROXIMATELY
1,000 FEET EAST OF DELMAR AVENUE,
ETC - BOROUGH OF STATEN ISLAND
NOTICE OF AWARD

Dear Contractor:

You are hereby awarded the above referenced contract based upon your bid in the amount of \$47,747,747.74 submitted at the bid opening on May 15, 2013. 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,

Lorraine Holley
DACCO



Bid Tab

Description	CONSTRUCTION OF SANITARY AND STORM SEWERS IN: SHELDON AVENUE BETWEEN ELLSWORTH AVENUE AND BMP-SB1 A POINT APPROXIMATELY 1,000 FEET EAST OF DELMAR AVENUE, ETC - BOROUGH OF STATEN ISLAND		
Bid Date	5/15/2013	FMS ID	SE818
Estimated Cost	\$49,395,050.50	Dep. Supervised	No
Bid Security	2% of Total Bid Price	PLA	No
Time Allowed	1095 CCD	Contract Manager	Giovanni Matos
Addenda	9	Project Manager	Godhwani, Indur
PIN	8502011SE0027C	E-PIN	85013B0093
Selective Bidding	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Consultant	In-House

Bid Rank	Vendor	Bid Amount	Security Type
1	DIFAZIO INDUSTRIES, INC.	\$47,747,747.74	Bond
2	CARP CONSTRUCTION CORP.	\$51,551,551.51	Bond
3	JR CRUZ CORP.	\$53,678,901.00	Bond
4	NORTHEAST REMSCO CONSTRUCTION, INC	\$55,985,076.30	Bond
5	C.A.C. INDUSTRIES, INC.	\$56,619,180.72	Bond

Recorder: Phyllis Lopez – ext. 1283

Approver: 

Bid Tab
Pin: 8502011SE0027C

Page 1 of 1

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

1

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

PROJECT ID: SE818

FOR THE CONSTRUCTION OF SANITARY AND STORM SEWERS IN: SHELDON AVENUE BETWEEN ELLSWORTH AVENUE AND BMP-SB1 A POINT APPROXIMATELY 1,000-FEET EAST OF DELMAR AVENUE; SINCLAIR AVENUE BETWEEN ELLSWORTH AVENUE AND DEAD END; STAFFORD AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; VINELAND AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; CROWN AVENUE BETWEEN NIPPON AVENUE AND BELFIELD AVENUE; WOODROW ROAD BETWEEN POWELL STREET AND BELFIELD AVENUE; CASTOR PLACE BETWEEN HUGUENOT AVENUE AND ANACONDA STREET; SPERRY PLACE BETWEEN ANACONDA STREET AND EVERTON AVENUE; POWELL STREET BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; WALKER PLACE BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; DAHLIA STREET BETWEEN WOODROW ROAD AND SHIFT PLACE; HUGUENOT AVENUE BETWEEN RENSSELAER AVENUE AND SHIFT PLACE; CARDIFF STREET BETWEEN CASTOR PLACE AND ROSEDALE AVENUE; BOULDER STREET BETWEEN WOODROW ROAD AND ROSEDALE AVENUE; NIPPON AVENUE BETWEEN RENSSELAER AVENUE AND WOODROW ROAD; ANACONDA STREET BETWEEN SPERRY PLACE AND DELMAR AVENUE; BALLARD AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; DELMAR AVENUE BETWEEN RENSSELAER AVENUE AND ANACONDA STREET; CROWN PLACE BETWEEN CROWN AVENUE AND DEAD END; EVERTON AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; AND, HEENAN AVENUE BETWEEN VINELAND AVENUE AND DEAD END

INCLUDING WATER MAIN WORK

Together With All Work Incidental Thereto
BOROUGH OF STATEN ISLAND

Name of Bidder: Difazio Industries

Date of Bid Opening: 5/8/2013

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

Place of Business of Bidder: 38 Kincy Pl. Staten Island, NY 10303

Bidder's Telephone Number: 718-720-6966 Fax Number: 718-876-5689

Bidder's E-Mail Address: joseph1@difazioind.net, john@difazioind.net

Residence of Bidder (If Individual): _____

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

Names of Partners	Residence of Partners
_____	_____
_____	_____
_____	_____

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

Organized under the laws of the State of NY

Name and Home Address of President: John Difazio
3 Green Hill Rd. Colts Neck, NJ 08033 07722

Name and Home Address of Secretary: Jeff Difazio
415 Darlington Ave, SI NY 10309

Name and Home Address of Treasurer: Jeff Difazio
415 Darlington Ave, SI NY 10309

BID FORM

The above-named Bidder affirms and declares:

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

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

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

Contractor have been finally accepted by the City. In the event of any breach or violation of the foregoing, the Contractor may be subject to damages, liquidated or otherwise, cancellation of the Contract and suspension as a bidder for a period of three years. (The words, "the bidder", "he", "his", and "him" where used herein shall mean the individual bidder, firm, partnership or corporation executing this bid).

6. Compliance Report

The bidder, as an individual, or as a member, partner, director, or officer of the bidder, if the same be a firm, partnership, or corporation, (1) represents that his attention has been specifically drawn to Executive Order No. 50, dated, April 25, 1980, on Equal Employment Compliance of the contract, and (2) warrants that he will comply with the provisions of Executive Order No. 50. The Employment Report must be submitted as part of the bid.

The bidder, as an individual, or as a member, partner, director, or officer of the bidder, if the same be a firm, partnership, or corporation, executes this document expressly warranting that he will comply with: (1) the provision of the contract on providing records, Chapter 8.

7. By submission of this bid, the bidder certifies that it now has and will continue to have the financial capability to fully perform the work required for this contract. Any award of this contract will be made in reliance upon such certification. Upon request therefor, the bidder will submit written verification of such financial capability in a form that is acceptable to the department.

8. In accordance with Section 165 of the State Finance Law, the bidder agrees that tropical hardwoods, as defined in Section 165 of the State Finance Law, shall not be utilized in the performance of this Contract, except as the same are permitted by the foregoing provision of law.

9. The bidder has visited and examined the site of the work and has carefully examined the Contract in the form approved by the Corporation Counsel, and will execute the Contract and perform all its items, covenants and conditions, and will provide, furnish and deliver all the work, materials, supplies, tools and appliances for all labor and materials necessary or required for the hereinafter named work, all in strict conformity with the Contract, for the prices set forth in the Bid Schedule:

(NO TEXT ON THIS PAGE)

BID FORM

PROJECT ID: SE818

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)

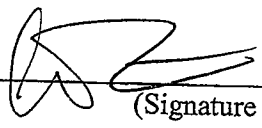
\$ 47,747,747.74

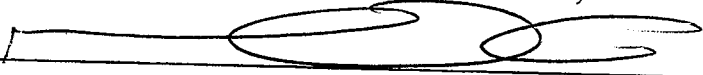
5/15/13
P.8

BIDDER'S SIGNATURE AND AFFIDAVIT

WARNING!!! If M/WBE goals have been established for this Contract, you **MUST** complete and submit the Affirmations on the 2nd page of the Subcontractor Utilization Plan (or a pre-approved waiver) at the time you submit your bid. Failure to comply will result in the rejection of your bid.

Bidder: DiFazio Industries

By: X  (Signature of Partner or corporate officer)

X 

Attest:
(Corporate Seal)

Secretary of Corporate Bidder

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

BID FORM (TO BE NOTARIZED)

AFFIDAVIT WHERE BIDDER IS AN INDIVIDUAL

STATE OF NEW YORK, COUNTY OF _____ ss:

being duly sworn says:

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

(Signature of the person who signed the Bid)

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

Notary Public

AFFIDAVIT WHERE BIDDER IS A PARTNERSHIP

STATE OF NEW YORK, COUNTY OF _____ ss:

being duly sworn says:

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

(Signature of Partner who signed the Bid)

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

Notary Public

AFFIDAVIT WHERE BIDDER IS A CORPORATION

STATE OF NEW YORK, COUNTY OF RICHMOND ss:

being duly sworn says:

I am the PRESIDENT of the above named corporation whose name is subscribed to and which executed the foregoing bid. I reside at COLD SPRING
I have knowledge of the several matters therein stated, and they are in all respects true.

(Signature of Partner who signed the Bid)

Subscribed and sworn to before me this 10 day of MAY, 2013

[Signature]
Notary Public

CESAR PIEDRAHITA
Notary Public, State of New York
No. 01PI6151715
Qualified in Richmond County
Commission Expires Aug. 21, 2014

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.)

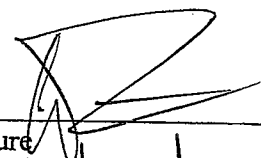
Full Name of Bidder: DiFazio Industries
Address: 38 Kinsey Pl.
City Staten Island State NY Zip Code 10305

CHECK ONE BOX AND INCLUDE APPROPRIATE NUMBER:

A - Individual or Sole Proprietorship*
SOCIAL SECURITY NUMBER

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

C - Corporation
EMPLOYER IDENTIFICATION NUMBER
73-170-6369.

By: X 
Signature
Title: President

If a corporation, place seal here

This affirmation must be signed by an officer or duly authorized representative.

*Under the Federal Privacy Act the furnishing of Social Security Numbers by bidders on City contracts is voluntary. Failure to provide a Social Security Number will not result in a bidder's disqualification. Social Security Numbers will be used to identify bidders, proposers or vendors to ensure their compliance with laws, to assist the City in enforcement of laws, as well as to provide the City a means of identifying of businesses which seek City contracts.

(NO TEXT ON THIS PAGE)

BID SCHEDULE

NOTICE TO BIDDERS

Items listed in this Bid Schedule which have one (1) digit followed by a decimal (e.g. 4.02 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 and Addendum No. 2, 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. 50.31CC15) shall comply with the requirements of the New York City Department of Design and Construction (NYCDDC) 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. 60.11R612) shall comply with the requirements of the New York City Department of Environmental Protection (NYCDEP) Standard Water Main 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 "7" followed by a decimal (e.g. 70.31FN) shall comply with the requirements of the New York City Department of Environmental Protection (NYCDEP) Standard Sewer Specifications dated August 1, 2009, and Standard Water Main Specifications dated August 1, 2009, as amended by Addendum No. 2, herein Volume 3 of 3.

Items listed in this Bid Schedule beginning with the prefix "UTL-" (e.g. UTL-6.01.8) are for Gas Cost Sharing (EP-7) work and shall comply with the requirements of Addendum No. 3, herein Volume 3 of 3.

(NO TEXT ON THIS PAGE)



05/01/2013
2:21PM

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

PROJECT ID:
CONTRACT PIN:

SE818
8502011SE0027C

BID SCHEDULE

NOTE:

- (1) The Agency may reject a bid if it contains unbalanced bid prices. An unbalanced bid is considered to be one containing lump sum or unit items which do not reflect reasonable actual costs plus a reasonable proportionate share of the Bidder's anticipated profit, overhead costs, and other indirect costs, anticipated for the performance of the items in question.
- (2) The following bid prices on Unit Price Contracts are to be paid for the actual quantities of the item numbers in the completed work or structure, and they cover the cost of all work, labor, material, tools, plant and appliances of every description necessary to complete the entire work, as specified, and the removal of all debris, temporary work and appliances.
- (3) PLEASE BE SURE A LEGIBLE BID IS ENTERED, IN INK, FOR EACH ITEM.
Alterations must be initialed in ink by the bidder.
- (4) The Extended Amount entered in Column 6 shall be the product of the Estimated Quantity in Column 3 times the Unit Price Bid in Column 5.
- (5) Prospective bidders must examine the Bid Schedule carefully and, before bidding, must advise the Commissioner, in writing, if any pages are missing, and must request that such missing pages be furnished them. The pages of this Bid Schedule are numbered consecutively, as follows: B - 3 through B - 30 [REVISION # 1]

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

B - 3
[REVISION # 1]



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

05/01/2013
 2:21PM

PROJECT ID: SE818
 CONTRACT PIN: 8502011SE0027C

BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)
				DOLLARS	CENTS	
001	4.01 RAG ASPHALT MACADAM PAVEMENT, 6" THICK	52,000.00	S.Y.	41	00	2,132,000 00
002	4.02 AB-R ASPHALTIC CONCRETE WEARING COURSE, 1-1/2" THICK	350.00	S.Y.	13	00	4,550 00
003	4.02 AF-R ASPHALTIC CONCRETE WEARING COURSE, 2" THICK	65,000.00	S.Y.	13	00	845,000 00
004	4.02 CA BINDER MIXTURE	15,820.00	TONS	84	00	1,328,880 00
005	4.04 H CONCRETE BASE FOR PAVEMENT, VARIABLE THICKNESS FOR TRENCH RESTORATION, (HIGH-EARLY STRENGTH)	1,625.00	C.Y.	0	01	16 25
006	4.05 AX HIGH-EARLY STRENGTH REINFORCED CONCRETE PAVEMENT (BUS STOPS)	80.00	C.Y.	435	00	34,800 00
007	4.08 AA CONCRETE CURB (18" DEEP)	4,500.00	L.F.	25	00	112,500 00
008	4.08 BA CONCRETE CURB (21" DEEP)	21,500.00	L.F.	26	00	559,000 00
009	4.09 AD STRAIGHT STEEL FACED CONCRETE CURB (18" DEEP)	250.00	L.F.	80	00	20,000 00
010	4.09 AF STRAIGHT STEEL FACED CONCRETE CURB (27" DEEP)	200.00	L.F.	90	00	18,000 00



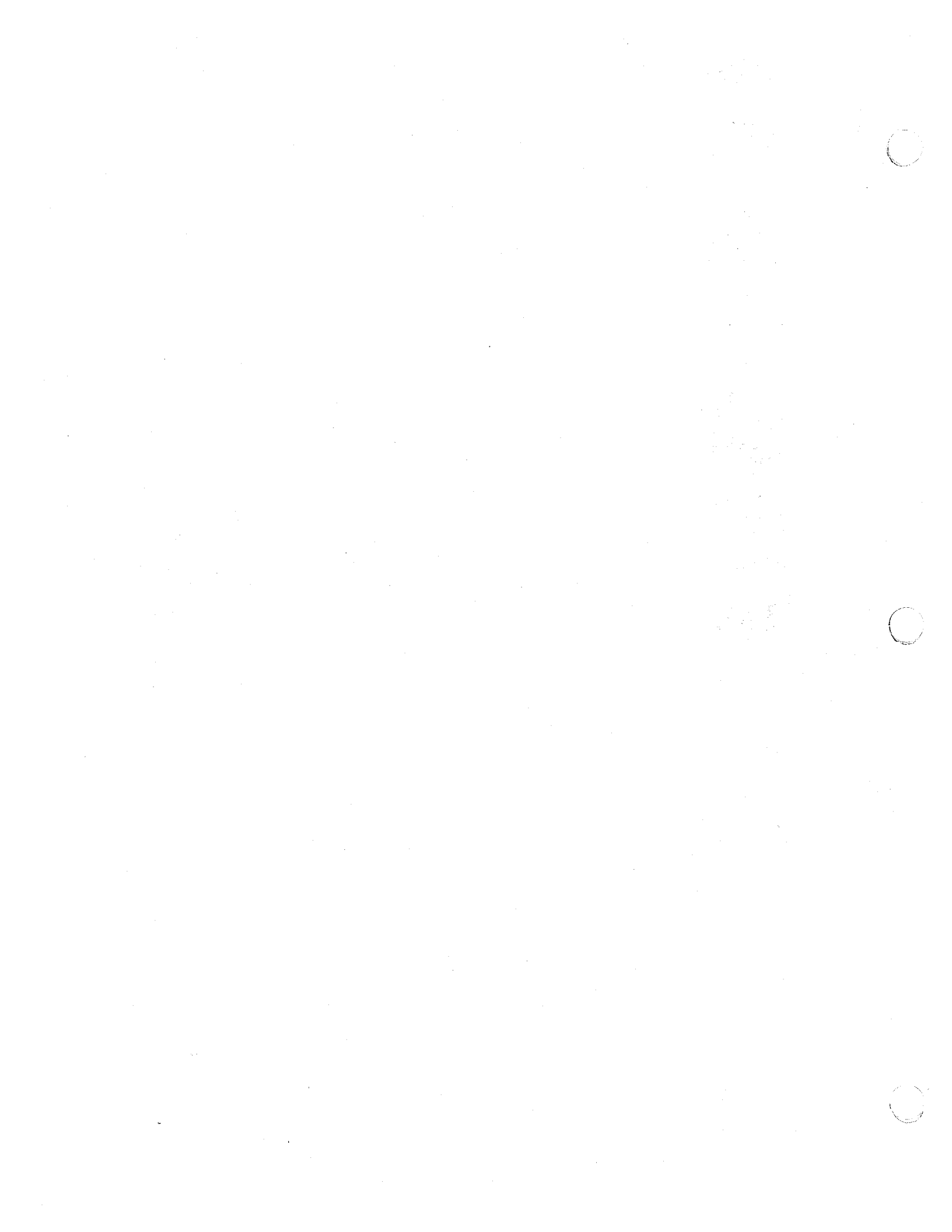
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

PROJECT ID: SE818
CONTRACT PIN: 8502011SE0027C

BID SCHEDULE FORM

COL. 1 SEQ. NO.	COL. 2 ITEM NUMBER AND DESCRIPTION	COL. 3 ENGINEER'S ESTIMATE OF QUANTITY	COL. 4 UNIT	COL. 5 UNIT PRICE (IN FIGURES)		COL. 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CENTS	DOLLARS	CENTS
011	4.09 CD CORNER STEEL FACED CONCRETE CURB (18" DEEP)	2,800.00	L.F.	56	00	156,800	00
012	4.13 AAS 4" CONCRETE SIDEWALK (UNPIGMENTED)	10,000.00	S.F.	7	00	70,000	00
013	4.13 BAS 7" CONCRETE SIDEWALK (UNPIGMENTED)	36,000.00	S.F.	8	00	288,000	00
014	4.13 DE EMBEDDED PREFORMED DETECTABLE WARNING UNITS	1,500.00	S.F.	20	00	30,000	00
015	4.16 AA TREES REMOVED (4" TO UNDER 12" CALIPER)	45.00	EACH	250	00	11,250	00
016	4.16 AB TREES REMOVED (12" TO UNDER 18" CALIPER)	11.00	EACH	425	00	4,675	00
017	4.16 CA505 TREES PLANTED, 3" TO 3-1/2" CALIPER, ALL TYPES, IN 5 X 5' TREE PITS	260.00	EACH	975	00	253,500	00
018	4.16 STUMP STUMP REMOVAL	1.00	UNITS	300	00	300	00
019	4.18 A MAINTENANCE TREE PRUNING (UNDER 12" CAL.)	30.00	EACH	95	00	2,850	00
020	4.18 B MAINTENANCE TREE PRUNING (12" TO UNDER 18" CAL.)	40.00	EACH	115	00	4,600	00



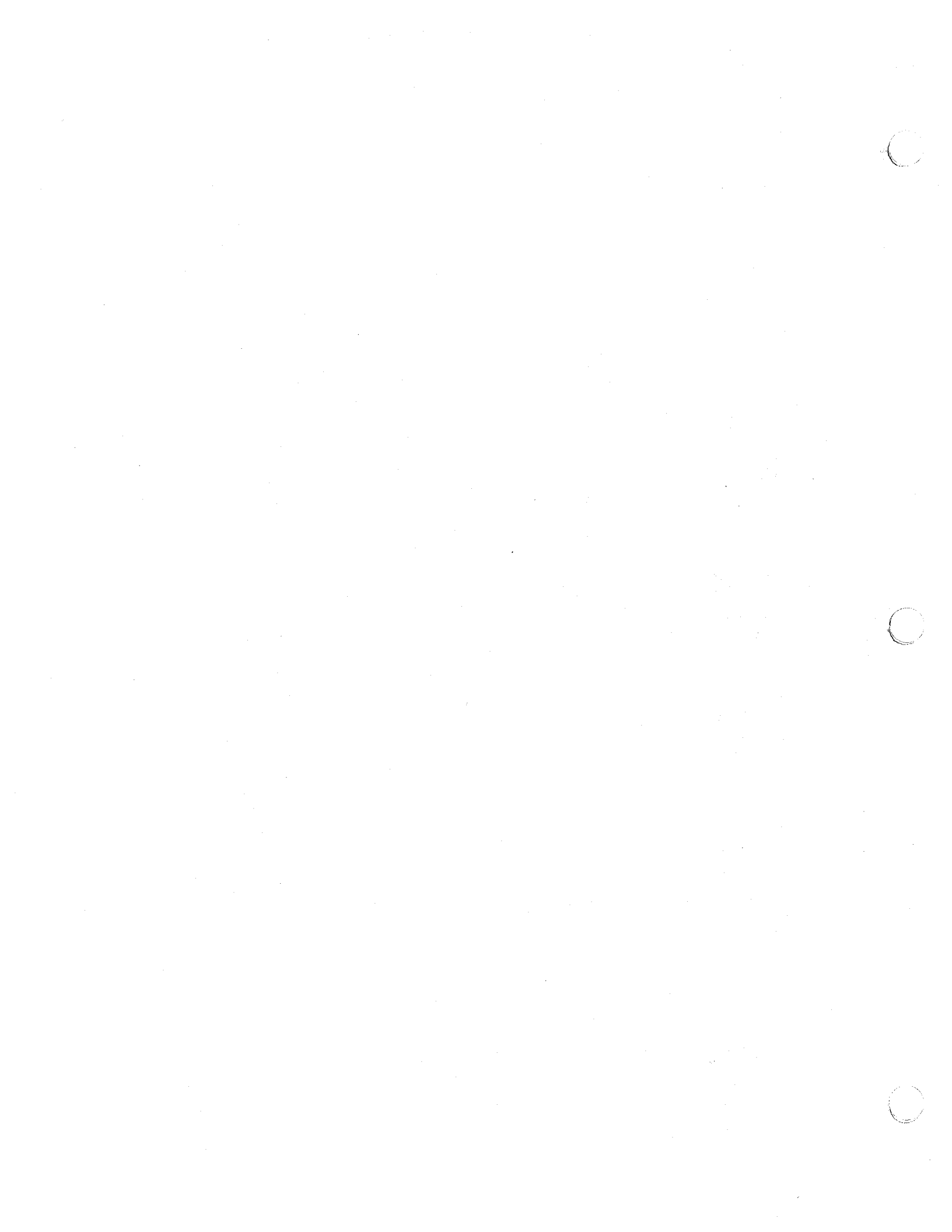
BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
021	4.18 C MAINTENANCE TREE PRUNING (18" TO UNDER 24" CAL.)	30.00	EACH	145	00	4,350	00
022	4.18 D MAINTENANCE TREE PRUNING (24" CAL. AND OVER)	20.00	EACH	185	00	3,700	00
023	4.19 SODDING	9,700.00	S.Y.	9	00	87,300	00
024	4.21 TREE CONSULTANT	5,000.00	PHR	70	00	350,000	00
025	50.11MS040030 4'-0"W X 3'-0"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	676.00	L.F.	900	00	608,400	00
026	50.11MS040040 4'-0"W X 4'-0"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	1,192.00	L.F.	1,000	00	1,192,000	00
027	50.11MS070050 7'-0"W X 5'-0"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	45.00	L.F.	1,200	00	54,000	00
028	50.21M3C024D 24" R.C.P. CLASS III STORM SEWER, ON CONCRETE CRADLE	2,246.00	L.F.	245	00	550,270	00
029	50.21M3C030D 30" R.C.P. CLASS III STORM SEWER, ON CONCRETE CRADLE	1,764.00	L.F.	400	00	705,600	00
030	50.21M3C036D 36" R.C.P. CLASS III STORM SEWER, ON CONCRETE CRADLE	1,267.00	L.F.	425	00	538,475	00



BID SCHEDULE FORM

COL 1 SECTION	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
031	50.21M3C042D 42" R.C.P. CLASS III STORM SEWER, ON CONCRETE CRADLE	249.00	L.F.	450	00	112,050	00
032	50.21M3C048D 48" R.C.P. CLASS III STORM SEWER, ON CONCRETE CRADLE	53.00	L.F.	400	00	21,200	00
033	50.21M3E024D 24" R.C.P. CLASS III STORM SEWER, ENCASED IN CONCRETE	742.00	L.F.	800	00	593,600	00
034	50.21M3E030D 30" R.C.P. CLASS III STORM SEWER, ENCASED IN CONCRETE	443.00	L.F.	265	00	117,395	00
035	50.21M3E036D 36" R.C.P. CLASS III STORM SEWER, ENCASED IN CONCRETE	212.00	L.F.	315	00	66,780	00
036	50.31MC12 12" E.S.V.P. STORM SEWER, ON CONCRETE CRADLE	902.00	L.F.	350	00	315,700	00
037	50.31MC15 15" E.S.V.P. STORM SEWER, ON CONCRETE CRADLE	1,987.00	L.F.	500	00	993,500	00
038	50.31MC18 18" E.S.V.P. STORM SEWER, ON CONCRETE CRADLE	2,714.00	L.F.	650	00	1,764,100	00
039	50.31ME12 12" E.S.V.P. STORM SEWER, ENCASED IN CONCRETE	137.00	L.F.	300	00	41,100	00
040	50.31ME15 15" E.S.V.P. STORM SEWER, ENCASED IN CONCRETE	47.00	L.F.	325	00	15,275	00



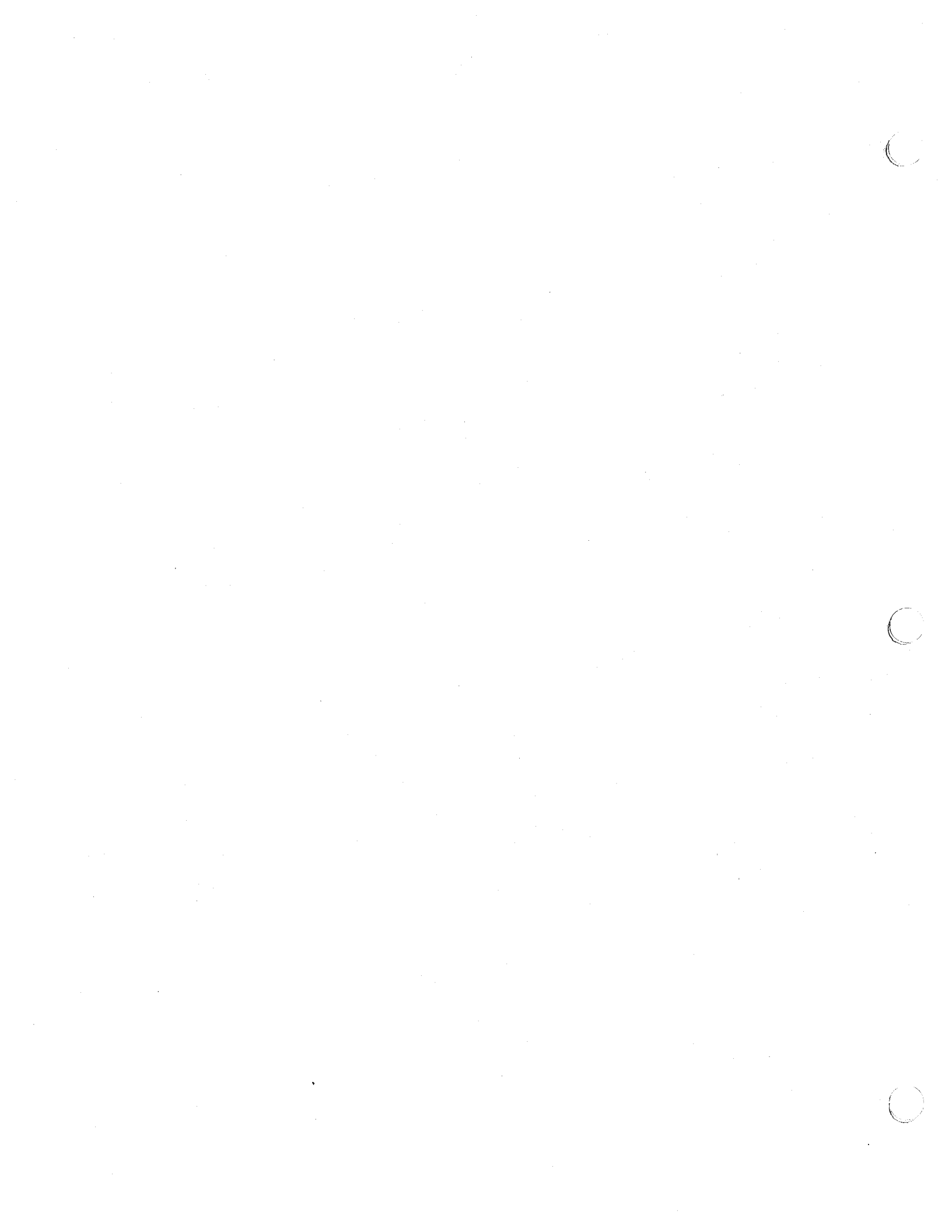
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

PROJECT ID: SE610
CONTRACT PIN: 8502011SE0027C

BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	COL 7 CTS
041	50.31ME18 18" E.S.V.P. STORM SEWER, ENCASED IN CONCRETE	383.00	L.F.	400 00	153,200 00	
042	50.31SC10 10" E.S.V.P. SANITARY SEWER, ON CONCRETE CRADLE	20,600.00	L.F.	337 75	6,957,650 00	
043	50.31SC12 12" E.S.V.P. SANITARY SEWER, ON CONCRETE CRADLE	285.00	L.F.	450 00	128,250 00	
044	50.31SC15 15" E.S.V.P. SANITARY SEWER, ON CONCRETE CRADLE	1,020.00	L.F.	460 00	469,200 00	
045	50.31SC18 18" E.S.V.P. SANITARY SEWER, ON CONCRETE CRADLE	1,142.00	L.F.	700 00	799,400 00	
046	50.31SE10 10" E.S.V.P. SANITARY SEWER, ENCASED IN CONCRETE	52.00	L.F.	500 00	26,000 00	
047	50.31SE15 15" E.S.V.P. SANITARY SEWER, ENCASED IN CONCRETE	13.00	L.F.	600 00	7,800 00	
048	50.41SE10 10" D.I.P. CLASS 56 SANITARY SEWER, ENCASED IN CONCRETE	124.00	L.F.	500 00	62,000 00	
049	50.41SE18 18" D.I.P. CLASS 56 SANITARY SEWER, ENCASED IN CONCRETE	42.00	L.F.	800 00	33,600 00	
050	51.11C001 CHAMBER NO. 1	1.00	EACH	100,000 00	100,000 00	



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

PROJECT ID: SE818
 CONTRACT PIN: 8502011SE0027C

05/01/2013
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BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
051	51.11C002 CHAMBER NO. 2	1.00	EACH	100,000	00	100,000	00
052	51.11C003 CHAMBER NO. 3	1.00	EACH	250,000	00	250,000	00
053	51.11C004 CHAMBER NO. 4	1.00	EACH	90,000	00	90,000	00
054	51.11C005 CHAMBER NO. 5	1.00	EACH	175,000	00	175,000	00
055	51.11C006 CHAMBER NO. 6	1.00	EACH	210,000	00	210,000	00
056	51.11P004 STANDARD 4'-0" DIAMETER PRECAST MANHOLE	18.00	EACH	4,000	00	72,000	00
057	51.11P005 STANDARD 5'-0" DIAMETER PRECAST MANHOLE	3.00	EACH	9,000	00	27,000	00
058	51.11P006 STANDARD 6'-0" DIAMETER PRECAST MANHOLE	2.00	EACH	10,000	00	20,000	00
059	51.11P007 STANDARD 7'-0" DIAMETER PRECAST MANHOLE	4.00	EACH	15,000	00	60,000	00
060	51.11P008 STANDARD 8'-0" DIAMETER PRECAST MANHOLE	2.00	EACH	18,000	00	36,000	00



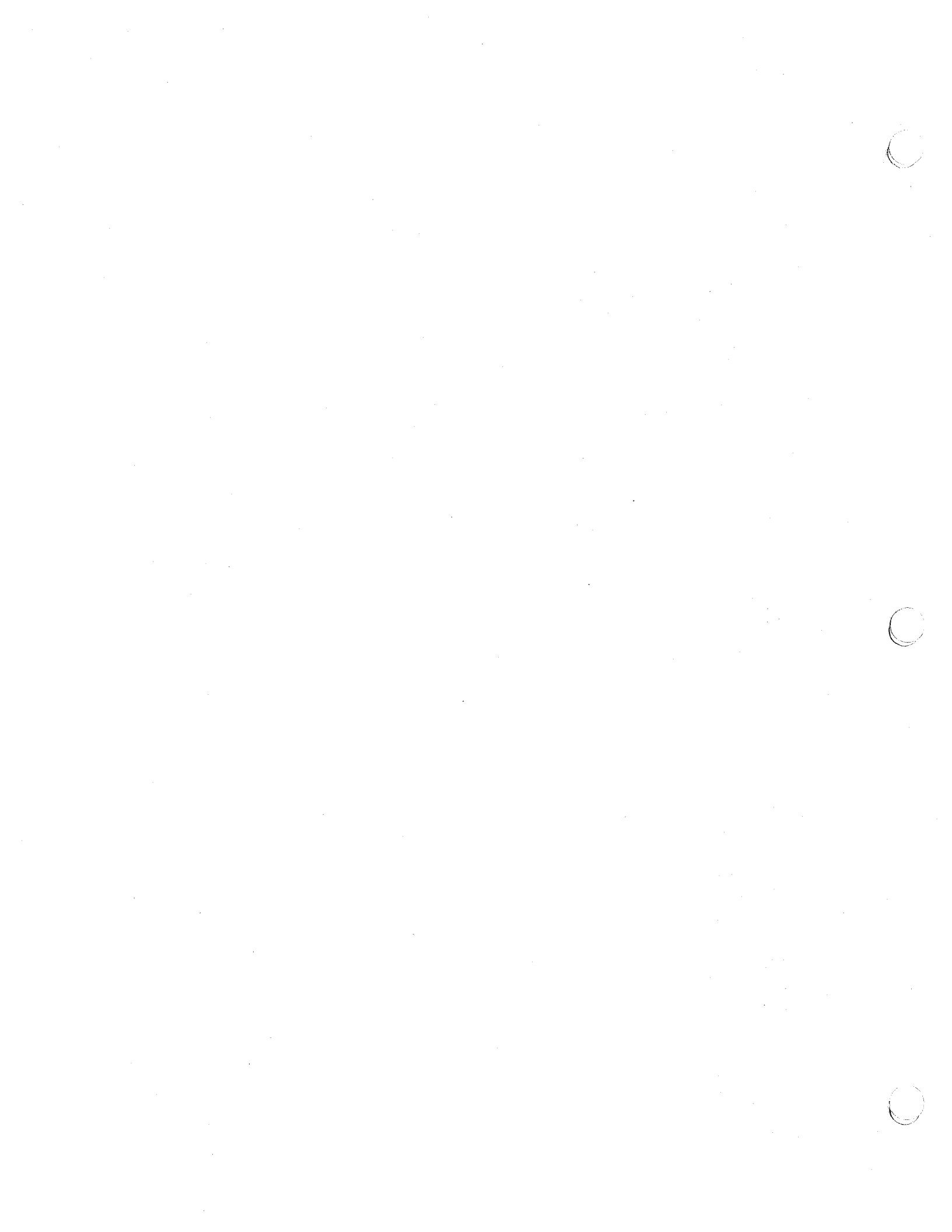
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

PROJECT ID: SE876
CONTRACT PIN: 8502011SE0027C

BID SCHEDULE FORM

COL 1 SEQ NO	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CENTS	DOLLARS	CENTS
061	51.11P010 STANDARD 10'-0" DIAMETER PRECAST MANHOLE	1.00	EACH	40,000	00	40,000	00
062	51.11R007 STANDARD 7'-0" DIAMETER PRECAST DROP-PIPE MANHOLE TYPE II	1.00	EACH	30,000	00	30,000	00
063	51.21A00000C ACCESS MANHOLE	8.00	EACH	20,000	00	160,000	00
064	51.21S0A1000V STANDARD MANHOLE TYPE A-1	145.00	EACH	11,000	00	1,595,000	00
065	51.21S0A2000V STANDARD MANHOLE TYPE A-2	3.00	EACH	15,000	00	45,000	00
066	51.21S0A3000V STANDARD SHALLOW MANHOLE TYPE A-3	10.00	EACH	6,000	00	60,000	00
067	51.21S0B1000V STANDARD MANHOLE TYPE B-1	46.00	EACH	4,000	00	184,000	00
068	51.21S0B2000V STANDARD MANHOLE TYPE B-2	17.00	EACH	7,000	00	119,000	00
069	51.21S0C1036R STANDARD MANHOLE TYPE C-1 ON 36" R.C.P. SEWER	9.00	EACH	15,000	00	135,000	00
070	51.21S0C1042E STANDARD MANHOLE TYPE C-1 ON EXISTING 42" SEWER	1.00	EACH	50,000	00	50,000	00



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

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PROJECT ID: SE818
 CONTRACT PIN: 8502011SE0027C

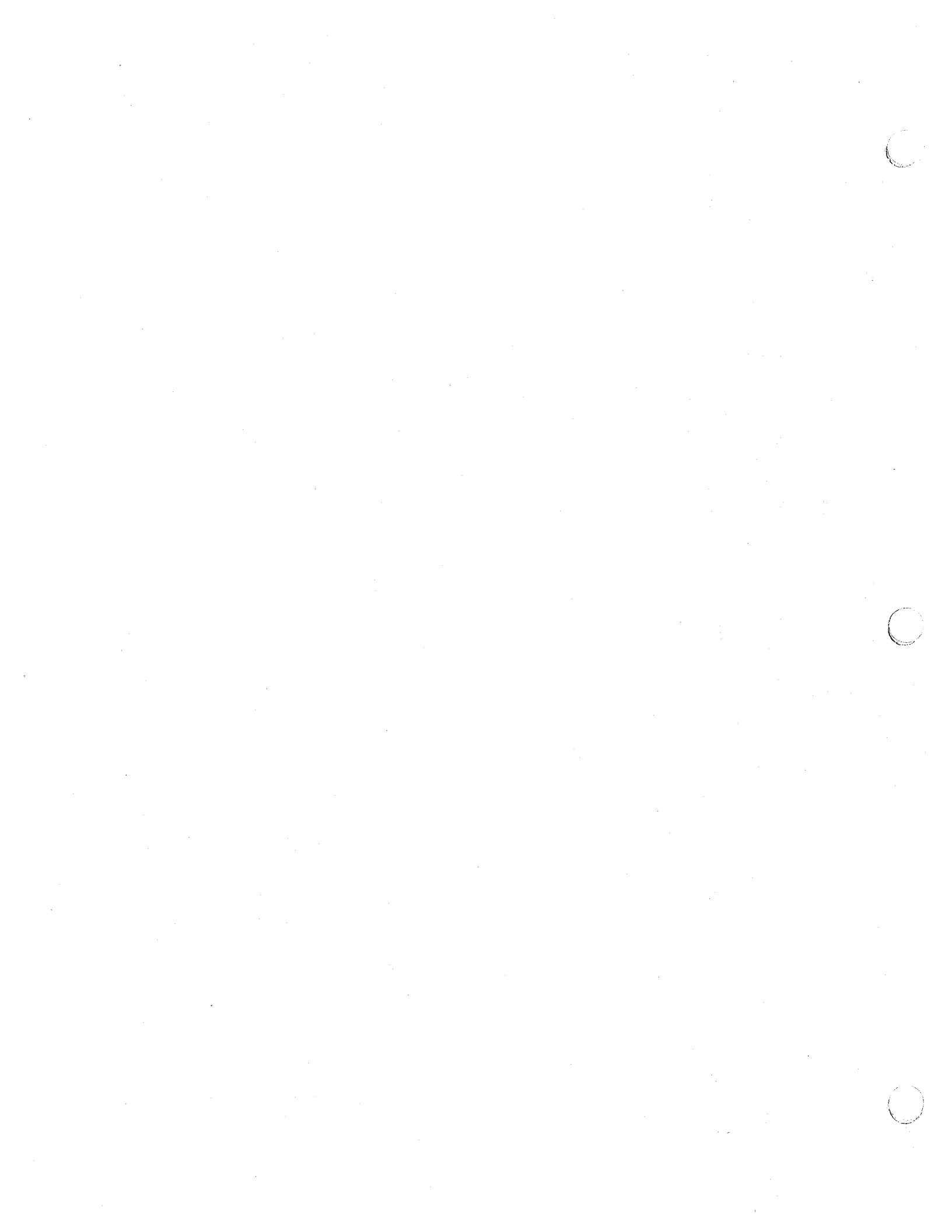
BID SCHEDULE FORM

COL 1 SEQ NO	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	COL 7 CTS
071	51.21S0C1042R STANDARD MANHOLE TYPE C-1 ON 42" R.C.P. SEWER	2.00	EACH	4,000.00	8,000.00	00
072	51.21S0C1048E STANDARD MANHOLE TYPE C-1 ON EXISTING 48" SEWER	2.00	EACH	50,000.00	100,000.00	00
073	51.21S0C1048R STANDARD MANHOLE TYPE C-1 ON 48" R.C.P. SEWER	3.00	EACH	20,000.00	60,000.00	00
074	51.23RF REPLACEMENT OF EXISTING MANHOLE FRAME AND COVER	3.00	EACH	775.00	2,325.00	00
075	51.41S001 STANDARD CATCH BASIN, TYPE 1	195.00	EACH	9,000.00	1,755,000.00	00
076	51.41S002 STANDARD CATCH BASIN, TYPE 2	2.00	EACH	7,500.00	15,000.00	00
077	52.11D12 12" DUCTILE IRON PIPE BASIN CONNECTION	3,700.00	L.F.	250.00	925,000.00	00
078	52.21V08 8" E.S.V.P. RISER FOR HOUSE CONNECTION	260.00	V.F.	0.01	2.60	
079	52.21V10 10" E.S.V.P. RISER FOR HOUSE CONNECTION	10.00	V.F.			
080	52.31V06S10 6" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 10" E.S.V.P. SANITARY SEWER	535.00	EACH	0.01	6.01	
						3.35



BID SCHEDULE FORM

COL. 1 SEQ. NO.	COL. 2 ITEM NUMBER AND DESCRIPTION	COL. 3 ENGINEER'S ESTIMATE OF QUANTITY	COL. 4 UNIT	COL. 5 UNIT PRICE (IN FIGURES)		COL. 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CENTS	DOLLARS	CENTS
081	52.31V06S12 6" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 12" E.S.V.P. SANITARY SEWER	9.00	EACH	0	01	0	09
082	52.31V06S15 6" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 15" E.S.V.P. SANITARY SEWER	30.00	EACH	0	01	0	30
083	52.31V06S18 6" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 18" E.S.V.P. SANITARY SEWER	18.00	EACH	0	01	0	18
084	52.31V08S10 8" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 10" E.S.V.P. SANITARY SEWER	3.00	EACH	0	01	0	03
085	52.41V06N NEW 6" E.S.V.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE Unit price bid shall not be greater than: \$ 75.00	12,300.00	L.F.	A0	00	492	00000
086	52.41V06R 6" E.S.V.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	100.00	L.F.	0	01	1	00
087	52.41V08N NEW 8" E.S.V.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE Unit price bid shall not be greater than: \$ 80.00	130.00	L.F.	40	00	5,200	00
088	53.11DR TELEVISION INSPECTION AND DIGITAL AUDIO-VISUAL RECORDING OF SEWERS	48,900.00	L.F.	3	00	146,700	00
089	6.02 AAN UNCLASSIFIED EXCAVATION	21,150.00	C.Y.	75	00	1,586,250	00



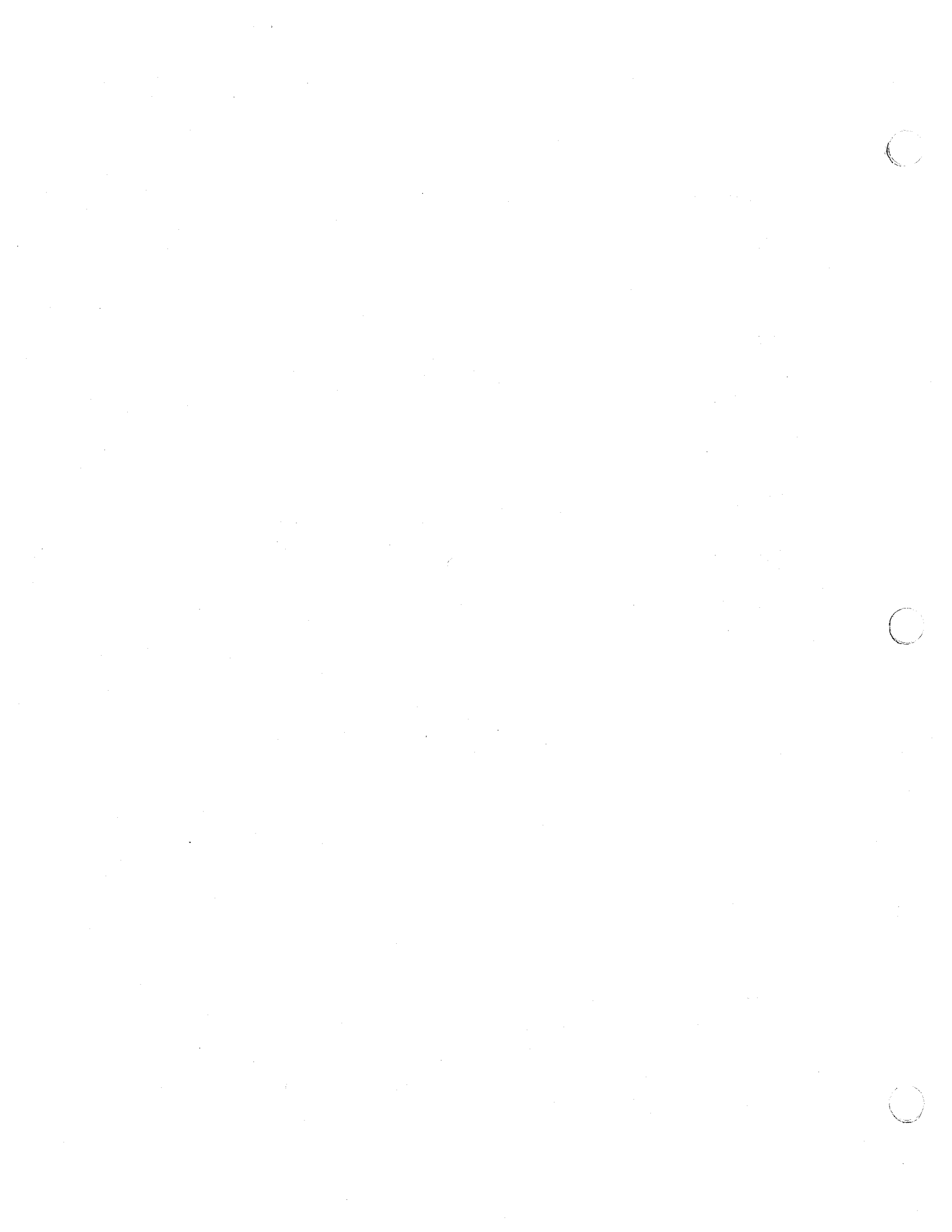
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NEW YORK CITY DEPARTMENT OF DESIGN, PLANNING & CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

PROJECT ID: SE810
CONTRACT PIN: 8502011SE0027C

BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	COL 7 GTS
090	6.22 F ADDITIONAL HARDWARE	9,000.00	LBS.	2.00	18,000.00	
091	6.25 RS TEMPORARY SIGNS	28,800.00	S.F.	0.01	288.00	
092	6.26 TIMBER CURB	127,500.00	L.F.	0.01	1,275.00	
093	6.28 AA LIGHTED TIMBER BARRICADES	18,250.00	L.F.	0.01	182.50	
094	6.40 DC ENGINEER'S FIELD OFFICE WITH CONFERENCE ROOM	42.00	MONTH	10,000.00	420,000.00	
095	6.44 THERMOPLASTIC REFLECTORIZED PAVEMENT MARKINGS (4" WIDE)	6,000.00	L.F.	3.00	18,000.00	
096	6.49 TEMPORARY PAVEMENT MARKINGS (4" WIDE)	4,500.00	L.F.	1.00	4,500.00	
097	6.53 REMOVE EXISTING LANE MARKINGS (4" WIDE)	850.00	L.F.	2.00	1,700.00	
098	6.67 SUBBASE COURSE, SELECT GRANULAR MATERIAL	8,650.00	C.Y.	30.00	259,500.00	
099	6.68 PLASTIC FILTER FABRIC	110,000.00	S.Y.	0.01	1,100.00	



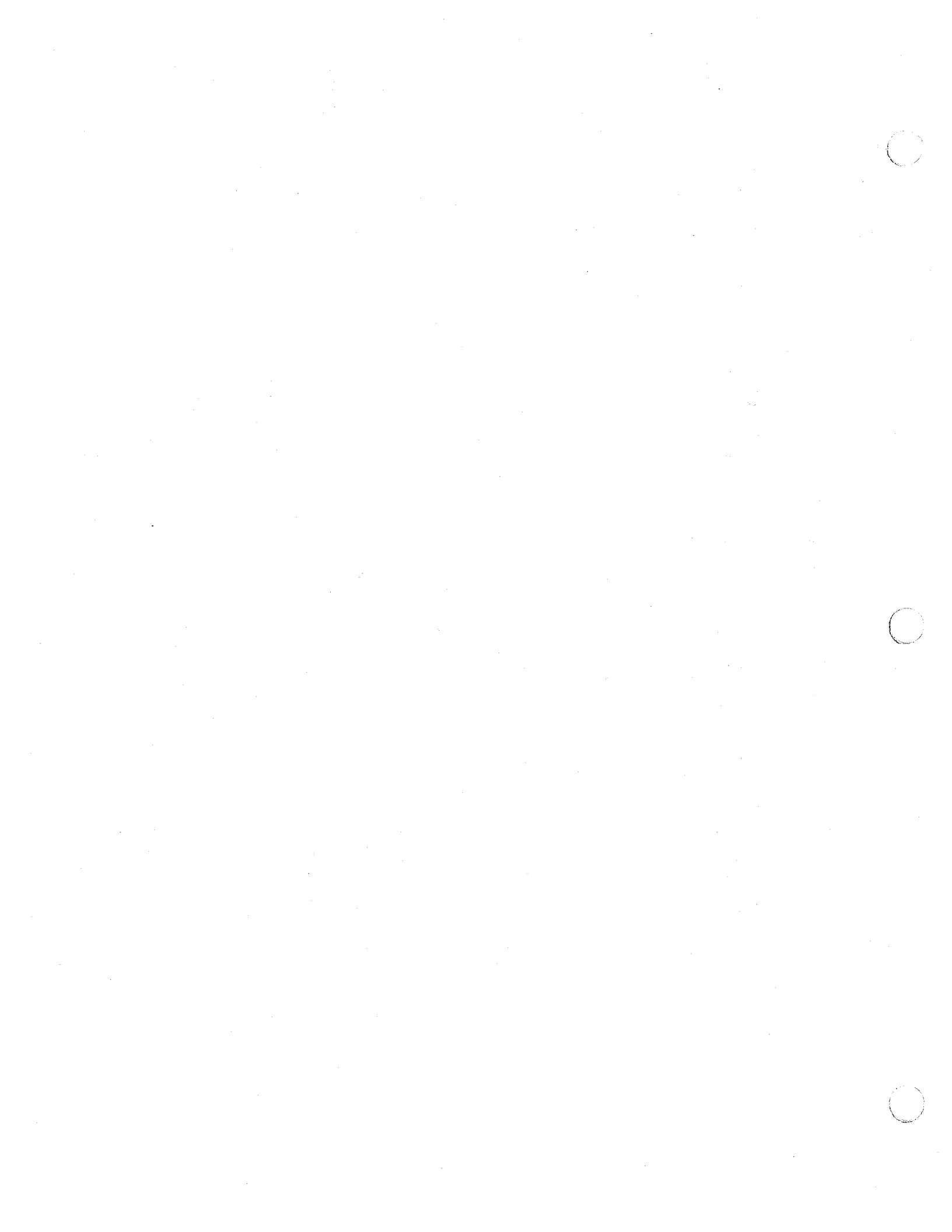
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

PROJECT ID: SE818
CONTRACT PIN: 8502011SE0027C

BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CENTS	DOLLARS	CENTS
100	6.75 GRINDING EXISTING ASPHALTIC CONCRETE WEARING COURSE	1,000.00	C.Y.				
101	6.87 PLASTIC BARRELS	28,800.00	EACH	75	00	75,000	00
102	60.11R520 FURNISHING AND DELIVERING 20-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 55)	375.00	L.F.	145	00	54,375	00
103	60.11R606 FURNISHING AND DELIVERING 6-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	260.00	L.F.	45	00	11,700	00
104	60.11R608 FURNISHING AND DELIVERING 8-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	8,650.00	L.F.	46	00	397,900	00
105	60.11R612 FURNISHING AND DELIVERING 12-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	2,850.00	L.F.	55	00	156,750	00
106	60.12D06 LAYING 6-INCH DUCTILE IRON PIPE AND FITTINGS	330.00	L.F.				
107	60.12D08 LAYING 8-INCH DUCTILE IRON PIPE AND FITTINGS	8,850.00	L.F.	40	00	13,200	00
108	60.12D12 LAYING 12-INCH DUCTILE IRON PIPE AND FITTINGS	3,000.00	L.F.	50	00	442,500	00
109	60.12D20 LAYING 20-INCH DUCTILE IRON PIPE AND FITTINGS	400.00	L.F.	90	00	270,000	00
				125	00	50,000	00



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

PROJECT ID: SE818
CONTRACT PIN: 8502011SE0027C

BID SCHEDULE FORM

COL 1 SEQ NO	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
110	60.13M0A24 FURNISHING AND DELIVERING DUCTILE IRON MECHANICAL JOINT 24-INCH DIAMETER AND SMALLER FITTINGS, INCLUDING WEDGE TYPE RETAINER GLANDS	29.00	TONS	2500.00		72,500.00	
111	60.18BJC20EL FURNISHING, DELIVERING AND INSTALLING BELL JOINT CLAMPS, COMPLETE FOR 20-INCH PIPE AND LESS	5.00	EACH		0.01		0.05
112	61.11DMM06 FURNISHING AND DELIVERING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	34.00	EACH	3000.00		102,000.00	
113	61.11DMM08 FURNISHING AND DELIVERING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	33.00	EACH	1,300.00		42,900.00	
114	61.11DMM12 FURNISHING AND DELIVERING 12-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	9.00	EACH	4,000.00		36,000.00	
115	61.11DMM20 FURNISHING AND DELIVERING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	1.00	EACH	1,000.00		1,000.00	
116	61.11TWC03 FURNISHING AND DELIVERING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	1.00	EACH				0.01
117	61.11TWC04 FURNISHING AND DELIVERING 4-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	1.00	EACH				0.01



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

PROJECT ID: SE810
CONTRACT PIN: 8502011SE0027C

BID SCHEDULE FORM

COL 1 SECTION	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	COL 7 CTS
118	61.11TWC06 FURNISHING AND DELIVERING 6-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	1.00	EACH	0.01	0.01	0.01
119	61.12DMM06 SETTING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	34.00	EACH	600.00	20,400.00	
120	61.12DMM08 SETTING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	33.00	EACH	200.00	6,600.00	
121	61.12DMM12 SETTING 12-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	9.00	EACH	1400.00	12,600.00	
122	61.12DMM20 SETTING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	1.00	EACH	200.00	200.00	
123	61.12TWC03 SETTING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	1.00	EACH	0.01	0.01	
124	61.12TWC04 SETTING 4-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	1.00	EACH	0.01	0.01	
125	61.12TWC06 SETTING 6-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	1.00	EACH	0.01	0.01	
126	62.11SD FURNISHING AND DELIVERING HYDRANTS	34.00	EACH	6000.00	204,000.00	



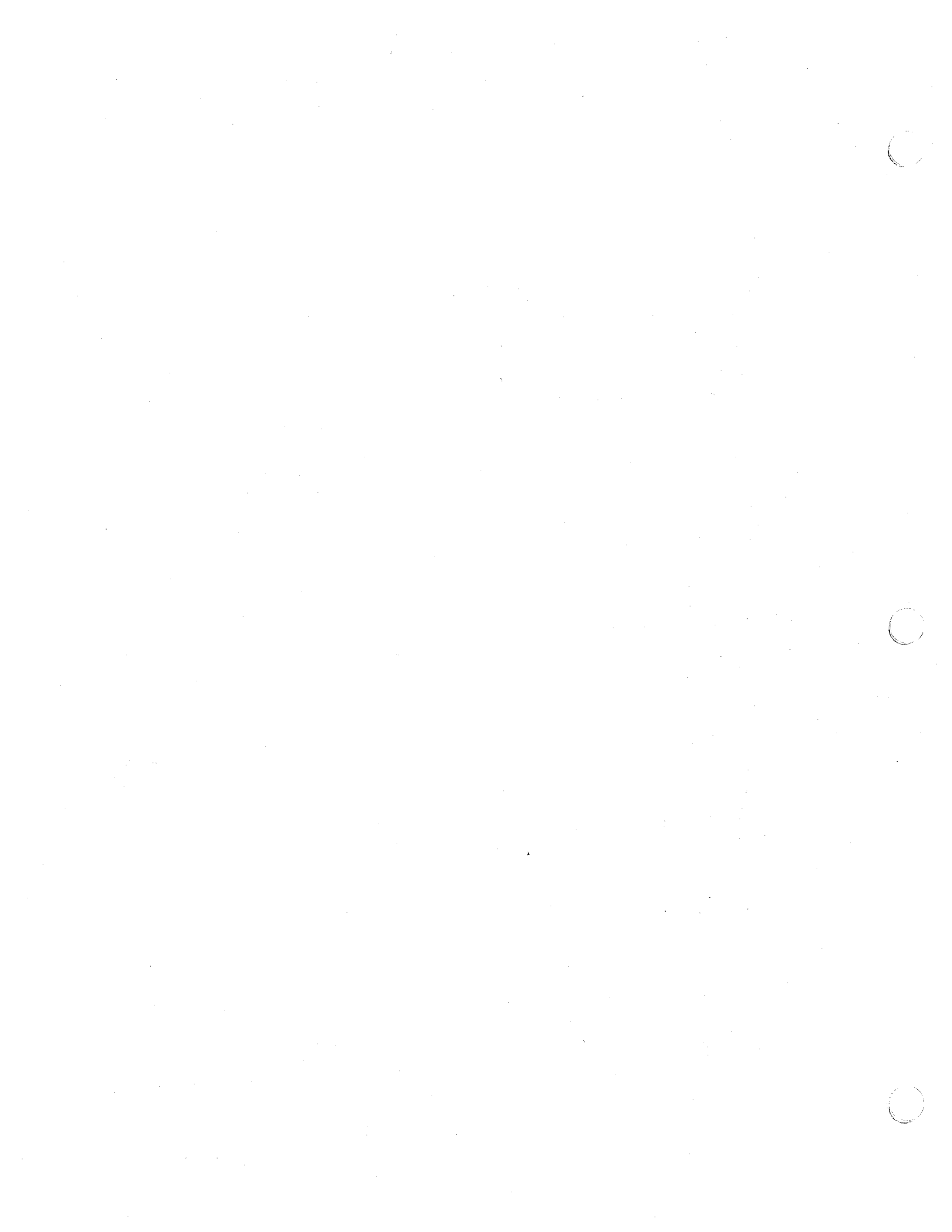
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

PROJECT ID: SE818
CONTRACT PIN: 8502011SE0027C

BID SCHEDULE FORM

COL 1 SEQ NO	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEERS ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	COL 7 CTS
127	62.12SG SETTING HYDRANTS COMPLETE WITH WEDGE TYPE RETAINER GLANDS	34.00	EACH	5,000.00	170,000.00	100
128	62.13RH REMOVING HYDRANTS	23.00	EACH	0.01	0.23	
129	62.14FS FURNISHING, DELIVERING AND INSTALLING HYDRANT FENDERS	68.00	EACH	200.00	13,600.00	
130	63.11VC FURNISHING AND DELIVERING VARIOUS CASTINGS	57.00	TONS			
131	64.11EL WITHDRAWING AND REPLACING HOUSE SERVICES USING 1-1/2-INCH OR LARGER SCREW TAPS	85.00	EACH	0.01	0.85	
132	64.11ST WITHDRAWING AND REPLACING HOUSE SERVICES USING SMALLER THAN 1-1/2-INCH SCREW TAPS	50.00	EACH	0.01	0.50	
133	64.12COEG CUTTING AND OFFSETTING HOUSE SERVICE WATER CONNECTIONS (EQUAL TO OR GREATER THAN 3-INCH DIAMETER)	75.00	L.F.			
134	64.12COLT CUTTING AND OFFSETTING HOUSE SERVICE WATER CONNECTIONS (LESS THAN 3-INCH DIAMETER)	150.00	L.F.			
135	64.12SEEG EXTENDING HOUSE SERVICE WATER CONNECTIONS (EQUAL TO OR GREATER THAN 3-INCH DIAMETER)	200.00	L.F.			
				0.01	1.50	
				0.01	2.00	



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

PROJECT ID: SE
CONTRACT PIN: 8502011SE0027C

BID SCHEDULE FORM

COL 1 SEQ NO	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEERS ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	COL 7 GTS
136	64.12ESLT EXTENDING HOUSE SERVICE WATER CONNECTIONS (LESS THAN 3-INCH DIAMETER)	500.00	L.F.	0.01	5.00	
137	64.13WC08 FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 8-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	2.00	EACH	0.01	0.02	
138	64.13WC12 FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 12-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	1.00	EACH	0.01	0.01	
139	64.13WC20 FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 20-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	1.00	EACH	0.01	0.01	
140	65.11BR FURNISHING, DELIVERING AND INSTALLING BANDS, RODS, WASHERS, ETC., COMPLETE, FOR RESTRAINING JOINTS	670.00	LBS.	0.01	6.70	
141	65.21PS FURNISHING AND PLACING POLYETHYLENE SLEEVE Unit price bid shall not be less than: \$ 0.50	6,265.00	L.F.	0.50	3,132.50	
142	65.31FF FURNISHING, DELIVERING AND PLACING FILTER FABRIC Unit price bid shall not be less than: \$ 0.10	95,000.00	S.F.	0.10	9,500.00	
143	65.71SG FURNISHING, DELIVERING AND PLACING SCREENED GRAVEL OR SCREENED BROKEN STONE BEDDING	350.00	C.Y.	0.01	3.50	

NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
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PROJECT ID: SE818
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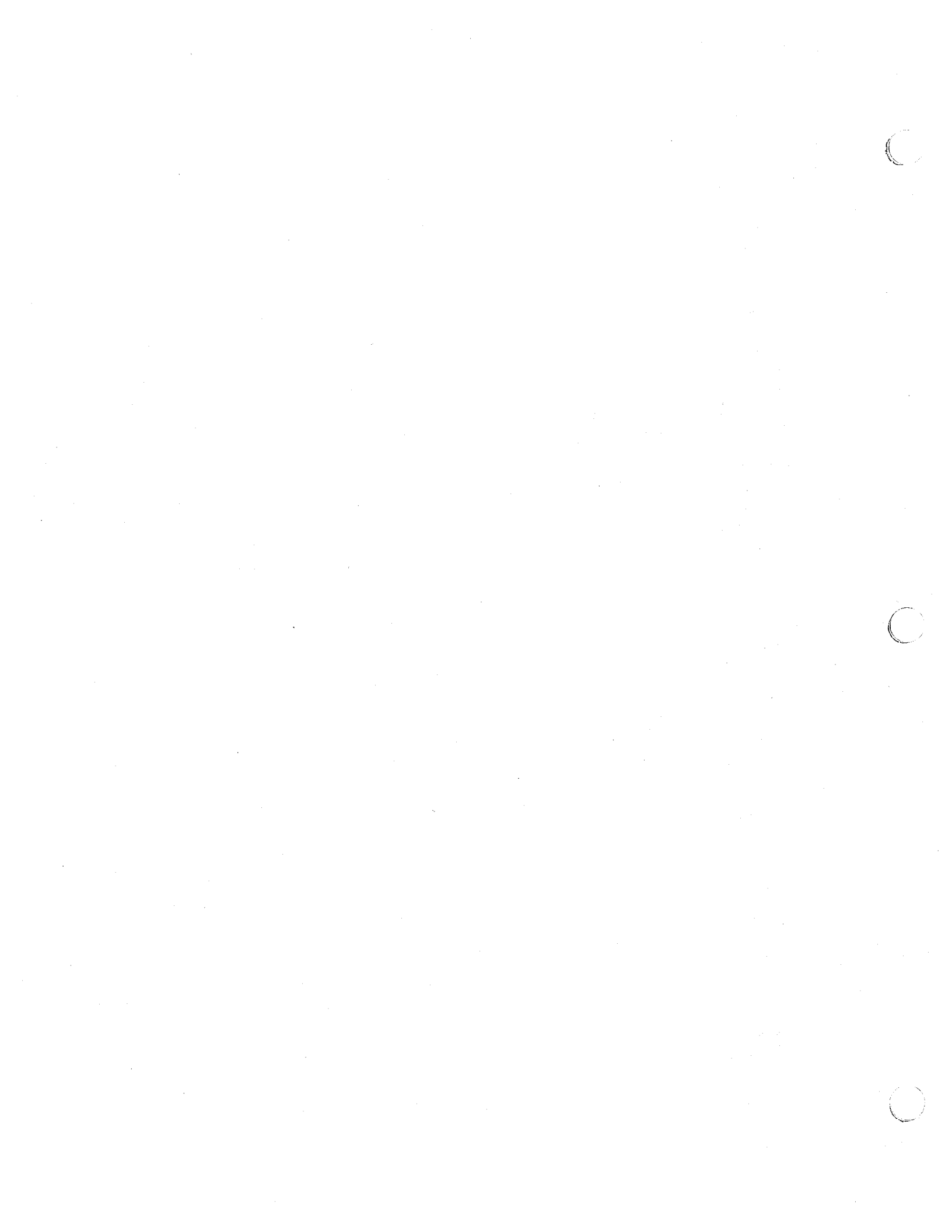
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BID SCHEDULE FORM

COL 1 SEQ NO	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	CIS
144	7.13 B MAINTENANCE OF SITE Unit price bid shall not be less than: \$ 7,500.00	36.00	MONTH	7500.00	270,000.00	00
145	7.19 LOAD TRANSFER JOINT	40.00	L.F.	32.00	1,280.00	00
146	7.36 PEDESTRIAN STEEL BARRICADES	115,500.00	L.F.	0.01	1,155.00	00
147	7.88 AA RODENT INFESTATION SURVEY AND MONITORING Unit price bid shall not be less than: \$ 50,000.00	1.00	L.S.	50,000.00	50,000.00	00
148	7.88 AB RODENT BAIT STATIONS	3,000.00	EACH	60.00	180,000.00	00
149	7.88 AC BAITING OF RODENT BAIT STATIONS Unit price bid shall not be less than: \$ 8.50	3,000.00	EACH	8.50	25,500.00	00
150	7.88 AD WATERBUG BAIT APPLICATIONS Unit price bid shall not be less than: \$ 65.00	400.00	BLOCK	65.00	26,000.00	00
151	70.21DK DECKING Unit price bid shall not be less than: \$ 85.00	1,000.00	S.Y.	85.00	85,000.00	00

BID SCHEDULE FORM

COMB SECT NO	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CENTS	DOLLARS	CENTS
152	70.31FN FENCING Unit price bid shall not be less than: \$ 2.00	80,000.00	L.F.	2	00	160,000	00
153	70.51EO EXCAVATION OF BOULDERS IN OPEN CUT Unit price bid shall not be less than: \$ 75.00	950.00	C.Y.	75	00	71,250	00
154	70.61RE ROCK EXCAVATION	50.00	C.Y.	0	01	0	50
155	70.71SB STONE BALLAST Unit price bid shall not be less than: \$ 15.00	9,000.00	C.Y.	15	00	135,000	00
156	70.81CB CLEAN BACKFILL Unit price bid shall not be less than: \$ 15.00	61,000.00	C.Y.	15	00	915,000	00
157	70.91SW12 FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 12-INCH IN DIAMETER AND LESS	3,000.00	S.F.	0	01	30	00
158	70.91SW20 FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 20-INCH IN DIAMETER	5,000.00	S.F.	0	01	50	00
159	72.11HF HYDRAULIC FILL FOR ABANDONED SEWERS AND WATER MAINS	20.00	C.Y.	200	00	4,000	00



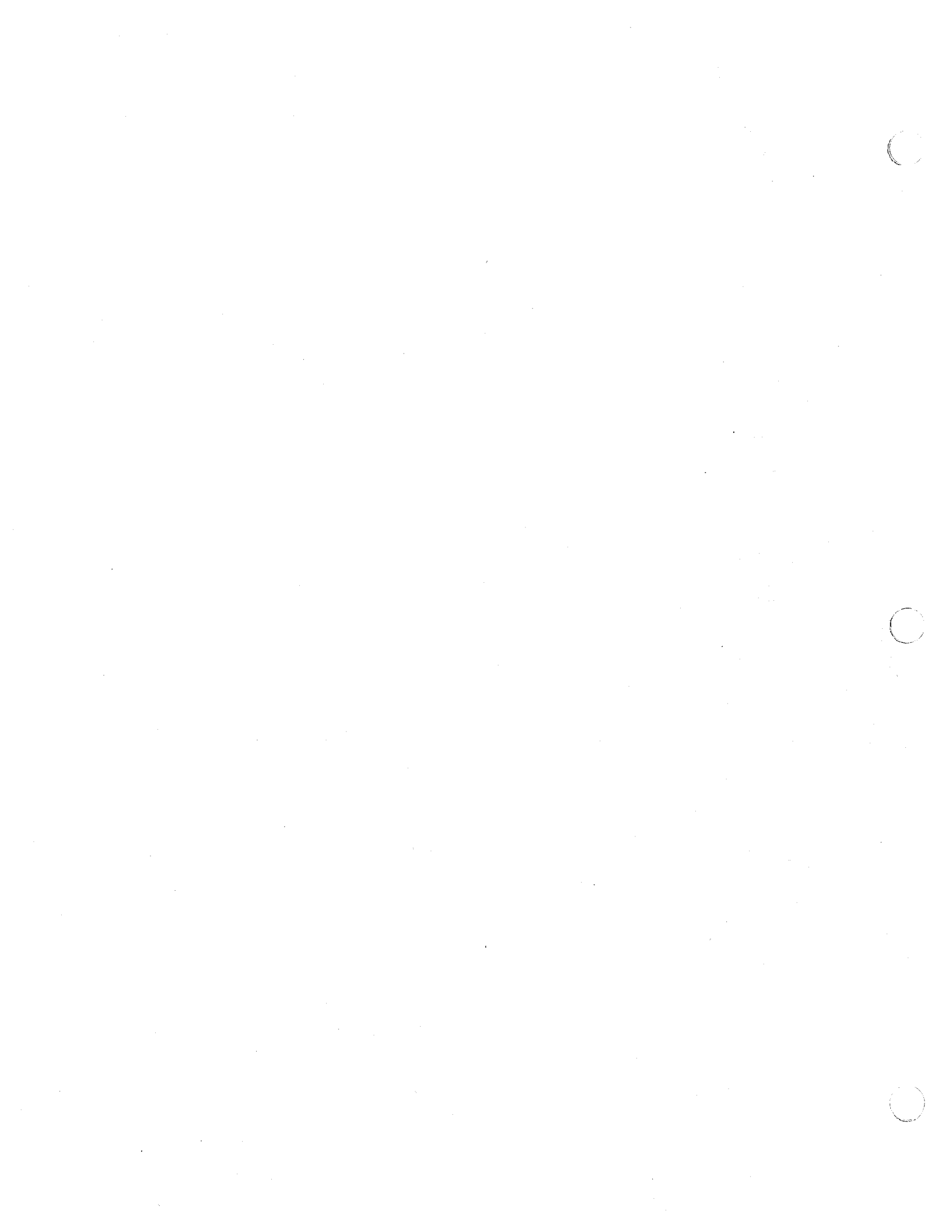
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

PROJECT ID: SEL
CONTRACT PIN: 8502011SE0027C

BID SCHEDULE FORM

SEQ NO	ITEM NUMBER AND DESCRIPTION	COL 2 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
160	73.11AB ADDITIONAL BRICK MASONRY Unit price bid shall not be less than: \$ 62.50	30.00	C.Y.	62	50	1,875	00
161	73.21AC ADDITIONAL CONCRETE Unit price bid shall not be less than: \$ 62.50	300.00	C.Y.	62	50	18,750	00
162	73.31AE0 ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (ALL DEPTHS) Unit price bid shall not be less than: \$ 20.00	9,150.00	C.Y.	20	00	183,000	00
163	73.41AG ADDITIONAL SELECT GRANULAR BACKFILL Unit price bid shall not be less than: \$ 15.00	955.00	C.Y.	15	00	14,325	00
164	73.51AS ADDITIONAL STEEL REINFORCING BARS Unit price bid shall not be less than: \$ 1.00	29,000.00	LBS.	1	00	29,000	00
165	9.04 HW ALLOWANCE FOR ANTI-FREEZE ADDITIVE IN CONCRETE PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 25,000.00	1.00	F.S.	25,000	00	25,000	00
166	9.30 STORM WATER POLLUTION PREVENTION	1.00	L.S.	40,000	00	40,000	00
167	9.99 M FLASHING ARROW BOARD	12.00	MONTH	1,000	00	12,000	00



BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	CTS
168	BMP-7.109 LICENSED SURVEYOR	60.00	DAY	1 00	60 00	00
169	BMP-7.103-A CONCRETE (NONSTRUCTURAL)	230.00	C.Y.	200 00	46,000 00	00
170	BMP-7.107-B RIP-RAP AND ANGULAR NATURAL FIELD STONE	900.00	C.Y.	175 00	157,500 00	00
171	BMP-7.114-1 FRP WEIR PLATE NO. 1	10.00	EACH	2,300 00	23,000 00	00
172	BMP-7.114-2 FRP WEIR PLATE NO. 2	1.00	EACH	9,000 00	9,000 00	00
173	BMP-7.129-1 STRUCTURE NO. 1	1.00	EACH	350,000 00	350,000 00	00
174	BMP-7.129-2 STRUCTURE NO. 2	1.00	EACH	180,000 00	180,000 00	00
175	BMP-7.129-3 STRUCTURE NO. 3	1.00	EACH	180,000 00	180,000 00	00
176	BMP-7.129-4 STRUCTURE NO. 4	1.00	EACH	180,000 00	180,000 00	00
177	BMP-7.129-5 STRUCTURE NO. 5	1.00	EACH	1,675,000 00	1,675,000 00	00



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BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	COLS CTS
178	BMP-7.18 JOB PROGRESS FRAMES	500.00	EACH	12 00	6,000 00	00
179	BMP-7.301 DEBRIS REMOVAL AND DISPOSAL	520.00	C.Y.	60 00	31,200 00	00
180	BMP-7.302 CLEARING, GRUBBING AND REMOVALS	270,000.00	S.F.	0 80	216,000 00	00
181	BMP-7.304-A EXCAVATION	51,330.00	C.Y.	48 00	2,463,840 00	00
182	BMP-7.305 CRUSHED STONES	50.00	C.Y.	30 00	1,500 00	00
183	BMP-7.306-A TREE REMOVAL 6" TO 12" CALIPER	203.00	EACH	250 00	50,750 00	00
184	BMP-7.306-B TREE REMOVAL ABOVE 12" TO 18" CALIPER	203.00	EACH	425 00	86,275 00	00
185	BMP-7.306-C TREE REMOVAL ABOVE 18" TO 24" CALIPER	130.00	EACH	650 00	84,500 00	00
186	BMP-7.306-D TREE REMOVAL ABOVE 24" CALIPER	45.00	EACH	900 00	40,500 00	00
187	BMP-7.307-A GRADING	270,000.00	S.F.	0 37	99,900 00	00



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COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	COL 7 CTS
188	BMP-7.308 FILL	10.00	C.Y.	40 00	400 00	00
189	BMP-7.310-A4 PLANT SALVAGE	1,200.00	HRS	150 00	180,000 00	00
190	BMP-7.401-A CANOPY TREES (2 1/2" TO 3" CALIPER)	581.00	EACH	700 00	406,700 00	00
191	BMP-7.401-C CANOPY TREES - WHIPS 5' TO 6'	142.00	EACH	140 00	19,880 00	00
192	BMP-7.401-H SHRUBS (SEE PLANTING PLANS)	166.00	EACH	55 00	9,130 00	00
193	BMP-7.401-I SEEDING	114,500.00	S.F.	0 16	18,320 00	00
194	BMP-7.401-J HERBACEOUS PLANTS (PLUGS)	36,850.00	EACH	4 50	165,825 00	00
195	BMP-7.403 TOPSOIL	1,070.00	C.Y.	65 00	69,550 00	00
196	BMP-7.405-A VECTOR AND PEST CONTROL	120.00	HRS	150 00	18,000 00	00
197	BMP-7.406 WOOD CHIPS	100.00	C.Y.	55 00	5,500 00	00

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BID SCHEDULE FORM

SEQ NO	ITEM NAME AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
198	BMP-7.407 JUTE MESH	114,500.00	S.F.	1	50	171,750	00
199	BMP-7.408B HERBICIDE APPLICATION	20.00	CREW DAY	1,500	00	30,000	00
200	BMP-7.413 TEMPORARY GOOSE EXCLUSION FENCE	10,120.00	L.F.	9	00	91,080	00
201	BMP-7.415 INVASIVE VINE AND PLANT REMOVAL	10.00	CREW DAY	400	00	4,000	00
202	BMP-7.418-A SAND	310.00	C.Y.	40	00	12,400	00
203	BMP-7.419 TREE AND ROOT PRUNING	3.00	CREW DAY	2,500	00	7,500	00
204	BMP-7.502 CONSTRUCTION LIMIT FENCE	1,110.00	L.F.	9	50	10,545	00
205	BMP-7.504 REINFORCED SILT FENCE	3,690.00	L.F.	25	00	92,250	00
206	BMP-7.505 SAND BAG	12,500.00	EACH	7	00	87,500	00
207	BMP-7.506-A SEDIMENT TRAP WITH FILTER	3.00	EACH	4,200	00	12,600	00

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BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
208	BMP-7.510 PORTABLE SEDIMENT TANK	3.00	EACH	14,000	00	42,000	00
209	BMP-7.511 STORM DRAIN INLET PROTECTION	4.00	EACH	300	00	1,200	00
210	BMP-7.512 DIRTBAG	15.00	EACH	350	00	5,250	00
211	BMP-7.601-B GALVANIZED STEEL "W" BEAM GUIDE RAIL AND GUIDE RAIL GATE	120.00	L.F.	40	00	4,800	00
212	BMP-7.601-G GALVANIZED STEEL "W" BEAM GUIDE RAIL	375.00	L.F.	45	00	16,875	00
213	BMP-7.602 BOULDERS	440.00	EACH	250	00	110,000	00
214	BMP-7.604-4 4-FOOT BLACK CHAIN LINK FENCE	245.00	L.F.	45	00	11,025	00
215	BMP-7.605-A PERMANENT SIGNS ON STEEL RAIL POSTS	11.00	EACH	325	00	3,575	00
216	BMP-7.605-B 0.020" TEMPORARY SIGNS	20.00	EACH	75	00	1,500	00
217	BMP-7.606-B PERMANENT MAINTENANCE ACCESSWAY (PAVERS)	3,010.00	S.F.	22	00	66,220	00



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BID SCHEDULE FORM

SEQ NO	ITEM NUMBER AND DESCRIPTION	GOL 1 ENGINEER'S ESTIMATE OF QUANTITY	GOL 4 UNIT	GOL 5 UNIT PRICE (IN FIGURES)		GOL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
218	BMP-7.606-C PERMANENT MAINTENANCE ACCESSWAY (GRAVEL)	26,380.00	S.F.	1.50		39,570.00	
219	BMP-7.608-B SURVEY MONUMENTS	4.00	EACH	4,070.00		16,280.00	
220	BMP-7.612 BRONZE PLAQUE	1.00	EACH	1,000.00		1,000.00	
221	BMP-7.622 FOREBAY MICROPOOL SEDIMENT CLEAN-OUT INDICATOR	7.00	EACH	410.00		2,870.00	
222	BMP-7.701A LIVE STAKES	465.00	EACH	9.00		4,185.00	
223	BMP-7.703 NATURAL FIELD STONES	220.00	C.Y.	180.00		39,600.00	
224	BMP-7.705 EROSION CONTROL MAT	10,000.00	S.F.	2.50		25,000.00	
225	BMP-7.706-A FILTER FABRIC	1,240.00	S.F.	0.20		248.00	
226	BMP-7.707-A COIR LOG	140.00	L.F.	50.00		7,000.00	
227	BMP-7.710 RENO MATTRESS	850.00	S.Y.	55.00		46,750.00	

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BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	QTS
228	UTL-6.01.1 GAS MAIN CROSSING SEWER UP TO 24" IN DIAMETER (S6.01) Unit price bid shall not be less than: \$ 1,040.00	67.00	EACH	1,040.00	69,680.00	00
229	UTL-6.01.2 GAS MAIN CROSSING SEWER 30" IN DIAMETER (S6.01) Unit price bid shall not be less than: \$ 1,770.00	7.00	EACH	1,770.00	12,390.00	00
230	UTL-6.01.3 GAS MAIN CROSSING SEWER 36" THRU 42" IN DIAMETER (S6.01) Unit price bid shall not be less than: \$ 1,770.00	7.00	EACH	2,040.00	14,280.00	00
231	UTL-6.01.4 GAS MAIN CROSSING SEWER 48" THRU 54" IN DIAMETER (S6.01) Unit price bid shall not be less than: \$ 2,120.00	3.00	EACH	2,120.00	6,360.00	00
232	UTL-6.01.4G GAS MAIN CROSSING 4'-0"W X 4'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 2,300.00	2.00	EACH	2,300.00	4,600.00	00
233	UTL-6.01.4I GAS MAIN CROSSING 4'-0"W X 3'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 2,340.00	1.00	EACH	2,340.00	2,340.00	00
234	UTL-6.01.8 GAS SERVICES CROSSING TRENCHES AND/OR EXCAVATIONS (S6.01) Unit price bid shall not be less than: \$ 465.00	378.00	EACH	465.00	175,770.00	00



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BID SCHEDULE FORM

COL 1 SEQ NO	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	COL 7 CTS
235	UTL-6.01.9 GAS MAIN CROSSING WATER MAIN UP TO 20" IN DIAMETER (\$6.01) Unit price bid shall not be less than: \$ 485.00	44.00	EACH	485 00	21,340.00	00
236	UTL-6.02 EXTRA EXCAVATION FOR THE INSTALLATION OF CATCH BASIN SEWER DRAIN PIPES WITH GAS INTERFERENCES (\$6.02) Unit price bid shall not be less than: \$ 715.00	71.00	EACH	715 00	50,765.00	00
237	UTL-6.03 REMOVAL OF ABANDONED GAS FACILITIES. ALL SIZES. (\$6.03) Unit price bid shall not be less than: \$ 15.00	9,000.00	L.F.	15 00	135,000.00	00
238	UTL-6.03.1 REMOVAL OF ABANDONED GAS FACILITIES WITH POSSIBLE COAL TAR WRAP. ALL SIZES. (\$6.03) Unit price bid shall not be less than: \$ 25.00	3,000.00	L.F.	25 00	75,000.00	00
239	UTL-6.04 ADJUST HARDWARE TO GRADE USING SPACER RINGS/ADAPTORS. (STREET REPAVING.) (\$6.04) Unit price bid shall not be less than: \$ 35.00	420.00	EACH	35 00	14,700.00	00
240	UTL-6.05 ADJUST HARDWARE TO GRADE BY RESETTING. (ROAD RECONSTRUCTION.) (\$6.05) Unit price bid shall not be less than: \$ 65.00	150.00	EACH	65 00	9,750.00	00
241	UTL-6.06 SPECIAL CARE EXCAVATION AND BACKFILLING (\$6.06) Unit price bid shall not be less than: \$ 180.00	5,250.00	C.Y.	180 00	945,000.00	00

BID SCHEDULE FORM

COL 1 SEQ NO	COL 2 ITEM NUMBER AND DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	COL 7 CTS
242	UTL-6.07 TEST PITS FOR GAS FACILITIES (S6.07) Unit price bid shall not be less than: \$ 100.00	1,000.00	C.Y.	100.00	100,000.00	00
243	UTL-GCS-2WS GAS INTERFERENCES AND ACCOMMODATIONS PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 100,000.00	1.00	F.S.	100,000.00	100,000.00	00

SUB-TOTAL: \$ 45,916,907.15

244	6.39 A MOBILIZATION BID PRICE OF MOBILIZATION SHALL NOT EXCEED 4% OF THE ABOVE SUB-TOTAL PRICE.	1.00	L.S.		1,830,840.59	
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TOTAL BID PRICE: \$ 47,747,747.74

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.



Tax ID #: 73 170 6369

PIN #: 8502011SE0027C



#7

THE CITY OF NEW YORK

SCHEDULE B - Subcontractor Utilization Plan - Part I: Agency's Target

This page to be completed by contracting agency

Contract Overview

Pin #: 8502011SE0027C FMS Project ID #: SE-818
 Project Title: CONSTRUCTION OF SANITARY AND STORM SEWERS
 Contracting Agency: Department of Design and Construction
 Agency Address: 30-30 Thomson Ave City Long Island City State NY Zip Code 11101
 Contact Person: Diana A. Benjamin Title MWBE Liaison & Compliance Analyst
 Telephone #: (718) 391-3470 Email: BenjamiDi@ddc.nyc.gov

Project Description (attach additional pages if necessary)

PROJECT ID: SE818

FOR THE CONSTRUCTION OF SANITARY AND STORM SEWERS IN: SHELDON AVENUE BETWEEN ELLSWORTH AVENUE AND BMP-SB1 A POINT APPROXIMATELY 1,000-FEET EAST OF DELMAR AVENUE; SINCLAIR AVENUE BETWEEN ELLSWORTH AVENUE AND DEAD END; STAFFORD AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; VINELAND AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; CROWN AVENUE BETWEEN NIPPON AVENUE AND BELFIELD AVENUE; WOODROW ROAD BETWEEN POWELL STREET AND BELFIELD AVENUE; CASTOR PLACE BETWEEN HUGUENOT AVENUE AND ANACONDA STREET; SPERRY PLACE BETWEEN ANACONDA STREET AND EVERTON AVENUE; POWELL STREET BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; WALKER PLACE BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; DAHLIA STREET BETWEEN WOODROW ROAD AND SHIFT PLACE; HUGUENOT AVENUE BETWEEN RENSSELAER AVENUE AND SHIFT PLACE; CARDIFF STREET BETWEEN CASTOR PLACE AND ROSEDALE AVENUE; BOULDER STREET BETWEEN WOODROW ROAD AND ROSEDALE AVENUE; NIPPON AVENUE BETWEEN RENSSELAER AVENUE AND WOODROW ROAD; ANACONDA STREET BETWEEN SPERRY PLACE AND DELMAR AVENUE; BALLARD AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; DELMAR AVENUE BETWEEN RENSSELAER AVENUE AND ANACONDA STREET; CROWN PLACE BETWEEN CROWN AVENUE AND DEAD END; EVERTON AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; AND, HEENAN AVENUE BETWEEN VINELAND AVENUE AND DEAD END

INCLUDING WATER MAIN WORK

Together With All Work Incidental Thereto
 BOROUGH OF STATEN ISLAND
 CITY OF NEW YORK

(1) **Target Subcontracting Percentage**
 Percentage of total contract dollar value that agency estimates will be awarded to subcontractors in amounts under \$1 million for construction and professional services. 5 %

Subcontractor Participation Goals*
 Complete and enter total for each Construction or Professional Services, or both (if applicable)

Group	Construction	Professional Services
Black American	Unspecified %	0 %
Hispanic American	Unspecified %	0 %
Asian American	Unspecified %	No Goal
Caucasian Female	No Goal %	0 %
Total Participation Goals	(2) 50 %	(3) 0 %

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

M/WBE PROGRAM

SUBCONTRACTOR UTILIZATION PLAN - SCHEDULE B

Subcontractor Utilization Plan (Schedule B): The Subcontractor Utilization Plan (Schedule B) for this Contract is set forth on the following pages of this Bid Booklet. The Subcontractor Utilization Plan (Part I) indicates whether participation goals have been established for this Contract. If participation goals have been established for this Contract, the bidder must submit a Subcontractor Utilization Plan (Part II) with its bid.

Contract Provisions: Contract provisions regarding the participation of MWBE firms are set forth in Article 77 of the Contract. The bidder is advised to review these contract provisions.

Waiver: The bidder may seek a full or partial pre-award waiver of the Target Subcontracting Percentage in accordance with Article 77 of the Contract (See Part A, Section 10). The bidder's request for a waiver must be submitted at least seven (7) calendar days prior to the bid date. Waiver requests submitted after the deadline will not be considered. The form for requesting a waiver of the Target Subcontracting Percentage is set forth in the Subcontractor Utilization Plan (Part III).

Rejection of the Bid: The bidder must complete the Subcontractor Utilization Plan (Part II) set forth on the following pages. Subcontractor Utilization Plans which do not include the required affirmations will be deemed to be non-responsive, unless a full waiver of the Target Subcontracting Percentage is granted (Subcontractor Utilization Plan, Part III). In the event that the City determines that the bidder has submitted a Subcontractor Utilization Plan where the required affirmations are completed but other aspects of the Plan are not complete, or contain a copy or computation error that is at odds with the affirmation, the bidder will be notified by the Agency and will be given four (4) calendar days from receipt of notification to cure the specified deficiencies and return a completed plan to the Agency. Failure to do so will result in a determination that the Bid is non-responsive. Receipt of notification is defined as the date notice is emailed or faxed (if the bidder has provided an email address or fax number), or no later than five (5) days from the date of mailing or upon delivery, if delivered.

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

Tax ID #: 73 170 6369

PIN #: 8502011SE0027C

SCHEDULE B - Subcontractor Utilization Plan - Part II: Bidder/Proposer Subcontracting Plan

This page and the next (Part II herein) are to be completed by the bidder/proposer. **AFFIRMATIONS; Bidder/proposer must check the applicable boxes below, affirming compliance with M/WBE requirements.**

Bidder/proposer **AFFIRMS** or **DOES NOT AFFIRM** [statement below]

It is a material term of the contract to be awarded that, with respect to the total amount of the contract to be awarded, bidder/proposer will award one or more subcontracts for amounts under one million dollars, sufficient to meet or exceed the Target Subcontracting Percentage (as set forth in Part I) unless it obtains a full or partial waiver thereof, and it will award subcontracts sufficient to meet or exceed the Total Participation Goals (as set forth in Part I) unless such goals are modified by the Agency.

- Bidder/proposer **AFFIRMS** that it intends to meet or exceed the Target Subcontracting Percentage (as set forth in Part I); or
- AFFIRMS** that it has obtained a full/partial pre-award waiver of the Target Subcontracting Percentage (as set forth in Part I) and intends to award the modified Target Subcontracting Percentage, if any; or
- DOES NOT AFFIRM**

Section I: Prime Contractor Contact Information

Tax ID # 73-170 6369 FMS Vendor ID # 0002543527
 Business Name DiFazio Ind. Contact Person Joe Ligo
 Address 38 Kinsey Pl. Staten Island, NY 10307
 Telephone # 718-725 6766 E-mail jueligo joel@difazioind.net

Section II: General Contract Information

- Define the industry in which work is to be performed.
 - Construction includes all contracts for the construction, rehabilitation, and/or renovation of physical structures. This category does include CM Build as well as other construction related services such as: demolition, asbestos and lead abatement, and painting services, carpentry services, carpet installation and removal, where related to new construction and not maintenance. This category does not include standard services which may be associated with construction projects but which do not constitute construction, such as trucking, site protection, site security, site surveying, soil testing, extermination, and maintenance/operations.
 - Professional Services are a class of services that typically require the provider to have some specialized field or advanced degree. Services of this type include: legal, management consulting, information technology, accounting, auditing, actuarial, advertising, health services, pure construction management, environmental analysis, scientific testing, architecture and engineering, and traffic studies, and similar services.

a. Type of work on Prime Contract (Check one): Construction Professional Services

b. Type of work on Subcontract (Check all that apply): Construction Professional Services Other
- What is the expected percentage of the total contract dollar value that you expect to award to all subcontracts? 5 %
- Will you award subcontract(s) in amounts below \$ 1 million for construction and/or professional Services contracts within the first 12 months of the notice to proceed on the contract? Yes No

Section III: Subcontractor Utilization Summary

IMPORTANT: If you do not anticipate that you will subcontract at the target level the agency has specified, because you will perform more of the work yourself, you must seek a waiver of the Target Subcontracting Percentage by completing p.9).

Step 1: Calculate the percentage (of your total bid) that will go towards subcontracts under \$ 1M for construction and/or Professional services	Subcontracts under \$1M (4) (construction/professional services)	Total Bid/Proposal Value	Calculated Target Subcontracting Percentage
	\$ <u>2,387,388</u>	\$ <u>47,747,747.74</u>	<u>5</u> %

- Subcontracts under \$1M (construction/professional services):** Enter the value you expect to award to subcontractors in dollars for amounts under \$1 million for construction and/or professional services. This value defines the amount that participation goals apply to, and will be entered into the first line of Step 2.
- Total Bid/Proposal Value:** Provide the dollar amount of the bid/proposal.
- Calculated Target Subcontracting Percentage:** The percentage of the total contract dollar value that will be awarded to one or more subcontractors for amounts under \$1 million for construction and/or professional services. This percentage must equal or exceed the percentage listed by the agency on page 6, at line (1).

NOTE: The "Calculated Target Subcontracting Percentage" MUST equal or exceed the Target Subcontracting Percentage listed by the agency on Page 6, Line (1).

SCHEDULE B - Subcontractor Utilization Plan - Part II: Bidder/Proposer Subcontracting Plan - cont.

Step 2:
Calculate value of subcontractor participation goals

a. Copy value from Step 1, line (4) – the total value of all expected subcontracts Under \$1M for construction and/or professional services \$ 2,387,388

Subcontracts under \$1M
(construction/professional services)

	Construction	Professional Services
b. From line a. above, allocate the dollar value of "Subcontracts Under \$1M" by Construction and Professional Services.		
• If all subcontracts under \$1M are in one industry, enter "0" for the industry with no subcontracts.		
• Amounts listed on these lines should add up to the value from line a.		
Subcontracts under \$1M by industry	<u>\$ 2,387,388</u>	<u>\$</u>
• For Construction enter percentage from line (2) from Page 6.		
• For Professional Services enter percentage from line (3) from Page 6.		
c. Total Participation Goals Percentages must be copied from Part I, lines (2) and (3).		
Total Participation Goals	x <u>50</u> %	x <u> </u> %
d. Value of Total Participation Goals	<u>\$ 1,193,694</u>	<u>\$</u>

Step 3:

✓ Subcontracts in Amounts Under \$1 M Scope of Work - Construction

	Enter brief description of type(s) of subcontracts in amounts under \$1M anticipated, by Type of work, not by name of subcontractor	
	Tree Consultant	350,000
	TV Inspection	165,000
	Pavement Marking	12,000
	Rodent Monitoring	15,000

✓ Subcontracts in Amounts Under \$1 M Scope of Work - Professional Services

	Enter brief description of type(s) of subcontracts in amounts under \$1M anticipated, by Type of work, not by name of subcontractor	
	Landscape	999,640
	Trucking	200,000
		MBE
		MBE

Section IV: Vendor Certification and Required Affirmations

I hereby 1) acknowledge my understanding of the M/WBE requirements as set forth herein and the pertinent provisions of Local Law 129 of 2005, and the rules promulgated thereunder; 2) affirm that the information supplied in support of this subcontractor utilization plan is true and correct; 3) agree, if awarded this Contract, to comply with the M/WBE requirements of this Contract and the pertinent provisions of Local Law 129 of 2005, 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 subcontract(s) sufficient to meet the Target Subcontracting Percentage, unless a waiver is obtained, and the Vendor will award subcontract(s) sufficient to meet the Total Participation Goals unless such goals are modified by the Agency; and 5) agree and affirm, if awarded this contract the Vendor intends to make all reasonable, good faith efforts to meet the Target Subcontracting Percentage, or If the Vendor has obtained a waiver, the Vendor intends to meet the modified Target Subcontracting Percentage, if any, and the Vendor intends to to solicit and obtain the participation of M/WBEs so as to meet the Total Participation Goals unless modified by the Agency.

Signature Joe Liga Date 5/15/13

Print Name Joe Liga Title P.M.

SCHEDULE B - PART III - REQUEST FOR WAIVER OF TARGET SUBCONTRACTING PERCENTAGE

Contract Overview

Tax ID # _____ FMS Vendor ID # _____

Business Name _____

Contact Name _____ Telephone # _____ Email _____

Type of Procurement Competitive Sealed Bids Other Bid/Response Due Date _____

PIN # (for this procurement) _____ Type of work on Prime Contract (Check one): _____ Type of work on Subcontract (Check all that apply): _____

- Construction
- Professional Services

- Construction
- Professional Services
- Other

SUBCONTRACTING as described in bid/solicitation documents (Copy this % figure from the solicitation)
 _____ % of the total contract value anticipated by the agency to be subcontracted for construction/professional services subcontracts valued below \$1 million (each)

ACTUAL SUBCONTRACTING as anticipated by vendor seeking waiver
 _____ % of the total contract value anticipated in good faith by the bidder/proposer to be subcontracted for construction/professional services subcontracts valued below \$1 million (each)

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

- Vendor does not subcontract construction/professional services, and has the capacity and good faith intention to perform all such work itself.
- Vendor subcontracts some of this type of work but at lower % than bid/solicitation describes, and has the capacity and good faith intention to do so on this contract.
- Other _____

References

List 3 most recent contracts/subcontracts performed for NYC agencies (if any)

CONTRACT NO. _____	AGENCY _____	DATE COMPLETED _____
CONTRACT NO. _____	AGENCY _____	DATE COMPLETED _____
CONTRACT NO. _____	AGENCY _____	DATE COMPLETED _____

List 3 most recent contracts/subcontracts performed for other agencies/entities (complete ONLY if vendor has performed fewer than 3 NYC contracts)

TYPE OF WORK _____	AGENCY/ENTITY _____	DATE COMPLETED _____
Manager at agency/entity that hired vendor (Name/Phone No.) _____		
TYPE OF WORK _____	AGENCY/ENTITY _____	DATE COMPLETED _____
Manager at agency/entity that hired vendor (Name/Phone No.) _____		
TYPE OF WORK _____	AGENCY/ENTITY _____	DATE COMPLETED _____
Manager at agency/entity that hired vendor (Name/Phone No.) _____		

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: _____

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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: SE818

FOR THE CONSTRUCTION OF SANITARY AND STORM SEWERS IN: SHELDON AVENUE BETWEEN ELLSWORTH AVENUE AND BMP-SB1 A POINT APPROXIMATELY 1,000-FEET EAST OF DELMAR AVENUE; SINCLAIR AVENUE BETWEEN ELLSWORTH AVENUE AND DEAD END; STAFFORD AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; VINELAND AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; CROWN AVENUE BETWEEN NIPPON AVENUE AND BELFIELD AVENUE; WOODROW ROAD BETWEEN POWELL STREET AND BELFIELD AVENUE; CASTOR PLACE BETWEEN HUGUENOT AVENUE AND ANACONDA STREET; SPERRY PLACE BETWEEN ANACONDA STREET AND EVERTON AVENUE; POWELL STREET BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; WALKER PLACE BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; DAHLIA STREET BETWEEN WOODROW ROAD AND SHIFT PLACE; HUGUENOT AVENUE BETWEEN RENSSELAER AVENUE AND SHIFT PLACE; CARDIFF STREET BETWEEN CASTOR PLACE AND ROSEDALE AVENUE; BOULDER STREET BETWEEN WOODROW ROAD AND ROSEDALE AVENUE; NIPPON AVENUE BETWEEN RENSSELAER AVENUE AND WOODROW ROAD; ANACONDA STREET BETWEEN SPERRY PLACE AND DELMAR AVENUE; BALLARD AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; DELMAR AVENUE BETWEEN RENSSELAER AVENUE AND ANACONDA STREET; CROWN PLACE BETWEEN CROWN AVENUE AND DEAD END; EVERTON AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; AND, HEENAN AVENUE BETWEEN VINELAND AVENUE AND DEAD END

INCLUDING WATER MAIN WORK

Together With All Work Incidental Thereto
BOROUGH OF STATEN ISLAND

(NO TEXT ON THIS PAGE)

PROJECT ID: SE818

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

BID BOOKLET

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

SPECIAL NOTICE TO BIDDERS

BID SUBMISSION REQUIREMENTS

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

1. Bid Schedule and Bid Form, including Affirmation
2. Bid Security (if required, see Attachment 1 on Page A-1)
3. 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. Bidder's Certification of Compliance with Iran Divestment Act
9. Special Experience Requirements (if applicable)
10. Apprenticeship Program Questionnaire (if applicable)

FAILURE TO SUBMIT ITEMS (4) THROUGH (10)
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 additional information is required, please contact the Department of Design and Construction at 718-391-2601.
 - (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: _____

(NO TEXT ON THIS PAGE)

ATTACHMENT 1 - BID INFORMATION

PROJECT ID: SE818

PIN: 8502011SE0027C

Description and Location of Work: For The Construction Of Sanitary And Storm Sewers In: Sheldon Avenue Between Ellsworth Avenue And Bmp-Sb1 A Point Approximately 1,000-Feet East Of Delmar Avenue; Sinclair Avenue Between Ellsworth Avenue And Dead End; Stafford Avenue Between Huguenot Avenue And Heenan Avenue; Vineland Avenue Between Huguenot Avenue And Heenan Avenue; Crown Avenue Between Nippon Avenue And Belfield Avenue; Woodrow Road Between Powell Street And Belfield Avenue; Castor Place Between Huguenot Avenue And Anaconda Street; Sperry Place Between Anaconda Street And Everton Avenue; Powell Street Between Sinclair Avenue And Woodrow Road; Walker Place Between Sinclair Avenue And Woodrow Road; Dahlia Street Between Woodrow Road And Shift Place; Huguenot Avenue Between Rensselaer Avenue And Shift Place; Cardiff Street Between Castor Place And Rosedale Avenue; Boulder Street Between Woodrow Road And Rosedale Avenue; Nippon Avenue Between Rensselaer Avenue And Woodrow Road; Anaconda Street Between Sperry Place And Delmar Avenue; Ballard Avenue Between Woodrow Road And Sperry Place; Delmar Avenue Between Rensselaer Avenue And Anaconda Street; Crown Place Between Crown Avenue And Dead End; Everton Avenue Between Woodrow Road And Sperry Place; And, Heenan Avenue Between Vineland Avenue And Dead End, Including Water Main Work; Together With All Work Incidental Thereto, Borough Of Queens.

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 MAY 2, 2013

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 MAY 2, 2013

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

(NO TEXT ON THIS PAGE)

BID SCHEDULE

NOTICE TO BIDDERS

Items listed in this Bid Schedule which have one (1) digit followed by a decimal (e.g. 4.02 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 and Addendum No. 2, 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. 50.31CC15) shall comply with the requirements of the New York City Department of Design and Construction (NYCDDC) 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. 60.11R612) shall comply with the requirements of the New York City Department of Environmental Protection (NYCDEP) Standard Water Main 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 "7" followed by a decimal (e.g. 70.31FN) shall comply with the requirements of the New York City Department of Environmental Protection (NYCDEP) Standard Sewer Specifications dated August 1, 2009, and Standard Water Main Specifications dated August 1, 2009, as amended by Addendum No. 2, herein Volume 3 of 3.

Items listed in this Bid Schedule beginning with the prefix "UTL-" (e.g. UTL-6.01.8) are for Gas Cost Sharing (EP-7) work and shall comply with the requirements of Addendum No. 3, herein Volume 3 of 3.

(NO TEXT ON THIS PAGE)



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

PROJECT ID: SE818
CONTRACT PIN: 8502011SE0027C

03/13/2013
10:57AM

BID SCHEDULE

- NOTE:
- (1) The Agency may reject a bid if it contains unbalanced bid prices. An unbalanced bid is considered to be one containing lump sum or unit items which do not reflect reasonable actual costs plus a reasonable proportionate share of the Bidder's anticipated profit, overhead costs, and other indirect costs, anticipated for the performance of the items in question.
 - (2) The following bid prices on Unit Price Contracts are to be paid for the actual quantities of the item numbers in the completed work or structure, and they cover the cost of all work, labor, material, tools, plant and appliances of every description necessary to complete the entire work, as specified, and the removal of all debris, temporary work and appliances.
 - (3) PLEASE BE SURE A LEGIBLE BID IS ENTERED, IN INK, FOR EACH ITEM.
Alterations must be initialed in ink by the bidder.
 - (4) The Extended Amount entered in Column 6 shall be the product of the Estimated Quantity in Column 3 times the Unit Price Bid in Column 5.
 - (5) Prospective bidders must examine the Bid Schedule carefully and, before bidding, must advise the Commissioner, in writing, if any pages are missing, and must request that such missing pages be furnished them. The pages of this Bid Schedule are numbered consecutively, as follows: B - 3 through B - 30

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 SCHEDULE FORM

COL. 1 SEQ. NO	COL. 2 ITEM NUMBER and DESCRIPTION	COL. 3 ENGINEER'S ESTIMATE OF QUANTITY	COL. 4 UNIT	COL. 5 UNIT PRICE (IN FIGURES)		COL. 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CIS	DOLLARS	CIS
001	4.01 RAG ASPHALT MACADAM PAVEMENT, 6" THICK	52,000.00	S.Y.				
002	4.02 AB-R ASPHALTIC CONCRETE WEARING COURSE, 1-1/2" THICK	350.00	S.Y.				
003	4.02 AF-R ASPHALTIC CONCRETE WEARING COURSE, 2" THICK	65,000.00	S.Y.				
004	4.02 CA BINDER MIXTURE	15,820.00	TONS				
005	4.04 H CONCRETE BASE FOR PAVEMENT, VARIABLE THICKNESS FOR TRENCH RESTORATION, (HIGH-EARLY STRENGTH)	1,625.00	C.Y.				
006	4.05 AX HIGH-EARLY STRENGTH REINFORCED CONCRETE PAVEMENT (BUS STOPS)	80.00	C.Y.				
007	4.08 AA CONCRETE CURB (18" DEEP)	4,500.00	L.F.				
008	4.08 BA CONCRETE CURB (21" DEEP)	21,500.00	L.F.				
009	4.09 AD STRAIGHT STEEL FACED CONCRETE CURB (18" DEEP)	250.00	L.F.				
010	4.09 AF STRAIGHT STEEL FACED CONCRETE CURB (27" DEEP)	200.00	L.F.				

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

PROJECT ID: SE818
 CONTRACT PIN: 8502011SE0027C

03/13/2013
 10:57AM

BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	CTS
011	4.09 CD CORNER STEEL FACED CONCRETE CURB (18" DEEP)	2,800.00	L.F.			
012	4.13 AAS 4" CONCRETE SIDEWALK (UNPIGMENTED)	10,000.00	S.F.			
013	4.13 BAS 7" CONCRETE SIDEWALK (UNPIGMENTED)	36,000.00	S.F.			
014	4.13 DE EMBEDDED PREFORMED DETECTABLE WARNING UNITS	1,500.00	S.F.			
015	4.16 AA TREES REMOVED (4" TO UNDER 12" CALIPER)	45.00	EACH			
016	4.16 AB TREES REMOVED (12" TO UNDER 18" CALIPER)	11.00	EACH			
017	4.16 CA505 TREES PLANTED, 3" TO 3-1/2" CALIPER, ALL TYPES, IN 5' X 5' TREE PITS	260.00	EACH			
018	4.16 STUMP STUMP REMOVAL	1.00	UNITS			
019	4.18 A MAINTENANCE TREE PRUNING (UNDER 12" CAL.)	30.00	EACH			
020	4.18 B MAINTENANCE TREE PRUNING (12" TO UNDER 18" CAL.)	40.00	EACH			

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BID SCHEDULE FORM

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				DOLLARS	CTS	DOLLARS	CTS
021	4.18 C MAINTENANCE TREE PRUNING (18" TO UNDER 24" CAL.)	30.00	EACH				
022	4.18 D MAINTENANCE TREE PRUNING (24" CAL. AND OVER)	20.00	EACH				
023	4.19 SODDING	9,700.00	S.Y.				
024	4.21 TREE CONSULTANT	5,000.00	PIHR				
025	50.11MS040030 4'-0"W X 3'-0"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	676.00	L.F.				
026	50.11MS040040 4'-0"W X 4'-0"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	1,192.00	L.F.				
027	50.11MS070050 7'-0"W X 5'-0"H SINGLE BARREL FLAT TOP REINFORCED CONCRETE STORM SEWER	45.00	L.F.				
028	50.21M3C024D 24" R.C.P. CLASS III STORM SEWER, ON CONCRETE CRADLE	2,246.00	L.F.				
029	50.21M3C030D 30" R.C.P. CLASS III STORM SEWER, ON CONCRETE CRADLE	1,764.00	L.F.				
030	50.21M3C036D 36" R.C.P. CLASS III STORM SEWER, ON CONCRETE CRADLE	1,267.00	L.F.				

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031	50.21M3C042D 42" R.C.P. CLASS III STORM SEWER, ON CONCRETE CRADLE	249.00	L.F.		
032	50.21M3C048D 48" R.C.P. CLASS III STORM SEWER, ON CONCRETE CRADLE	53.00	L.F.		
033	50.21M3E024D 24" R.C.P. CLASS III STORM SEWER, ENCASED IN CONCRETE	742.00	L.F.		
034	50.21M3E030D 30" R.C.P. CLASS III STORM SEWER, ENCASED IN CONCRETE	443.00	L.F.		
035	50.21M3E036D 36" R.C.P. CLASS III STORM SEWER, ENCASED IN CONCRETE	212.00	L.F.		
036	50.31MC12 12" E.S.V.P. STORM SEWER, ON CONCRETE CRADLE	902.00	L.F.		
037	50.31MC15 15" E.S.V.P. STORM SEWER, ON CONCRETE CRADLE	1,987.00	L.F.		
038	50.31MC18 18" E.S.V.P. STORM SEWER, ON CONCRETE CRADLE	2,714.00	L.F.		
039	50.31ME12 12" E.S.V.P. STORM SEWER, ENCASED IN CONCRETE	137.00	L.F.		
040	50.31ME15 15" E.S.V.P. STORM SEWER, ENCASED IN CONCRETE	47.00	L.F.		

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				DOLLARS	CTS	DOLLARS	CTS
041	50.31ME18 18" E.S.V.P. STORM SEWER, ENCASED IN CONCRETE	383.00	L.F.				
042	50.31SC10 10" E.S.V.P. SANITARY SEWER, ON CONCRETE CRADLE	20,600.00	L.F.				
043	50.31SC12 12" E.S.V.P. SANITARY SEWER, ON CONCRETE CRADLE	285.00	L.F.				
044	50.31SC15 15" E.S.V.P. SANITARY SEWER, ON CONCRETE CRADLE	1,020.00	L.F.				
045	50.31SC18 18" E.S.V.P. SANITARY SEWER, ON CONCRETE CRADLE	1,142.00	L.F.				
046	50.31SE10 10" E.S.V.P. SANITARY SEWER, ENCASED IN CONCRETE	52.00	L.F.				
047	50.31SE15 15" E.S.V.P. SANITARY SEWER, ENCASED IN CONCRETE	13.00	L.F.				
048	50.41S6E10 10" D.I.P. CLASS 56 SANITARY SEWER, ENCASED IN CONCRETE	124.00	L.F.				
049	50.41S6E18 18" D.I.P. CLASS 56 SANITARY SEWER, ENCASED IN CONCRETE	42.00	L.F.				
050	51.11C001 CHAMBER NO. 1	1.00	EACH				

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				DOLLARS	CTS	DOLLARS	CTS
051	51.11C002 CHAMBER NO. 2	1.00	EACH				
052	51.11C003 CHAMBER NO. 3	1.00	EACH				
053	51.11C004 CHAMBER NO. 4	1.00	EACH				
054	51.11C005 CHAMBER NO. 5	1.00	EACH				
055	51.11C006 CHAMBER NO. 6	1.00	EACH				
056	51.11P004 STANDARD 4'-0" DIAMETER PRECAST MANHOLE	18.00	EACH				
057	51.11P005 STANDARD 5'-0" DIAMETER PRECAST MANHOLE	3.00	EACH				
058	51.11P006 STANDARD 6'-0" DIAMETER PRECAST MANHOLE	2.00	EACH				
059	51.11P007 STANDARD 7'-0" DIAMETER PRECAST MANHOLE	4.00	EACH				
060	51.11P008 STANDARD 8'-0" DIAMETER PRECAST MANHOLE	2.00	EACH				

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				DOLLARS	CTS	DOLLARS	CTS
061	51.11P010 STANDARD 10'-0" DIAMETER PRECAST MANHOLE	1.00	EACH				
062	51.11R007 STANDARD 7'-0" DIAMETER PRECAST DROP-PIPE MANHOLE TYPE II	1.00	EACH				
063	51.21A000000C ACCESS MANHOLE	8.00	EACH				
064	51.21S0A1000V STANDARD MANHOLE TYPE A-1	145.00	EACH				
065	51.21S0A2000V STANDARD MANHOLE TYPE A-2	3.00	EACH				
066	51.21S0A3000V STANDARD SHALLOW MANHOLE TYPE A-3	10.00	EACH				
067	51.21S0B1000V STANDARD MANHOLE TYPE B-1	46.00	EACH				
068	51.21S0B2000V STANDARD MANHOLE TYPE B-2	17.00	EACH				
069	51.21S0C1036R STANDARD MANHOLE TYPE C-1 ON 36" R.C.P. SEWER	9.00	EACH				
070	51.21S0C1042E STANDARD MANHOLE TYPE C-1 ON EXISTING 42" SEWER	1.00	EACH				

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071	51.21S0C1042R STANDARD MANHOLE TYPE C-1 ON 42" R.C.P. SEWER	2.00	EACH				
072	51.21S0C1048E STANDARD MANHOLE TYPE C-1 ON EXISTING 48" SEWER	2.00	EACH				
073	51.21S0C1048R STANDARD MANHOLE TYPE C-1 ON 48" R.C.P. SEWER	3.00	EACH				
074	51.23RF REPLACEMENT OF EXISTING MANHOLE FRAME AND COVER	3.00	EACH				
075	51.41S001 STANDARD CATCH BASIN, TYPE 1	195.00	EACH				
076	51.41S002 STANDARD CATCH BASIN, TYPE 2	2.00	EACH				
077	52.11D12 12" DUCTILE IRON PIPE BASIN CONNECTION	3,700.00	L.F.				
078	52.21V08 8" E.S.V.P. RISER FOR HOUSE CONNECTION	260.00	V.F.				
079	52.21V10 10" E.S.V.P. RISER FOR HOUSE CONNECTION	10.00	V.F.				
080	52.31V06S10 6" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 10" E.S.V.P. SANITARY SEWER	535.00	EACH				

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				DOLLARS	CTS	DOLLARS	CTS
081	52.31V06S12 6" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 12" E.S.V.P. SANITARY SEWER	9.00	EACH				
082	52.31V06S15 6" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 15" E.S.V.P. SANITARY SEWER	30.00	EACH				
083	52.31V06S18 6" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 18" E.S.V.P. SANITARY SEWER	18.00	EACH				
084	52.31V08S10 8" E.S.V.P. SPUR FOR HOUSE CONNECTION ON 10" E.S.V.P. SANITARY SEWER	3.00	EACH				
085	52.41V06N NEW 6" E.S.V.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE Unit price bid shall not be greater than: \$ 75.00	12,300.00	L.F.				
086	52.41V06R 6" E.S.V.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	100.00	L.F.				
087	52.41V08N NEW 8" E.S.V.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE Unit price bid shall not be greater than: \$ 80.00	130.00	L.F.				
088	53.11DR TELEVISION INSPECTION AND DIGITAL AUDIO-VISUAL RECORDING OF SEWERS	48,900.00	L.F.				
089	6.02 AAN UNCLASSIFIED EXCAVATION	21,150.00	C.Y.				

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090	6.22 F ADDITIONAL HARDWARE	9,000.00	LBS.		
091	6.25 RS TEMPORARY SIGNS	28,800.00	S.F.		
092	6.26 TIMBER CURB	127,500.00	L.F.		
093	6.28 AA LIGHTED TIMBER BARRICADES	18,250.00	L.F.		
094	6.40 D ENGINEER'S FIELD OFFICE (TYPE D)	42.00	MONTH		
095	6.44 THERMOPLASTIC REFLECTORIZED PAVEMENT MARKINGS (4" WIDE)	6,000.00	L.F.		
096	6.49 TEMPORARY PAVEMENT MARKINGS (4" WIDE)	4,500.00	L.F.		
097	6.53 REMOVE EXISTING LANE MARKINGS (4" WIDE)	850.00	L.F.		
098	6.67 SUBBASE COURSE, SELECT GRANULAR MATERIAL	8,650.00	C.Y.		
099	6.68 PLASTIC FILTER FABRIC	110,000.00	S.Y.		

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				DOLLARS	CTS	DOLLARS	CTS
100	6.75 GRINDING EXISTING ASPHALTIC CONCRETE WEARING COURSE	1,000.00	C.Y.				
101	6.87 PLASTIC BARRELS	28,800.00	EACH				
102	60.11R520 FURNISHING AND DELIVERING 20-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 55)	375.00	L.F.				
103	60.11R606 FURNISHING AND DELIVERING 6-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	260.00	L.F.				
104	60.11R608 FURNISHING AND DELIVERING 8-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	8,650.00	L.F.				
105	60.11R612 FURNISHING AND DELIVERING 12-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	2,850.00	L.F.				
106	60.12D06 LAYING 6-INCH DUCTILE IRON PIPE AND FITTINGS	330.00	L.F.				
107	60.12D08 LAYING 8-INCH DUCTILE IRON PIPE AND FITTINGS	8,850.00	L.F.				
108	60.12D12 LAYING 12-INCH DUCTILE IRON PIPE AND FITTINGS	3,000.00	L.F.				
109	60.12D20 LAYING 20-INCH DUCTILE IRON PIPE AND FITTINGS	400.00	L.F.				

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110	60.13M0A24 FURNISHING AND DELIVERING DUCTILE IRON MECHANICAL JOINT 24-INCH DIAMETER AND SMALLER FITTINGS, INCLUDING WEDGE TYPE RETAINER GLANDS	29.00	TONS			
111	60.18BJC20EL FURNISHING, DELIVERING AND INSTALLING BELL JOINT CLAMPS, COMPLETE FOR 20-INCH PIPE AND LESS	5.00	EACH			
112	61.11DMM06 FURNISHING AND DELIVERING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	34.00	EACH			
113	61.11DMM08 FURNISHING AND DELIVERING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	33.00	EACH			
114	61.11DMM12 FURNISHING AND DELIVERING 12-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	9.00	EACH			
115	61.11DMM20 FURNISHING AND DELIVERING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	1.00	EACH			
116	61.11TWC03 FURNISHING AND DELIVERING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	1.00	EACH			
117	61.11TWC04 FURNISHING AND DELIVERING 4-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	1.00	EACH			

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				DOLLARS	CTS	DOLLARS	CTS
118	61.11TWC06 FURNISHING AND DELIVERING 6-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	1.00	EACH				
119	61.12DMM06 SETTING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	34.00	EACH				
120	61.12DMM08 SETTING 8-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	33.00	EACH				
121	61.12DMM12 SETTING 12-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	9.00	EACH				
122	61.12DMM20 SETTING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	1.00	EACH				
123	61.12TWC03 SETTING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	1.00	EACH				
124	61.12TWC04 SETTING 4-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	1.00	EACH				
125	61.12TWC06 SETTING 6-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	1.00	EACH				
126	62.11SD FURNISHING AND DELIVERING HYDRANTS	34.00	EACH				

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127	62.12SG SETTING HYDRANTS COMPLETE WITH WEDGE TYPE RETAINER GLANDS	34.00	EACH			
128	62.13RH REMOVING HYDRANTS	23.00	EACH			
129	62.14FS FURNISHING, DELIVERING AND INSTALLING HYDRANT FENDERS	68.00	EACH			
130	63.11VC FURNISHING AND DELIVERING VARIOUS CASTINGS	57.00	TONS			
131	64.11EL WITHDRAWING AND REPLACING HOUSE SERVICES USING 1-1/2-INCH OR LARGER SCREW TAPS	85.00	EACH			
132	64.11ST WITHDRAWING AND REPLACING HOUSE SERVICES USING SMALLER THAN 1-1/2-INCH SCREW TAPS	50.00	EACH			
133	64.12COEG CUTTING AND OFFSETTING HOUSE SERVICE WATER CONNECTIONS (EQUAL TO OR GREATER THAN 3-INCH DIAMETER)	75.00	L.F.			
134	64.12COLT CUTTING AND OFFSETTING HOUSE SERVICE WATER CONNECTIONS (LESS THAN 3-INCH DIAMETER)	150.00	L.F.			
135	64.12ESEG EXTENDING HOUSE SERVICE WATER CONNECTIONS (EQUAL TO OR GREATER THAN 3-INCH DIAMETER)	200.00	L.F.			

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				DOLLARS	CTS	DOLLARS	CTS
136	64.12ESLT EXTENDING HOUSE SERVICE WATER CONNECTIONS (LESS THAN 3-INCH DIAMETER)	500.00	L.F.				
137	64.13WC08 FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 8-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	2.00	EACH				
138	64.13WC12 FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 12-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	1.00	EACH				
139	64.13WC20 FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 20-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	1.00	EACH				
140	65.11BR FURNISHING, DELIVERING AND INSTALLING BANDS, RODS, WASHERS, ETC., COMPLETE, FOR RESTRAINING JOINTS	670.00	LBS.				
141	65.21PS FURNISHING AND PLACING POLYETHYLENE SLEEVE Unit price bid shall not be less than: \$ 0.50	6,265.00	L.F.				
142	65.31FF FURNISHING, DELIVERING AND PLACING FILTER FABRIC Unit price bid shall not be less than: \$ 0.10	95,000.00	S.F.				
143	65.71SG FURNISHING, DELIVERING AND PLACING SCREENED GRAVEL OR SCREENED BROKEN STONE BEDDING	350.00	C.Y.				

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144	7.13 B MAINTENANCE OF SITE Unit price bid shall not be less than: \$ 7,500.00	36.00	MONTH			
145	7.19 LOAD TRANSFER JOINT	40.00	L.F.			
146	7.36 PEDESTRIAN STEEL BARRICADES	115,500.00	L.F.			
147	7.88 AA RODENT INFESTATION SURVEY AND MONITORING Unit price bid shall not be less than: \$ 50,000.00	1.00	L.S.			
148	7.88 AB RODENT BAIT STATIONS Unit price bid shall not be less than: \$ 60.00	3,000.00	EACH			
149	7.88 AC BAITING OF RODENT BAIT STATIONS Unit price bid shall not be less than: \$ 8.50	3,000.00	EACH			
150	7.88 AD WATERBUG BAIT APPLICATIONS Unit price bid shall not be less than: \$ 65.00	400.00	BLOCK			
151	70.21DK DECKING	1,000.00	S.Y.			

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				DOLLARS	CTS	DOLLARS	CTS
152	70.31FN FENCING Unit price bid shall not be less than: \$ 2.00	80,000.00	L.F.				
153	70.51EO EXCAVATION OF BOULDERS IN OPEN CUT Unit price bid shall not be less than: \$ 75.00	950.00	C.Y.				
154	70.61RE ROCK EXCAVATION	50.00	C.Y.				
155	70.71SB STONE BALLAST Unit price bid shall not be less than: \$ 15.00	9,000.00	C.Y.				
156	70.81CB CLEAN BACKFILL Unit price bid shall not be less than: \$ 15.00	61,000.00	C.Y.				
157	70.91SW12 FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 12-INCH IN DIAMETER AND LESS	3,000.00	S.F.				
158	70.91SW20 FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 20-INCH IN DIAMETER	5,000.00	S.F.				
159	72.11HF HYDRAULIC FILL FOR ABANDONED SEWERS AND WATER MAINS	20.00	C.Y.				

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

PROJECT ID: SE818
 CONTRACT PIN: 8502011SE0027C

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BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	CTS
160	73.11AB ADDITIONAL BRICK MASONRY Unit price bid shall not be less than: \$ 62.50	30.00	C.Y.			
161	73.21AC ADDITIONAL CONCRETE Unit price bid shall not be less than: \$ 62.50	300.00	C.Y.			
162	73.31AE0 ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (ALL DEPTHS) Unit price bid shall not be less than: \$ 20.00	9,150.00	C.Y.			
163	73.41AG ADDITIONAL SELECT GRANULAR BACKFILL Unit price bid shall not be less than: \$ 15.00	955.00	C.Y.			
164	73.51AS ADDITIONAL STEEL REINFORCING BARS Unit price bid shall not be less than: \$ 1.00	29,000.00	LBS.			
165	9.04 HW ALLOWANCE FOR ANTI-FREEZE ADDITIVE IN CONCRETE PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 25,000.00	1.00	F.S.	25,000.00	25,000.00	
166	9.30 STORM WATER POLLUTION PREVENTION	1.00	L.S.			
167	9.99 M FLASHING ARROW BOARD	12.00	MONTH			

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

PROJECT ID: SE818
CONTRACT PIN: 8502011SE0027C

BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
168	BMP-7.103-A CONCRETE (NONSTRUCTURAL)	230.00	C.Y.				
169	BMP-7.107-B RIP-RAP AND ANGULAR NATURAL FIELD STONE	900.00	C.Y.				
170	BMP-7.114-1 FRP WEIR PLATE NO. 1	10.00	EACH				
171	BMP-7.114-2 FRP WEIR PLATE NO. 2	1.00	EACH				
172	BMP-7.129-1 STRUCTURE NO. 1	1.00	EACH				
173	BMP-7.129-2 STRUCTURE NO. 2	1.00	EACH				
174	BMP-7.129-3 STRUCTURE NO. 3	1.00	EACH				
175	BMP-7.129-4 STRUCTURE NO. 4	1.00	EACH				
176	BMP-7.129-5 STRUCTURE NO. 5	1.00	EACH				
177	BMP-7.301 DEBRIS REMOVAL AND DISPOSAL	520.00	C.Y.				

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

PROJECT ID: SE818
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BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
178	BMP-7.302 CLEARING, GRUBBING AND REMOVALS	270,000.00	S.F.				
179	BMP-7.304-A EXCAVATION	51,330.00	C.Y.				
180	BMP-7.305 CRUSHED STONES	50.00	C.Y.				
181	BMP-7.306-A TREE REMOVAL 6" TO 12" CALIPER	203.00	EACH				
182	BMP-7.306-B TREE REMOVAL ABOVE 12" TO 18" CALIPER	203.00	EACH				
183	BMP-7.306-C TREE REMOVAL ABOVE 18" TO 24" CALIPER	130.00	EACH				
184	BMP-7.306-D TREE REMOVAL ABOVE 24" CALIPER	45.00	EACH				
185	BMP-7.307-A GRADING	270,000.00	S.F.				
186	BMP-7.308 FILL	10.00	C.Y.				
187	BMP-7.310-A4 PLANT SALVAGE	1,200.00	HRS				

PROJECT ID: SE818
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NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION
 DIVISION OF INFRASTRUCTURE - BUREAU OF DESIGN

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BID SCHEDULE FORM

COL. 1 SEQ. NO.	COL. 2 ITEM NUMBER and DESCRIPTION	COL. 3 ENGINEER'S ESTIMATE OF QUANTITY	COL. 4 UNIT	COL. 5 UNIT PRICE (IN FIGURES)		COL. 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
188	BMP-7.401-A CANOPY TREES (2 1/2" TO 3" CALIPER)	581.00	EACH				
189	BMP-7.401-C CANOPY TREES - WHIPS 5' TO 6'	142.00	EACH				
190	BMP-7.401-H SHRUBS (SEE PLANTING PLANS)	166.00	EACH				
191	BMP-7.401-I SEEDING	114,500.00	S.F.				
192	BMP-7.401-J HERBACEOUS PLANTS (PLUGS)	36,850.00	EACH				
193	BMP-7.403 TOPSOIL	1,070.00	C.Y.				
194	BMP-7.405-A VECTOR AND PEST CONTROL	120.00	HRS				
195	BMP-7.406 WOOD CHIPS	100.00	C.Y.				
196	BMP-7.407 JUTE MESH	114,500.00	S.F.				
197	BMP-7.408B HERBICIDE APPLICATION	20.00	CREW DAY				

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

PROJECT ID: SE818
 CONTRACT PIN: 8502011SE0027C

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BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES) DOLLARS	COL 6 EXTENDED AMOUNT (IN FIGURES) DOLLARS	CTS
198	BMP-7.413 TEMPORARY GOOSE EXCLUSION FENCE	10,120.00	L.F.			
199	BMP-7.415 INVASIVE VINE AND PLANT REMOVAL	10.00	CREW DAY			
200	BMP-7.418-A SAND	310.00	C.Y.			
201	BMP-7.419 TREE AND ROOT PRUNING	3.00	CREW DAY			
202	BMP-7.502 CONSTRUCTION LIMIT FENCE	1,110.00	L.F.			
203	BMP-7.504 REINFORCED SILT FENCE	3,690.00	L.F.			
204	BMP-7.505 SAND BAG	12,500.00	EACH			
205	BMP-7.506-A SEDIMENT TRAP WITH FILTER	3.00	EACH			
206	BMP-7.510 PORTABLE SEDIMENT TANK	3.00	EACH			
207	BMP-7.511 STORM DRAIN INLET PROTECTION	4.00	EACH			

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

PROJECT ID: SE818
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BID SCHEDULE FORM

COL. 1 SEQ. NO	COL. 2 ITEM NUMBER and DESCRIPTION	COL. 3 ENGINEER'S ESTIMATE OF QUANTITY	COL. 4 UNIT	COL. 5 UNIT PRICE (IN FIGURES)		COL. 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
208	BMP-7.512 DIRTBAG	15.00	EACH				
209	BMP-7.601-B GALVANIZED STEEL "W" BEAM GUIDE RAIL AND GUIDE RAIL GATE	120.00	L.F.				
210	BMP-7.601-G GALVANIZED STEEL "W" BEAM GUIDE RAIL	375.00	L.F.				
211	BMP-7.602 BOULDERS	440.00	EACH				
212	BMP-7.604-4 4-FOOT BLACK CHAIN LINK FENCE	245.00	L.F.				
213	BMP-7.605-A PERMANENT SIGNS ON STEEL RAIL POSTS	11.00	EACH				
214	BMP-7.605-B 0.020" TEMPORARY SIGNS	20.00	EACH				
215	BMP-7.606-B PERMANENT MAINTENANCE ACCESSWAY (PAVERS)	3,010.00	S.F.				
216	BMP-7.606-C PERMANENT MAINTENANCE ACCESSWAY (GRAVEL)	26,380.00	S.F.				
217	BMP-7.608-B SURVEY MONUMENTS	4.00	EACH				

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

PROJECT ID: SE818
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BID SCHEDULE FORM

COL 1 SEQ. NO.	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEERS ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
218	BMP-7.612 BRONZE PLAQUE	1.00	EACH				
219	BMP-7.622 FOREBAY MICROPOOL SEDIMENT CLEAN-OUT INDICATOR	7.00	EACH				
220	BMP-7.701A LIVE STAKES	465.00	EACH				
221	BMP-7.703 NATURAL FIELD STONES	220.00	C.Y.				
222	BMP-7.705 EROSION CONTROL MAT	10,000.00	S.F.				
223	BMP-7.706-A FILTER FABRIC	1,240.00	S.F.				
224	BMP-7.707-A COIR LOG	140.00	L.F.				
225	BMP-7.710 RENO MATTRESS	850.00	S.Y.				
226	UTL-6.01.1 GAS MAIN CROSSING SEWER UP TO 24" IN DIAMETER (S6.01) Unit price bid shall not be less than: \$ 1,040.00	67.00	EACH				

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

PROJECT ID: SE818
CONTRACT PIN: 8502011SE0027C

BID SCHEDULE FORM

COL. 1 SEQ. NO.	COL. 2 ITEM NUMBER and DESCRIPTION	COL. 3 ENGINEERS ESTIMATE OF QUANTITY	COL. 4 UNIT	COL. 5 UNIT PRICE (IN FIGURES)		COL. 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
227	UTL-6.01.2 GAS MAIN CROSSING SEWER 30" IN DIAMETER (S6.01) Unit price bid shall not be less than: \$ 1,770.00	7.00	EACH				
228	UTL-6.01.3 GAS MAIN CROSSING SEWER 36" THRU 42" IN DIAMETER (S6.01) Unit price bid shall not be less than: \$ 2,040.00	7.00	EACH				
229	UTL-6.01.4 GAS MAIN CROSSING SEWER 48" THRU 54" IN DIAMETER (S6.01) Unit price bid shall not be less than: \$ 2,120.00	3.00	EACH				
230	UTL-6.01.4G GAS MAIN CROSSING 4'-0"W X 4'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 2,300.00	2.00	EACH				
231	UTL-6.01.4I GAS MAIN CROSSING 4'-0"W X 3'-0"H FLAT TOP REINFORCED CONCRETE STORM SEWER (S6.01) Unit price bid shall not be less than: \$ 2,340.00	1.00	EACH				
232	UTL-6.01.8 GAS SERVICES CROSSING TRENCHES AND/OR EXCAVATIONS (S6.01) Unit price bid shall not be less than: \$ 465.00	378.00	EACH				
233	UTL-6.01.9 GAS MAIN CROSSING WATER MAIN UP TO 20" IN DIAMETER (S6.01) Unit price bid shall not be less than: \$ 485.00	44.00	EACH				

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

PROJECT ID: SE818
 CONTRACT PIN: 8502011SE0027C

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BID SCHEDULE FORM

COL. 1 SEQ. NO.	COL. 2 ITEM NUMBER and DESCRIPTION	COL. 3 ENGINEER'S ESTIMATE OF QUANTITY	COL. 4 UNIT	COL. 5 UNIT PRICE (IN FIGURES)		COL. 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
234	UTL-6.02 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	71.00	EACH				
235	UTL-6.03 REMOVAL OF ABANDONED GAS FACILITIES. ALL SIZES. (S6.03) Unit price bid shall not be less than: \$ 15.00	9,000.00	L.F.				
236	UTL-6.03.1 REMOVAL OF ABANDONED GAS FACILITIES WITH POSSIBLE COAL TAR WRAP. ALL SIZES. (S6.03) Unit price bid shall not be less than: \$ 25.00	3,000.00	L.F.				
237	UTL-6.04 ADJUST HARDWARE TO GRADE USING SPACER RINGS/ADAPTORS. (STREET REPAVING.) (S6.04) Unit price bid shall not be less than: \$ 35.00	420.00	EACH				
238	UTL-6.05 ADJUST HARDWARE TO GRADE BY RESETTING. (ROAD RECONSTRUCTION.) (S6.05) Unit price bid shall not be less than: \$ 65.00	150.00	EACH				
239	UTL-6.06 SPECIAL CARE EXCAVATION AND BACKFILLING (S6.06) Unit price bid shall not be less than: \$ 180.00	5,250.00	C.Y.				
240	UTL-6.07 TEST PITS FOR GAS FACILITIES (S6.07) Unit price bid shall not be less than: \$ 100.00	1,000.00	C.Y.				

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

PROJECT ID: SE818
CONTRACT PIN: 8502011SE0027C

BID SCHEDULE FORM

COL 1 SEQ. NO	COL 2 ITEM NUMBER and DESCRIPTION	COL 3 ENGINEER'S ESTIMATE OF QUANTITY	COL 4 UNIT	COL 5 UNIT PRICE (IN FIGURES)		COL 6 EXTENDED AMOUNT (IN FIGURES)	
				DOLLARS	CTS	DOLLARS	CTS
241	UTL-GCS-2WS GAS INTERFERENCES AND ACCOMMODATIONS PRICE BID SHALL BE FOR THE FIXED SUM OF \$ 100,000.00	1.00	F.S.	100,000;00		100,000;00	

SUB-TOTAL: \$

242	6.39 A MOBILIZATION BID PRICE OF MOBILIZATION SHALL NOT EXCEED 4% OF THE ABOVE SUB-TOTAL PRICE.	1.00	L.S.				
-----	--	------	------	--	--	--	--

TOTAL BID PRICE: \$

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

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

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

PROJECT ID: SE818

FOR THE CONSTRUCTION OF SANITARY AND STORM SEWERS IN: SHELDON AVENUE BETWEEN ELLSWORTH AVENUE AND BMP-SB1 A POINT APPROXIMATELY 1,000-FEET EAST OF DELMAR AVENUE; SINCLAIR AVENUE BETWEEN ELLSWORTH AVENUE AND DEAD END; STAFFORD AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; VINELAND AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; CROWN AVENUE BETWEEN NIPPON AVENUE AND BELFIELD AVENUE; WOODROW ROAD BETWEEN POWELL STREET AND BELFIELD AVENUE; CASTOR PLACE BETWEEN HUGUENOT AVENUE AND ANACONDA STREET; SPERRY PLACE BETWEEN ANACONDA STREET AND EVERTON AVENUE; POWELL STREET BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; WALKER PLACE BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; DAHLIA STREET BETWEEN WOODROW ROAD AND SHIFT PLACE; HUGUENOT AVENUE BETWEEN RENSSELAER AVENUE AND SHIFT PLACE; CARDIFF STREET BETWEEN CASTOR PLACE AND ROSEDALE AVENUE; BOULDER STREET BETWEEN WOODROW ROAD AND ROSEDALE AVENUE; NIPPON AVENUE BETWEEN RENSSELAER AVENUE AND WOODROW ROAD; ANACONDA STREET BETWEEN SPERRY PLACE AND DELMAR AVENUE; BALLARD AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; DELMAR AVENUE BETWEEN RENSSELAER AVENUE AND ANACONDA STREET; CROWN PLACE BETWEEN CROWN AVENUE AND DEAD END; EVERTON AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; AND, HEENAN AVENUE BETWEEN VINELAND AVENUE AND DEAD END

INCLUDING WATER MAIN WORK

**Together With All Work Incidental Thereto
BOROUGH OF STATEN ISLAND**

Name of Bidder: _____

Date of Bid Opening: _____

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

Place of Business of Bidder: _____

Bidder's Telephone Number: _____ Fax Number: _____

Bidder's E-Mail Address: _____

Residence of Bidder (If Individual): _____

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

Names of Partners

Residence of Partners

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

Organized under the laws of the State of _____

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).

6. Compliance Report

The bidder, as an individual, or as a member, partner, director, or officer of the bidder, if the same be a firm, partnership, or corporation, (1) represents that his attention has been specifically drawn to Executive Order No. 50, dated, April 25, 1980, on Equal Employment Compliance of the contract, and (2) warrants that he will comply with the provisions of Executive Order No. 50. The Employment Report must be submitted as part of the bid.

The bidder, as an individual, or as a member, partner, director, or officer of the bidder, if the same be a firm, partnership, or corporation, executes this document expressly warranting that he will comply with: (1) the provision of the contract on providing records, Chapter 8.

7. By submission of this bid, the bidder certifies that it now has and will continue to have the financial capability to fully perform the work required for this contract. Any award of this contract will be made in reliance upon such certification. Upon request therefor, the bidder will submit written verification of such financial capability in a form that is acceptable to the department.

8. In accordance with Section 165 of the State Finance Law, the bidder agrees that tropical hardwoods, as defined in Section 165 of the State Finance Law, shall not be utilized in the performance of this Contract, except as the same are permitted by the foregoing provision of law.

9. The bidder has visited and examined the site of the work and has carefully examined the Contract in the form approved by the Corporation Counsel, and will execute the Contract and perform all its items, covenants and conditions, and will provide, furnish and deliver all the work, materials, supplies, tools and appliances for all labor and materials necessary or required for the hereinafter named work, all in strict conformity with the Contract, for the prices set forth in the Bid Schedule:

(NO TEXT ON THIS PAGE)

BID FORM

PROJECT ID: SE818

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)

\$ _____

BIDDER'S SIGNATURE AND AFFIDAVIT

WARNING!!! If M/WBE goals have been established for this Contract, you **MUST** complete and submit the Affirmations on the 2nd page of the Subcontractor Utilization Plan (or a pre-approved waiver) at the time you submit your bid. Failure to comply will result in the rejection of your bid.

Bidder: _____

By: _____
(Signature of Partner or corporate officer)

Attest:
(Corporate Seal)

Secretary of Corporate Bidder

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

BID FORM (TO BE NOTARIZED)

AFFIDAVIT WHERE BIDDER IS AN INDIVIDUAL

STATE OF NEW YORK, COUNTY OF _____ ss:

_____ being duly sworn says:

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

(Signature of the person who signed the Bid)

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

Notary Public

AFFIDAVIT WHERE BIDDER IS A PARTNERSHIP

STATE OF NEW YORK, COUNTY OF _____ ss:

_____ being duly sworn says:

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

(Signature of Partner who signed the Bid)

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

Notary Public

AFFIDAVIT WHERE BIDDER IS A CORPORATION

STATE OF NEW YORK, COUNTY OF _____ 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 Partner who signed the Bid)

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

Notary Public

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: _____

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

Full Name of Bidder: _____

Address: _____

City _____ State _____ Zip Code _____

CHECK ONE BOX AND INCLUDE APPROPRIATE NUMBER:

A - Individual or Sole Proprietorship*
SOCIAL SECURITY NUMBER

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

C- Corporation
EMPLOYER IDENTIFICATION NUMBER

By: _____
Signature

Title: _____

If a corporation, place seal here

This affirmation must be signed by an officer or duly authorized representative.

*Under the Federal Privacy Act the furnishing of Social Security Numbers by bidders on City contracts is voluntary. Failure to provide a Social Security Number will not result in a bidder's disqualification. Social Security Numbers will be used to identify bidders, proposers or vendors to ensure their compliance with laws, to assist the City in enforcement of laws, as well as to provide the City a means of identifying of businesses which seek City contracts.

(NO TEXT ON THIS PAGE)

BID BOND 1
FORM OF BID BOND

KNOW ALL MEN BY THESE PRESENTS. That we, _____

hereinafter referred to as the "Principal", and _____

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 _____

(\$ _____), 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 _____

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

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

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

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

BID BOND 2

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

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

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

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

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

(Seal)

Principal (L.S.)

By: _____

(Seal)

Surety

By: _____

BID BOND 3

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

ACKNOWLEDGMENT OF PRINCIPAL, IF A PARTNERSHIP

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

Notary Public

ACKNOWLEDGMENT OF PRINCIPAL, IF AN INDIVIDUAL

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

Notary Public

AFFIX ACKNOWLEDGMENTS AND JUSTIFICATION OF SURETIES

(NO TEXT ON THIS PAGE)

M/WBE PROGRAM

SUBCONTRACTOR UTILIZATION PLAN - SCHEDULE B

Subcontractor Utilization Plan (Schedule B): The Subcontractor Utilization Plan (Schedule B) for this Contract is set forth on the following pages of this Bid Booklet. The Subcontractor Utilization Plan (Part I) indicates whether participation goals have been established for this Contract. If participation goals have been established for this Contract, the bidder must submit a Subcontractor Utilization Plan (Part II) with its bid.

Contract Provisions: Contract provisions regarding the participation of MWBE firms are set forth in Article 77 of the Contract. The bidder is advised to review these contract provisions.

Waiver: The bidder may seek a full or partial pre-award waiver of the Target Subcontracting Percentage in accordance with Article 77 of the Contract (See Part A, Section 10). The bidder's request for a waiver must be submitted at least seven (7) calendar days prior to the bid date. Waiver requests submitted after the deadline will not be considered. The form for requesting a waiver of the Target Subcontracting Percentage is set forth in the Subcontractor Utilization Plan (Part III).

Rejection of the Bid: The bidder must complete the Subcontractor Utilization Plan (Part II) set forth on the following pages. Subcontractor Utilization Plans which do not include the required affirmations will be deemed to be non-responsive, unless a full waiver of the Target Subcontracting Percentage is granted (Subcontractor Utilization Plan, Part III). In the event that the City determines that the bidder has submitted a Subcontractor Utilization Plan where the required affirmations are completed but other aspects of the Plan are not complete, or contain a copy or computation error that is at odds with the affirmation, the bidder will be notified by the Agency and will be given four (4) calendar days from receipt of notification to cure the specified deficiencies and return a completed plan to the Agency. Failure to do so will result in a determination that the Bid is non-responsive. Receipt of notification is defined as the date notice is emailed or faxed (if the bidder has provided an email address or fax number), or no later than five (5) days from the date of mailing or upon delivery, if delivered.

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

Tax ID #: _____

PIN #: 8502011SE0027C



THE CITY OF NEW YORK

SCHEDULE B - Subcontractor Utilization Plan - Part I: Agency's Target

This page to be completed by contracting agency

Contract Overview

Pin #: 8502011SE0027C FMS Project ID #: SE-818
 Project Title: CONSTRUCTION OF SANITARY AND STORM SEWERS
 Contracting Agency: Department of Design and Construction
 Agency Address: 30-30 Thomson Ave City Long Island City State NY Zip Code 11101
 Contact Person: Diana A. Benjamin Title MWBE Liaison & Compliance Analyst
 Telephone #: (718) 391-3470 Email: BenjamiDi@ddc.nyc.gov

Project Description (attach additional pages if necessary)

PROJECT ID: SE818

FOR THE CONSTRUCTION OF SANITARY AND STORM SEWERS IN: SHELDON AVENUE BETWEEN ELLSWORTH AVENUE AND BMP-SB1 A POINT APPROXIMATELY 1,000-FEET EAST OF DELMAR AVENUE; SINCLAIR AVENUE BETWEEN ELLSWORTH AVENUE AND DEAD END; STAFFORD AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; VINELAND AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; CROWN AVENUE BETWEEN NIPPON AVENUE AND BELFIELD AVENUE; WOODROW ROAD BETWEEN POWELL STREET AND BELFIELD AVENUE; CASTOR PLACE BETWEEN HUGUENOT AVENUE AND ANACONDA STREET; SPERRY PLACE BETWEEN ANACONDA STREET AND EVERTON AVENUE; POWELL STREET BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; WALKER PLACE BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; DAHLIA STREET BETWEEN WOODROW ROAD AND SHIFT PLACE; HUGUENOT AVENUE BETWEEN RENSSELAER AVENUE AND SHIFT PLACE; CARDIFF STREET BETWEEN CASTOR PLACE AND ROSEDALE AVENUE; BOULDER STREET BETWEEN WOODROW ROAD AND ROSEDALE AVENUE; NIPPON AVENUE BETWEEN RENSSELAER AVENUE AND WOODROW ROAD; ANACONDA STREET BETWEEN SPERRY PLACE AND DELMAR AVENUE; BALLARD AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; DELMAR AVENUE BETWEEN RENSSELAER AVENUE AND ANACONDA STREET; CROWN PLACE BETWEEN CROWN AVENUE AND DEAD END; EVERTON AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; AND, HEENAN AVENUE BETWEEN VINELAND AVENUE AND DEAD END

INCLUDING WATER MAIN WORK

Together With All Work Incidental Thereto
 BOROUGH OF STATEN ISLAND
 CITY OF NEW YORK

(1) ✓ Target Subcontracting Percentage

Percentage of total contract dollar value that agency estimates will be awarded to subcontractors in amounts under \$1 million for construction and professional services.

5 %

Subcontractor Participation Goals*

Complete and enter total for each Construction or Professional Services, or both (if applicable)

Group	Construction		Professional Services	
Black American	Unspecified	%	0	%
Hispanic American	Unspecified	%	0	%
Asian American	Unspecified	%	No Goal	
Caucasian Female	No Goal	%	0	%
Total Participation Goals	(2)	50	(3)	0
		%		%

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

Tax ID #: _____

PIN #: 8502011SE0027C

SCHEDULE B - Subcontractor Utilization Plan - Part II: Bidder/Proposer Subcontracting Plan

This page and the next (Part II herein) are to be completed by the bidder/proposer. **AFFIRMATIONS:** Bidder/proposer must check the applicable boxes below, affirming compliance with M/WBE requirements.

Bidder/proposer AFFIRMS or DOES NOT AFFIRM [statement below]

It is a material term of the contract to be awarded that, with respect to the total amount of the contract to be awarded, bidder/proposer will award one or more subcontracts for amounts under one million dollars, sufficient to meet or exceed the Target Subcontracting Percentage (as set forth in Part I) unless it obtains a full or partial waiver thereof, and it will award subcontracts sufficient to meet or exceed the Total Participation Goals (as set forth in Part I) unless such goals are modified by the Agency.

- Bidder/proposer AFFIRMS that it intends to meet or exceed the Target Subcontracting Percentage (as set forth in Part I); or
- AFFIRMS that it has obtained a full/partial pre-award waiver of the Target Subcontracting Percentage (as set forth in Part I) and intends to award the modified Target Subcontracting Percentage, if any; or
- DOES NOT AFFIRM

Section I: Prime Contractor Contact Information

Tax ID # _____ FMS Vendor ID # _____

Business Name _____ Contact Person _____

Address _____

Telephone # _____ E-mail _____

Section II: General Contract Information

1. Define the industry in which work is to be performed.

- Construction** includes all contracts for the construction, rehabilitation, and/or renovation of physical structures. This category does include CM Build as well as other construction related services such as: demolition, asbestos and lead abatement, and painting services, carpentry services, carpet installation and removal, where related to new construction and not maintenance. This category does not include standard services which may be associated with construction projects but which do not constitute construction, such as trucking, site protection, site security, site surveying, soil testing, extermination, and maintenance/operations.
- Professional Services** are a class of services that typically require the provider to have some specialized field or advanced degree. Services of this type include: legal, management consulting, information technology, accounting, auditing, actuarial, advertising, health services, pure construction management, environmental analysis, scientific testing, architecture and engineering, and traffic studies, and similar services.

a. Type of work on Prime Contract (Check one):

Construction Professional Services

b. Type of work on Subcontract (Check all that apply):

Construction Professional Services Other

2. What is the expected percentage of the total contract dollar value that you expect to award to all subcontracts? _____ %

3. Will you award subcontract(s) in amounts below \$ 1 million for construction and/or professional Services contracts within the first 12 months of the notice to proceed on the contract? Yes No

Section III: Subcontractor Utilization Summary

IMPORTANT: If you do not anticipate that you will subcontract at the target level the agency has specified, because you will perform more of the work yourself, you must seek a waiver of the Target Subcontracting Percentage by completing p.9).

Step 1:

Calculate the percentage (of your total bid) that will go towards subcontracts under \$ 1M for construction and/or Professional services

Subcontracts under \$1M (4) (construction/professional services)

Total Bid/Proposal Value

Calculated Target Subcontracting Percentage

\$ _____ ÷ \$ _____ X 100 = _____ %

- Subcontracts under \$1M (construction/professional services):** Enter the value you expect to award to subcontractors in dollars for amounts under \$1 million for construction and/or professional services. This value defines the amount that participation goals apply to, and will be entered into the first line of Step 2.
- Total Bid/Proposal Value:** Provide the dollar amount of the bid/proposal.
- Calculated Target Subcontracting Percentage:** The percentage of the total contract dollar value that will be awarded to one or more subcontractors for amounts under \$1 million for construction and/or professional services. **This percentage must equal or exceed the percentage listed by the agency on page 6, at line (1).**

NOTE: The "Calculated Target Subcontracting Percentage" MUST equal or exceed the Target Subcontracting Percentage listed by the agency on Page 6, Line (1).

SCHEDULE B - Subcontractor Utilization Plan - Part II: Bidder/Proposer Subcontracting Plan - cont.

Step 2:
Calculate value of subcontractor participation goals

Subcontracts under \$1M
(construction/professional services)

<p>a. Copy value from Step 1, line (4) – the total value of all expected subcontracts Under \$1M for construction and/or professional services</p>	\$ _____		
	↓		
<p>b. • From line a. above, allocate the dollar value of "Subcontracts Under \$1M" by Construction and Professional Services. • If all subcontracts under \$1M are in one industry, enter "0" for the industry with no subcontracts. • Amounts listed on these lines should add up to the value from line a.</p>	Construction	Professional Services	
<p>• Subcontracts under \$1M by industry</p> <p>• For Construction enter percentage from line (2) from Page 6. • For Professional Services enter percentage from line (3) from Page 6.</p>	\$ _____	\$ _____	
<p>c. • Total Participation Goals Percentages must be copied from Part I, lines (2) and (3).</p>	Total Participation Goals	x _____ %	x _____ %
<p>d. Value of Total Participation Goals</p>	\$ _____	\$ _____	

Step 3: *Enter brief description of type(s) of subcontracts in amounts under \$1M anticipated, by Type of work, not by name of subcontractor*

Subcontracts in Amounts Under \$1 M Scope of Work - Construction

Enter brief description of type(s) of subcontracts in amounts under \$1M anticipated, by Type of work, not by name of subcontractor

Subcontracts in Amounts Under \$1 M Scope of Work - Professional Services

Section IV: Vendor Certification and Required Affirmations

I hereby 1) acknowledge my understanding of the M/WBE requirements as set forth herein and the pertinent provisions of Local Law 129 of 2005, and the rules promulgated thereunder; 2) affirm that the information supplied in support of this subcontractor utilization plan is true and correct; 3) agree, if awarded this Contract, to comply with the M/WBE requirements of this Contract and the pertinent provisions of Local Law 129 of 2005, 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 subcontract(s) sufficient to meet the Target Subcontracting Percentage, unless a waiver is obtained, and the Vendor will award subcontract(s) sufficient to meet the Total Participation Goals unless such goals are modified by the Agency; and 5) agree and affirm, if awarded this contract the Vendor intends to make all reasonable, good faith efforts to meet the Target Subcontracting Percentage, or If the Vendor has obtained a waiver, the Vendor intends to to solicit and obtain the participation of M/WBEs so as to meet the Total Participation Goals unless modified by the Agency.

Signature _____ Date _____
Print Name _____ Title _____

SCHEDULE B - PART III - REQUEST FOR WAIVER OF TARGET SUBCONTRACTING PERCENTAGE

Contract Overview

Tax ID # _____ FMS Vendor ID # _____

Business Name _____

Contact Name _____ Telephone # _____ Email _____

Type of Procurement Competitive Sealed Bids Other Bid/Response Due Date _____

PIN # (for this procurement) _____ Type of work on Prime Contract _____ Type of work on Subcontract (Check all that apply):

(Check one):

Construction

Construction

Other

Professional Services

Professional Services

SUBCONTRACTING as described in bid/solicitation documents (Copy this % figure from the solicitation)

_____ % of the total contract value anticipated by the agency to be subcontracted for construction/professional services subcontracts valued below \$1 million (each)

ACTUAL SUBCONTRACTING as anticipated by vendor seeking waiver

_____ % of the total contract value anticipated in good faith by the bidder/proposer to be subcontracted for construction/professional services subcontracts valued below \$1 million (each)

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

- Vendor does not subcontract construction/professional services, and has the capacity and good faith intention to perform all such work itself.
- Vendor subcontracts *some* of this type of work but at *lower* % than bid/solicitation describes, and has the capacity and good faith intention to do so on this contract.
- Other _____

References

List 3 most recent contracts/subcontracts performed for NYC agencies (if any)

CONTRACT NO. _____ AGENCY _____ DATE COMPLETED _____

CONTRACT NO. _____ AGENCY _____ DATE COMPLETED _____

CONTRACT NO. _____ AGENCY _____ DATE COMPLETED _____

List 3 most recent contracts/subcontracts performed for other agencies/entities (complete ONLY if vendor has performed fewer than 3 NYC contracts)

TYPE OF WORK _____ AGENCY/ENTITY _____ DATE COMPLETED _____

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

TYPE OF WORK _____ AGENCY/ENTITY _____ DATE COMPLETED _____

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

TYPE OF WORK _____ AGENCY/ENTITY _____ DATE COMPLETED _____

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

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: _____

(NO TEXT ON THIS PAGE)

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: SE818

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

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: _____

Project ID. _____

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

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	<u>INTRASTATE RATE</u>	<u>INTERSTATE RATE</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

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

4. OSHA Information:

_____ Contractor has received a willful violation issued by OSHA or New York City Department of Buildings (NYCDOB) within the last three years.

_____ 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.

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

Project ID. _____

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

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)

_____ Contractor previously audited by the DDC Office of Site Safety.

DDC Project Number(s): _____

_____ Accident on previous DDC Project(s).

_____ Fatality or Life-altering Injury on DDC Project(s) within the last three years.
[Examples of a life-altering injury include loss of limb, loss of a sense (e.g., sight, hearing), or loss of neurological function].

Date: _____ 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 17 through 19 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, _____, being duly sworn, state that I have read
Enter Your Name

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

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

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

Vendor Questionnaire *This section is required.*

This refers to the vendor questionnaire(s) submitted for the vendor doing business with the City.

Name of Submitting Entity: _____

Vendor's Address: _____

Vendor's EIN or TIN: _____ Requesting Agency: _____

Are you submitting this Certification as a parent? (Please circle one) Yes No

Signature date on the last full vendor questionnaire signed for the submitting vendor: _____

Signature date on change submission for the submitting vendor: _____

Principal Questionnaire

This section refers to the most recent principal questionnaire submissions.



Principal Name	Date of signature on last full Principal Questionnaire	Date(s) of signature on submission of change
1		
2		
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:

Name (Print)

Title

Name of Submitting Entity

Signature

Date

Notarized By:

Notary Public

County License Issued

License Number

Sworn to before me on: _____
Date

Certificate of No Change Form



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

I, _____, being duly sworn, state that I have read
Enter Your Name

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

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

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

Vendor Questionnaire *This section is required.*

This refers to the vendor questionnaire(s) submitted for the vendor doing business with the City.

Name of Submitting Entity: _____

Vendor's Address: _____

Vendor's EIN or TIN: _____ Requesting Agency: _____

Are you submitting this Certification as a parent? (Please circle one) Yes No

Signature date on the last full vendor questionnaire signed for the submitting vendor: _____

Signature date on change submission for the submitting vendor: _____

Principal Questionnaire

This section refers to the most recent principal questionnaire submissions.



Principal Name	Date of signature on last full Principal Questionnaire	Date(s) of signature on submission of change
1		
2		
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:

Name (Print)

Title

Name of Submitting Entity

Signature

Date

Notarized By:

Notary Public

County License Issued

License Number

Sworn to before me on: _____
Date

IRAN DIVESTMENT ACT COMPLIANCE RIDER

FOR NEW YORK CITY CONTRACTORS

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

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
- 2a. If you are certified as an **MBE, WBE, or LBE**, 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 ____

PART I: CONTRACTOR/SUBCONTRACTOR INFORMATION

5. _____
Employer Identification Number or Federal Tax I.D./ _____ Email Address
6. _____
Company Name
7. _____
Company Address and Zip Code
8. _____
Chief Operating Officer _____ Telephone Number
- 9 _____
Designated Equal Opportunity Compliance Officer _____ Telephone Number
(If same as Item #7, write "same")
10. _____
Name of Prime Contractor and Contact Person
(If same as Item #5, write "same")
11. Number of employees in your company: _____

12. Contract information:

- (a) _____
Contracting Agency (City Agency)
- (b) _____
Contract Amount
- (d) _____
Procurement Identification Number (PIN)
- (e) _____
Contract Registration Number (CT#)
- (f) _____
Projected Commencement Date
- (g) _____
Projected Completion Date

(h) Description and location of proposed contract:

13. 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.

14. 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.

15. 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: _____

16. 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.

17. 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

18. 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?

19. 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___

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

21. 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.

22. 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.

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

___ Minorities and Women

___ Individuals with handicaps

___ Other. Please specify _____

24. 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.

25. 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.

26. 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.

27. 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).

28. 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

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NEW YORK CITY DEPARTMENT OF
DESIGN + CONSTRUCTION

**INFRASTRUCTURE DIVISION
BUREAU OF DESIGN**

VOLUME 1 OF 3

PROJECT ID: SE818

FOR THE CONSTRUCTION OF SANITARY AND STORM SEWERS IN: SHELDON AVENUE BETWEEN ELLSWORTH AVENUE AND BMP-SB1 A POINT APPROXIMATELY 1,000-FEET EAST OF DELMAR AVENUE; SINCLAIR AVENUE BETWEEN ELLSWORTH AVENUE AND DEAD END; STAFFORD AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; VINELAND AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; CROWN AVENUE BETWEEN NIPPON AVENUE AND BELFIELD AVENUE; WOODROW ROAD BETWEEN POWELL STREET AND BELFIELD AVENUE; CASTOR PLACE BETWEEN HUGUENOT AVENUE AND ANACONDA STREET; SPERRY PLACE BETWEEN ANACONDA STREET AND EVERTON AVENUE; POWELL STREET BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; WALKER PLACE BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; DAHLIA STREET BETWEEN WOODROW ROAD AND SHIFT PLACE; HUGUENOT AVENUE BETWEEN RENSSELAER AVENUE AND SHIFT PLACE; CARDIFF STREET BETWEEN CASTOR PLACE AND ROSEDALE AVENUE; BOULDER STREET BETWEEN WOODROW ROAD AND ROSEDALE AVENUE; NIPPON AVENUE BETWEEN RENSSELAER AVENUE AND WOODROW ROAD; ANACONDA STREET BETWEEN SPERRY PLACE AND DELMAR AVENUE; BALLARD AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; DELMAR AVENUE BETWEEN RENSSELAER AVENUE AND ANACONDA STREET; CROWN PLACE BETWEEN CROWN AVENUE AND DEAD END; EVERTON AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; AND, HEENAN AVENUE BETWEEN VINELAND AVENUE AND DEAD END

INCLUDING WATER MAIN WORK

Together With All Work Incidental Thereto
BOROUGH OF STATEN ISLAND
CITY OF NEW YORK

Contractor

Dated _____, 20____



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

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

LAW

VOLUME 2 OF 3

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

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED FOR:

PROJECT ID: SE818

FOR THE CONSTRUCTION OF SANITARY AND STORM SEWERS IN: SHELDON AVENUE BETWEEN ELLSWORTH AVENUE AND BMP-SB1 A POINT APPROXIMATELY 1,000-FEET EAST OF DELMAR AVENUE; SINCLAIR AVENUE BETWEEN ELLSWORTH AVENUE AND DEAD END; STAFFORD AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; VINELAND AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; CROWN AVENUE BETWEEN NIPPON AVENUE AND BELFIELD AVENUE; WOODROW ROAD BETWEEN POWELL STREET AND BELFIELD AVENUE; CASTOR PLACE BETWEEN HUGUENOT AVENUE AND ANACONDA STREET; SPERRY PLACE BETWEEN ANACONDA STREET AND EVERTON AVENUE; POWELL STREET BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; WALKER PLACE BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; DAHLIA STREET BETWEEN WOODROW ROAD AND SHIFT PLACE; HUGUENOT AVENUE BETWEEN RENSSELAER AVENUE AND SHIFT PLACE; CARDIFF STREET BETWEEN CASTOR PLACE AND ROSEDALE AVENUE; BOULDER STREET BETWEEN WOODROW ROAD AND ROSEDALE AVENUE; NIPPON AVENUE BETWEEN RENSSELAER AVENUE AND WOODROW ROAD; ANACONDA STREET BETWEEN SPERRY PLACE AND DELMAR AVENUE; BALLARD AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; DELMAR AVENUE BETWEEN RENSSELAER AVENUE AND ANACONDA STREET; CROWN PLACE BETWEEN CROWN AVENUE AND DEAD END; EVERTON AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; AND, HEENAN AVENUE BETWEEN VINELAND AVENUE AND DEAD END

INCLUDING WATER MAIN WORK

Together With All Work Incidental Thereto
**BOROUGH OF STATEN ISLAND
CITY OF NEW YORK**

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

March 13, 2013



13-037





NEW YORK CITY DEPARTMENT OF
DESIGN + CONSTRUCTION

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

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

VOLUME 2 OF 3

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

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED FOR:

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

March 13, 2013





Notice to Bidders:

In 2013 the City will be implementing a new web based subcontractor reporting system. Once this subcontractor reporting system is implemented, and Contractor receives notice of its implementation, Contractor will be required to list in the system all of the subcontractors that it knows it will use or is already using in the performance of this contract. For each subcontractor listed, Contractor will be required to provide the following information: maximum contract value, description of subcontractor work, start and end date of the subcontract and identification of the subcontractor's industry. Identification of subcontractors in the system along with the required information will be required in order to obtain subcontractor approval under [section 3.02 of Appendix A][Article 17 of the Standard Construction Contract] and PPB Rule § 4-13 for all subcontractors that have not been approved as of the implementation date. 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...

When the subcontractor reporting system is implemented, Contractor will receive a written notice from the City which will contain the information the Contractor will need to list its subcontractors and report payments. Contractor will not be required to comply with the requirements set forth herein until such notice is issued. Contractor will have 30 days from the date of the notice to list its current subcontractors for which it has already received Agency approval, if any. Thereafter, for those subcontractors that have not yet been approved by the Agency, subcontractors will have to be listed in the system in order to obtain the required Agency approval.

Failure of the Contractor to list a subcontractor and/or to report subcontractor payments in a timely fashion may result in the Agency declaring the Contractor in default of the Contract and may 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. For construction contracts, the provisions of Article 15 of the Standard Construction Contract shall govern the issue of liquidated damages.

Contractor hereby agrees to these provisions and acknowledges that they will become effective on the date set forth in the notice.

(NO TEXT ON THIS PAGE)

NOTICE TO BIDDERS, PROPOSERS, CONTRACTORS, AND RENEWAL CONTRACTORS

This contract includes a provision concerning the protection of employees for whistleblowing activity, pursuant to New York City Local Law Nos. 30-2012 and 33-2012, effective October 18, 2012 and September 18, 2012, respectively. The provisions apply to contracts with a value in excess of \$100,000.

Local Law No. 33-2012, the Whistleblower Protection Expansion Act ("WPEA"), prohibits a contractor or its subcontractor from taking an adverse personnel action against an employee or officer for whistleblower activity in connection with a City contract; requires that certain City contracts include a provision to that effect; and provides that a contractor or subcontractor may be subject to penalties and injunctive relief if a court finds that it retaliated in violation of the WPEA. The WPEA is codified at Section 12-113 of the New York City Administrative Code.

Local Law No. 30-2012 requires a contractor to prominently post information explaining how its employees can report allegations of fraud, false claims, criminality, or corruption in connection with a City contract to City officials and the rights and remedies afforded to employees for whistleblowing activity. Local Law No. 30-2012 is codified at Section 6-132 of the New York City Administrative Code.

WHISTLEBLOWER PROTECTION EXPANSION ACT RIDER

1. In accordance with Local Law Nos. 30-2012 and 33-2012, codified at sections 6-132 and 12-113 of the New York City Administrative Code, respectively,

- (a) 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 (i) the Commissioner of the Department of Investigation, (ii) a member of the New York City Council, the Public Advocate, or the Comptroller, or (iii) the City Chief Procurement Officer, ACCO, Agency head, or Commissioner.
- (b) If any of Contractor's officers or employees believes that he or she has been the subject of an adverse personnel action in violation of subparagraph (a) of paragraph 1 of this rider, he or she shall be entitled to bring a cause of action against Contractor to recover all relief necessary to make him or her whole. Such relief may include but is not limited to: (i) an injunction to restrain continued retaliation, (ii) reinstatement to the position such employee would have had but for the retaliation or to an equivalent position, (iii) reinstatement of full fringe benefits and seniority rights, (iv) payment of two times back pay, plus interest, and (v) compensation for any special damages sustained as a result of the retaliation, including litigation costs and reasonable attorney's fees.
- (c) 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:
 - (i) 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
 - (ii) the rights and remedies afforded to its employees under New York City 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.
- (d) For the purposes of this rider, "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.
- (e) This rider is applicable to all of Contractor's subcontractors having subcontracts with a value in excess of \$100,000; accordingly, Contractor shall include this rider in all subcontracts with a value in excess of \$100,000.

2. Paragraph 1 is not applicable to this Contract if it is valued at \$100,000 or less. Subparagraphs (a), (b), (d), and (e) of paragraph 1 are not applicable to this Contract if it was solicited pursuant to a finding of an emergency. Subparagraph (c) of paragraph 1 is neither applicable to this Contract if it was solicited prior to October 18, 2012 nor if it is a renewal of a contract executed prior to October 18, 2012.

NOTICE TO BIDDERS

Please be advised that the City of New York has revised the form of the performance bond that is required for City construction contracts that exceed \$5 million. The form of bond required for contracts that do not exceed \$5 million has not changed. The City's payment bond remains unchanged.

The bond form for contracts that do not exceed \$5 million has been approved by the U.S. Small Business Administration ("SBA") for participation in their Bond Guarantee Program. The SBA's Bond Guarantee Program enables eligible small businesses to obtain or increase bonding by having the SBA act as a partial guarantor of the contractor to the surety. For information concerning the SBA program, including current limits on what size contracts are eligible for participation in the program, go to www.sba.gov/osg. If you are interested in participating in this program, we suggest that you contact your broker or the SBA.

In order to maximize participation by small businesses in the SBA Guarantee Program, the City also encourages prime contractors who are awarded contracts greater than \$5 million to allow their subcontractors to use the SBA-approved form, particularly on contracts that are subject to Local Law 129 (the M/WBE program), if the prime contractor requires subcontractors to obtain performance bonds.

(NO TEXT ON THIS PAGE)

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*

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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 Bid Submission Requirements are set forth on page 2 of the Bid Booklet.

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.

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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.

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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.

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- 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.

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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

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- 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

SEPTEMBER 2008

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WITNESSETH:

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

**CHAPTER I
THE CONTRACT AND DEFINITIONS**

ARTICLE 1. THE CONTRACT

1.1 Except for titles, subtitles, headings, running headlines, tables of content 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 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.

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 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.

2.1.4 "**City**" shall mean the City of New York.

2.1.5 "**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.

2.1.6 "**Commissioner**" shall mean the head of the Agency that has entered into this Contract, or his/her duly authorized representative.

2.1.7 "**Comptroller**" shall mean the Comptroller of the City of New York.

2.1.8 "**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.

2.1.9 "**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.

2.1.10 "**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.

2.1.11 "**Contractor**" shall mean the entity which executed this Contract, whether a corporation, firm, partnership, joint venture, individual, or any combination thereof, and it(s), 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.

2.1.12 "**Days**" shall mean calendar days, except where otherwise specified.

2.1.13 "**Engineer**" or "**Architect**" or "**Project Manager**" shall mean the person so designated in writing by the Commissioner to act as such in relation to this Contract, including a private Architect or Engineer or Project Manager, as the case may be.

2.1.14 "**Engineering Audit Officer**" (EAO) shall mean the person so designated by the Commissioner to perform responsible auditing functions hereunder.

2.1.15 "**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.

2.1.16 "**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.

2.1.17 "**Final Acceptance**" shall mean final written acceptance of all the Work by the Commissioner, a copy of which shall be sent to the Contractor.

2.1.18 "**Final Approved Punch List**" shall mean a list, approved in writing by the Engineer, specifying those items of Work to be completed by the Contractor after Substantial Completion and dates for the completion of each item of Work.

2.1.19 "**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.

2.1.20 "**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.

2.1.21 "**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.

2.1.22 "**Other Contractor(s)**" shall mean any Contractor (other than the entity which executed this Contract or its Subcontractors) who has a contract with the City for work on or adjacent to the building or site of the Work.

2.1.23 "**Payroll Taxes**" shall mean State Unemployment Insurance ("SUI"), Federal Unemployment Insurance (FUI) and payments pursuant to the Federal Insurance Contributions Act ("FICA").

2.1.24 "**Project**" shall mean the public improvement to which this Contract relates.

2.1.25 "**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.

2.1.26 "**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.

2.1.27 "**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.

2.1.28 "**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.

2.1.29 "**Specifications**" shall mean all of the directions, requirements and standards of performance applying to the Work as hereinafter detailed and designated under the Specifications.

2.1.30 "**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, at the site. Wherever the word Subcontractor appears, it shall also mean Sub-Subcontractor.

2.1.31 "**Substantial Completion**" shall mean the written determination by the Commissioner that the Work required under this Contract is substantially, but not entirely, complete.

2.1.32 "**Treasurer**" shall mean the Commissioner of the Department of Finance of the City of New York.

2.1.33 "**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 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 Department of Environmental Protection.

5.3.2 The Contractor agrees to comply with Section 24-219 of the Administrative Code of the City ("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 work 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 New York City Department of Environmental Protection. In addition, the Contractor's certified Construction Noise Mitigation Plan is subject inspection by the Department of Environmental Protection in accordance with 15 RCNY §28-101. No Contract work may take place at a worksite 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 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 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.

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 to fulfill the requirements of this Article 5.4.2, where the Commissioner of the New York 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 City agencies and Contractors. Any such determination shall expire after six months unless renewed.

5.4.2(c) Contractors shall not be required to comply with this Article 5.4.2 where the 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 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 is available. Any finding made pursuant to this subdivision shall expire after sixty days, at which time the requirements of this Article 5.4.2 shall be in full force and effect unless the 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 Agency issuing this solicitation.

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 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 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 calendar 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)(1) Where the 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 those paragraphs is unavailable for such vehicle, Contractor shall use whatever technology for reducing the emission of pollutants, if any, is available and appropriate for such vehicle.

5.4.3(d)(2) 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, 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)(3) In determining which technology to use for the purposes of Articles 5.4.3(d)(1) and 5.4.3(d)(2) above, 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)(4) Contractors 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 Agency issuing the solicitation. Any finding or waiver made or issued pursuant to Articles 5.4.3(d)(1) and 5.4.3(d)(2) above shall expire after one hundred eighty days, at which time the requirements of Article 5.4.3(a) shall be in full force and effect unless the 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. Contractors 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) 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 and ten thousand 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 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 Department the following information:

5.4.6(1) The total number of diesel-powered Nonroad Vehicles used to fulfill the requirements of this Public Works Contract;

5.4.6(2) The number of such Nonroad Vehicles that were powered by Ultra Low Sulfur Diesel Fuel;

5.4.6(3) 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(4) 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(5) The locations where such Nonroad Vehicles were used; and

5.4.6(6) 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.

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 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 of New York 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 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 terms shall not apply to horticultural maintenance vehicles used for landscaping purposes that are powered by a Nonroad Engine of sixty-five horsepower 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.

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 horsepower (HP) rating of 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.

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 the persons and 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 notify in writing the commercial general liability insurance carrier, and, where applicable, the worker's compensation and/or other insurance carrier, of any such loss, damage, injury, or accident, and any claim or suit arising therefrom, immediately, but not later than 20 days after such event. The **Contractor's** notice to the commercial general liability insurance carrier must expressly specify that "this notice is being given on behalf of the City of New York as Additional Insured as well as [the Contractor] as Named Insured." The **Contractor's** notice to the insurance carrier shall contain the following information: the name of the **Contractor**, the number of the **Contract**, the date of the occurrence, the location (street address and borough) of the occurrence, and the identity of the persons or things injured, damaged or lost.

7.3.2(a) At the time notice is provided to the insurance carrier(s), the **Contractor** shall provide copies of such notice to the **Comptroller** and the **Commissioner**. Notice to the **Comptroller** shall be sent to the Insurance Unit, NYC Comptroller's Office, 1 Centre Street – Room 1222, New York, New York, 10007. Notice to the **Commissioner** shall be sent to the address set forth in Schedule A of the General Conditions.

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 indemnify, defend and hold the **City**, its employees and agents (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 **Contractor** waives all rights against the **City** for any damages or losses for which either is covered under any insurance required under Article 22 (whether or not such insurance is actually procured) or any other insurance applicable to the operations of the **Contractor** and/or its **Subcontractors** in the performance of this **Contract**.

7.6 The provisions of this Article 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 **Work** on the date specified in a written notice signed by the **Commissioner**. The time for performance of the **Work** under the **Contract** shall be computed from the date specified in such written notice. **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 herein, 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 with this **Contract**, unless otherwise directed by the **Engineer**, shall submit to the **Engineer** a proposed progress schedule 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**; 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** 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 enable 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, 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 fully 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 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.

11.2 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**.

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** shall determine 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 (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 this **Contractor's** failure to comply with the **Engineer's** direction 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 **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 suit based upon such claim and if any judgment or claims (even if the allegations of the suit 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 and the **PPB Rules**.

13.2 Any extension of time may be granted only by the **Commissioner** 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 officers, 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 **Commissioner** 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 **Commissioner** 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 **Commissioner** or the Board on an application for an extension of time shall be binding and conclusive on the **Contractor**.

13.6 The granting of an application for an extension of time for causes of delay other than those herein referred to shall be entirely within the discretion of the **Commissioner** or the Board.

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 **Commissioner** of the condition which allegedly has caused or is causing the delay, and shall submit a written application to the **Commissioner** 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 bid amount;

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 **Commissioner** 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 **Commissioner** 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 **Commissioner** 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 **Commissioner**, 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 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, and agrees that all it may be entitled to on account of any such delay is an extension of time to complete performance of the **Work** as provided herein.

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 in Articles 14.2.1 and 14.2.2 have been met. The **Commissioner** will then issue a Certificate of **Substantial Completion**.

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 Punch List and Date for **Final Acceptance**: Following inspection of the **Work**, the **Engineer** shall furnish the **Contractor** a final punch list, specifying all items of **Work** to be completed. The **Contractor** shall then submit to the **Engineer** dates for the completion of each specified item of **Work**. 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, shall establish dates for the completion of each item of **Work**. The latest completion date specified shall be the date for **Final Acceptance** of the **Work**.

14.3 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**.

14.4 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.

14.5 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.

14.6 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 complete the **Work** within the time fixed for such 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 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 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 shall apply to the **Contractor** if it 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 this article. In the event the **Commissioner** takes over, uses, occupies, or operates any part of the **Work**:

16.1.1 the **Commissioner** 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, 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 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.

17.4 The **Commissioner** will notify the **Contractor** in writing whether the proposed **Subcontractor** is qualified or not qualified. If the proposed **Subcontractor** is not qualified, the **Contractor** may submit another proposed **Subcontractor** unless the **Contractor** decides to do the **Work**. No **Subcontractor** shall be permitted on the **Site** unless approved.

17.5 Before entering into any subcontract hereunder, the **Contractor** shall inform the **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**.

17.6 Documents given to a **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.

17.7 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.

17.8 The **Contractor** shall be responsible for ensuring that all **Subcontractors** performing **Work** at the **Site** have either their own insurance coverage or are covered by the **Contractor's** insurance as required by Article 22.

17.9 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:

17.9.1 **Payment to Subcontractors:** The agreement between the **Contractor** and its **Subcontractors** 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**.

17.9.2 **Prevailing Rate of Wages:** The agreement between the **Contractor** and its **Subcontractors** shall include the prevailing wage rates and supplemental benefits to be paid in accordance with Labor Law Section 220.

17.9.3 **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 its **Subcontractors** in excess of \$50,000 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.).

17.10 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 adjusted.

17.11 On **Contracts** where 100% 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.

17.12 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, or conveyance shall not be valid until filed in the office of the **Commissioner** and the **Treasurer**, 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 or conveyance, 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 GUARANTY

ARTICLE 19. SECURITY DEPOSIT

19.1 The bid deposit, if required, shall be retained by the **Comptroller** as security for the **Contractor's** faithful performance of the **Contract** and will be returned to the **Contractor** only after the sum retained under Article 21 equals the amount of the bid deposit, subject to the other provisions of this **Contract**. If performance and payment bonds are required, any bid security posted shall be returned within a reasonable time after posting of such bonds and execution of this **Contract** by the **City**. When no partial payments are provided, the bid deposit will be released when final payment is certified to the **Comptroller** for payment.

19.2 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**:

19.2.1 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

19.2.2 To indemnify the **City** against any and all claims.

ARTICLE 20. PAYMENT GUARANTEE

20.1 On **Contracts** where 100% performance bonds and payment bonds are executed, this article does not apply.

20.2 In the event the terms of this **Contract** do not require the **Contractor** to provide a payment bond, the **City** shall, in accordance with the terms of this article, guarantee payment of all lawful demands 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 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 this Article 20.3.

20.3.2 Nothing in this article 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**.

20.3.3 All demands made against the **City** pursuant to this article shall be made within four (4) months from the date payment is due on the invoice or invoices submitted by the beneficiary to the **Contractor** for labor or **Work** done or for materials or supplies delivered, or, if the demand is for wages, four (4) months from the date the wages were due to be paid to the beneficiary.

20.3.4 All demands made against the **City** by such beneficiary shall be presented to the **Engineer** along with all written documentation concerning the demand which the **Engineer** deems 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.

20.3.5 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.

20.3.6 The **City** will not initiate the payment process of this article or make payment on a demand where the beneficiary making the demand has filed a lien against the **Work** or otherwise sues the **City** prior to receiving a written notice from the **City** that it will not pay the demand.

20.3.7 No beneficiary shall be entitled to interest from the **City**, or to any other costs, including, but not limited to, attorney's fees.

20.4 Upon the receipt by the **City** of a demand pursuant to this article, 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.

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**.

20.4.2 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 lien has been filed, the terms and conditions set forth in Article 23 shall apply.

20.5 The provisions of this article 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, 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 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 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 his **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 within the one year limitations period set forth in Section 137(4)(b).

ARTICLE 21. RETAINED PERCENTAGE

21.1 If this **Contract** requires 100% 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 100% performance and payment security and if the price for which this **Contract** was awarded does not exceed \$500,000, then as further security for the faithful performance of this **Contract**, the **Commissioner** shall deduct, and retain until the substantial completion of the **Work**, ten (10%) percent of the value of **Work** certified for payment in each partial payment voucher.

21.3 If this **Contract** does not require 100% performance and payment security and if the price for which this **Contract** was awarded exceeds \$500,000, 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.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
1/2/2014

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 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).

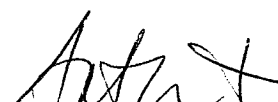
PRODUCER TCE Insurance Services Inc 201 Edward Curry Avenue Suite 205 Staten Island NY 10314		CONTACT NAME: Hope Edwards PHONE (A/C No, Ext): (718) 370-3110 FAX (A/C, No): E-MAIL ADDRESS:															
INSURED DiFazio Industries Inc. 38 Kinsey Place Staten Island NY 10303		INSURER(S) AFFORDING COVERAGE <table border="1"> <tr> <th>INSURER</th> <th>NAIC #</th> </tr> <tr> <td>INSURER A: National Union Fire Insurance</td> <td>19445</td> </tr> <tr> <td>INSURER B: James River Insurance Company</td> <td>12203</td> </tr> <tr> <td>INSURER C: New Hampshire Insurance Co.</td> <td>23841</td> </tr> <tr> <td>INSURER D: Aspen Insurance Company</td> <td>10717</td> </tr> <tr> <td>INSURER E: Chartis Specialty Insurance Co</td> <td></td> </tr> <tr> <td>INSURER F:</td> <td></td> </tr> </table>		INSURER	NAIC #	INSURER A: National Union Fire Insurance	19445	INSURER B: James River Insurance Company	12203	INSURER C: New Hampshire Insurance Co.	23841	INSURER D: Aspen Insurance Company	10717	INSURER E: Chartis Specialty Insurance Co		INSURER F:	
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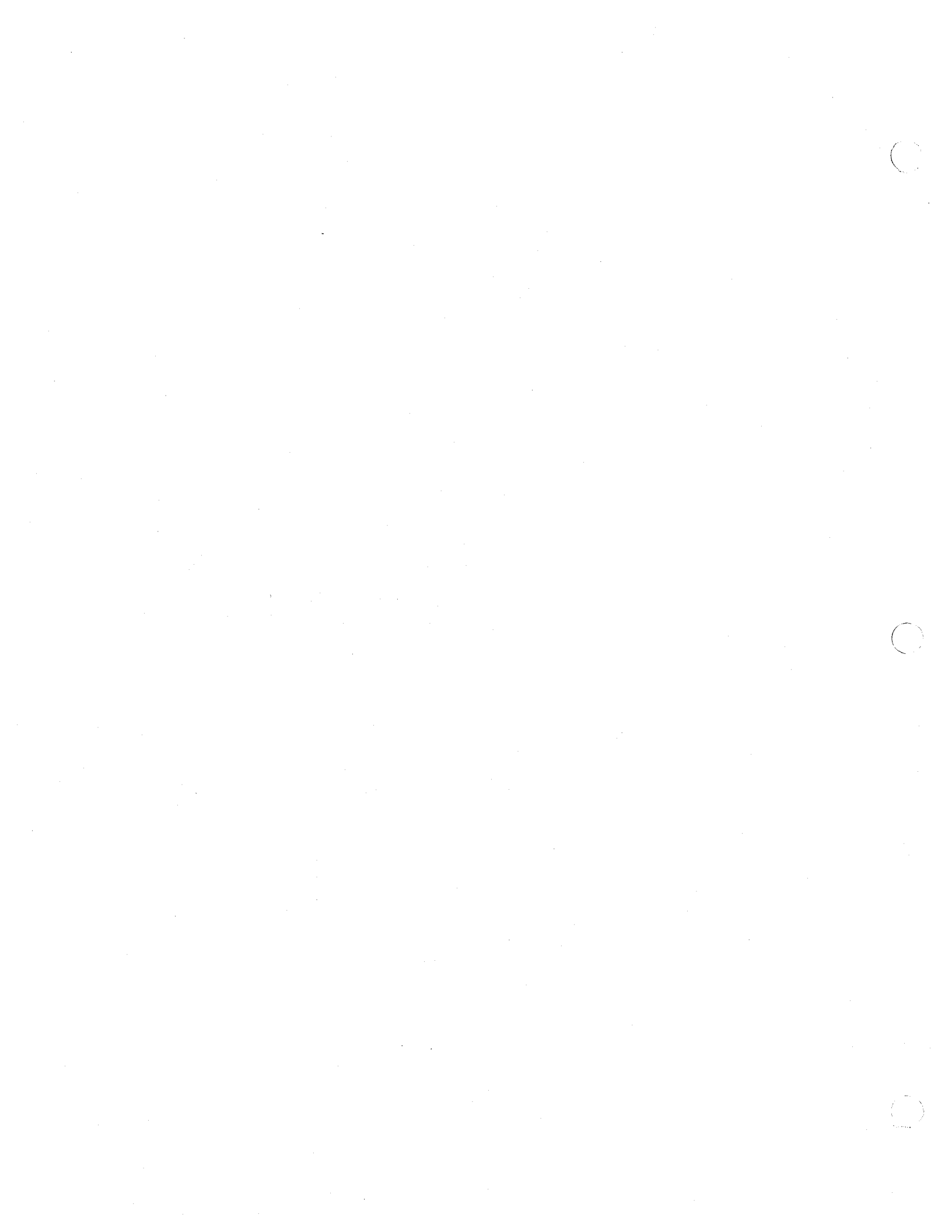
COVERAGES **CERTIFICATE NUMBER: 12-13** **REVISION NUMBER:**

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						EACH OCCURRENCE \$ 1,000,000
	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 50,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR	X	X	GL9725063	2/21/2013	2/21/2014	MED EXP (Any one person) \$ 5,000
	Contractual Liability						PERSONAL & ADV INJURY \$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE \$ 2,000,000
	<input checked="" type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO. JECT <input type="checkbox"/> LOC						PRODUCTS - COM/OP AGG \$ 2,000,000
C	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
	<input checked="" type="checkbox"/> ANY AUTO						BODILY INJURY (Per person) \$
	<input type="checkbox"/> ALL OWNED AUTOS			CA0948574	2/21/2013	2/21/2014	BODILY INJURY (Per accident) \$
	<input checked="" type="checkbox"/> HIRED AUTOS						PROPERTY DAMAGE (Per accident) \$
	<input type="checkbox"/> SCHEDULED AUTOS						Non-owned \$
B	<input checked="" type="checkbox"/> UMBRELLA LIAB						EACH OCCURRENCE \$ 5,000,000
	<input type="checkbox"/> EXCESS LIAB						AGGREGATE \$ 5,000,000
	<input type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$ 10,000			AUC 9382061 03	2/21/2013	2/21/2014	\$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						WC STATUTORY LIMITS
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)			WC 009876249	2/21/2013	2/21/2014	E.L. EACH ACCIDENT \$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below		N/A				E.L. DISEASE - EA EMPLOYEE \$ 1,000,000
							E.L. DISEASE - POLICY LIMIT \$ 1,000,000
D	Inland Marine			IMAC31T13	2/21/2013	2/21/2014	As per Schedule
E	Pollution			CPO1943442	07/06/2013	02/21/2015	\$3,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
 The following are listed as additional insured as required by written contract:
 City of New York, including its officials and employees, National Grid.

CERTIFICATE HOLDER DDC New York City Department of Design & 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 Anthony Defede/MKM 
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CERTIFICATION BY BROKER

The undersigned insurance broker represents to the City of New York that the attached Certificate of Insurance dated 01/07/2014 concerning insurance Policy Number GL9725063 is accurate in all material respects, that the described insurance is effective as of the date of this Certification.

The undersigned insurance broker further represents to the City of New York that the Commercial General Liability insurance policy, referenced in the Certificate of Liability, is issued by a company or companies that may lawfully issue the required policy and has an A.M. Best rating of at least A-VII or a Standard and Poor's rating of at least AA.

TCE Insurance Services Inc.
NAME OF BROKER OR INSURER

201 Edward Curry Ave
ADDRESS OF BROKER OR INSURER


SIGNATURE OF AUTHORIZED OFFICER OF BROKER

Anthony DeFede
NAME OF AUTHORIZED OFFICER

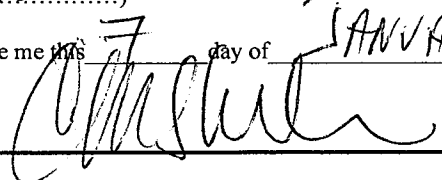
CEO
TITLE OF AUTHORIZED OFFICER

718-370-3131
CONTACT PHONE NUMBER FOR BROKER

ajd@tceins.com
EMAIL ADDRESS OF BROKER

State of NY.....)

County of Richmond.....

Sworn to before me this 7 day of JANUARY, 2014


CHRISTINA M. SHEHI
Notary Public, State of New York
No. 02SH6116628
Qualified in New York County
Commission Expires October 4, 2016

NOTARY PUBLIC FOR THE STATE OF new York

ARTICLE 22. INSURANCE

22.1 Types of Insurance: 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**), the **Contractor** shall effect 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 issued by companies that meet the standards of Article 22.2.1 and shall be primary (and non-contributing) to any insurance or self-insurance maintained by the **City**.

22.1.1 Commercial General Liability Insurance: The **Contractor** shall provide a Commercial General Liability Insurance policy covering the **Contractor** as Named Insured and the **City** as an Additional Insured. This policy shall protect the **City** and the **Contractor** from claims for property damage and/or bodily injury, including death, which may arise from any of the operations under this **Contract**. Coverage under this policy shall be at least as broad as that provided by ISO Form CG 0001 (10/01 ed.), must be "occurrence" based rather than "claims-made", and shall 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, Medical Payments, Independent Contractors, Personal Injury (Contractual Exclusion deleted), Explosion, Collapse and Underground Property, and Incidental Malpractice. If such insurance contains an aggregate limit, it shall apply separately to this **Project**.

22.1.1(a) Such Commercial General Liability Insurance shall name the **City**, together with its officials and employees, as an Additional Insured under this policy. Coverage for the **City** as Additional Insured shall specifically include the **City's** officials and employees, and shall be at least as broad as either Insurance Services Office ("ISO") Form CG 20 10 (07/04 ed.) or Form CG 20 33 (07/04 ed.) and shall provide completed operations coverage at least as broad as CG 20 37 (07/04 ed.).

22.1.1(b) If this **Contract** is equal to or greater than Ten Million Dollars (\$10,000,000.00), each Commercial General Liability Insurance policy provided shall contain each of the following endorsements:

22.1.1(b)(i) The Duties in the Event of Occurrence, Claim or Suit condition of the policy is amended per the following: If and insofar as knowledge of an "occurrence", "claim", or "suit" is relevant to the **City of New York** as Additional Insured under this policy, such knowledge by an agent, servant, official, or employee of the **City of New York** will not be considered knowledge on the part of the **City of New York** of the "occurrence", "claim", or "suit" unless the following position shall have received notice thereof from such agent, servant, official, or employee: Insurance Claims Specialist, Affirmative Litigation Division, New York City Law Department; and

22.1.1(b)(ii) Any notice, demand or other writing by or on behalf of the Named Insured to the Insurance Company shall also be deemed to be a notice, demand, or other writing on behalf of the **City** as Additional Insured. Any response by the Insurance Company to such notice, demand or other writing shall be addressed to Named Insured and to the **City** at the following addresses: Insurance Unit, NYC Comptroller's Office, 1 Centre Street – Room 1222, New York, N.Y. 10007; and Insurance Claims Specialist, Affirmative Litigation Division, New York City Law Department, 100 Church Street, New York, NY 10007.

22.1.2 Workers' Compensation Insurance and Disability Benefits Insurance: The **Contractor** shall provide, and ensure that each **Subcontractor** provides, Workers Compensation 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 qualifying for insurance pursuant to Article 22.1.4).

22.1.3 Employers' Liability Insurance: The **Contractor** shall provide, and ensure that each **Subcontractor** provides, Employers Liability Insurance affording compensation due to bodily injury by accident or disease sustained by any employee arising out of and in the course of his/her employment under this **Contract** (except for those qualifying for insurance pursuant to Article 22.1.4).

22.1.4 United States Longshoremen's and Harbor Workers Act and/or Jones Act Insurance: The **Contractor** shall provide, and ensure that each **Subcontractor** provides, 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**.

22.1.5 Builders' Risk Insurance: The **Contractor** shall provide a Builders' Risk Insurance policy covering all risks in completed value form. Such policy shall cover the total value of the **Work** performed in accordance with Schedule A, as well as the value of any equipment, supplies and/or material for the **Project** that may be in storage (on or off the **Site**) or in transit. The policy shall cover the cost of removing debris, including demolition as may be legally necessary by the operation of any law, ordinance or regulation, and for loss or damage to any owned, borrowed, leased or rented capital equipment, tools, including tools of their agents and employees, staging towers and forms, and property of the **City** held in their care, custody and/or control. Such policy shall name as insureds the **City**, the **Contractor**, and its **Subcontractors**. The Builders' Risk policy shall contain the following endorsements:

22.1.5(a) The **City** and the **Contractor** shall be named as loss payee for the **Work** in order of precedence, as their interest may appear; and

22.1.5(b) In the event the loss occurs at an occupied facility, the policy shall permit occupancy without the consent of the Insurance Company; and

22.1.5(c) In the event that the insurance policy has been issued by a mutual insurance company, the following language shall be included: "The City of New York is not liable for any premium or assessment under this policy of insurance. The First Named Insured is solely liable therefor."

22.1.6 Comprehensive Business Automobile Liability Insurance: The **Contractor** shall provide a Comprehensive Business Automobile Liability policy for liability arising out of any owned, non-owned, leased and hired vehicles to be used in connection with this **Contract**. Coverage should be at least as broad as ISO Form CA0001, ed. 10/01.

22.1.6(a) If autos 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.

22.1.7 Pollution/Environmental Liability Insurance: The **Contractor** shall provide Pollution/Environmental Liability Insurance covering bodily injury and property damage, including loss of use of damaged property or of property that has not been physically injured. 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, suit, or proceedings against the **City** arising from the operations under this **Contract**. Such insurance shall be in the **Contractor's** name and list the **City** as an Additional Insured. Coverage for the **City** as Additional Insured shall specifically include the **City's** officials and employees, and shall be at least as broad as provided to the **Contractor** for this **Project**.

22.1.7(a) If such coverage 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 years from the time the **Work** under this **Contract** is completed.

22.1.8 Marine Insurance:

22.1.8(a) Marine Protection and Indemnity Insurance: The **Contractor** shall provide a Marine Protection and Indemnity policy with coverage at least as broad as policy form SP-23. The policy shall provide coverage for the **Contractor** and for the **City** (together with its officials and employees) as Additional Insured for bodily injury and property damage arising from marine operations under this **Contract** including injury or death of crew members (if not fully provided through other insurance), damage to piers, wharves and other fixed or movable structures and loss of or damage to any other vessel or craft, or to property on such other vessel or craft, not caused by collision.

22.1.8(b) Ship Repairers Legal Liability Insurance: The **Contractor** shall provide a Ship Repairers Legal Liability Insurance policy covering all repair operations under this **Contract** at or in the vicinity of a designated approved port or yard under this **Contract**. The policy shall provide coverage from the point of acceptance of care custody and control of any **City** vessel. The policy shall provide Bailee Coverage for any **City** vessel in the **Contractor's** care, custody and control and coverage for damage to property of others caused by any **City** vessel in the **Contractor's** care custody and control.

22.1.8(c) Collision Liability/Towers Liability Insurance: The **Contractor** shall provide a Collision Liability/Towers Liability Insurance policy with coverage for the **Contractor** and for the **City** (together with its officials and employees) as Additional Insured at least as broad as the American Institute Tug Form (08/01/76) for all tugs used under this **Contract** and Collision Liability per American Institute Hull Clauses (6/2/77).

22.1.8(d) Marine Pollution Liability Insurance: The **Contractor** shall provide a Marine Pollution Liability Insurance policy covering itself as Named Insured and the **City** (together with its officials and employees) as Additional Insured for 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. Coverage under this policy shall be at least as broad as that provided by Water Quality Insurance Syndicate Form (09/98 ed.).

22.1.9 The **Contractor** shall provide such other types of insurance, at such minimum limits, as are specified in Schedule A of the General Conditions.

22.2 General Requirements for Insurance 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 AA, unless prior written approval is obtained from the Mayor's Office of Operations.

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 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 All required insurance policies, except for insurance required pursuant to Sections 22.1.2, 22.1.3, and 22.1.4, shall contain the following endorsement: "This policy may not be cancelled, terminated, modified or changed unless thirty (30) days prior written notice is sent by the Insurance Company to the Named Insured (or First Named Insured, as appropriate), the **Commissioner**, and to the **Comptroller**, attn: Office of Contract Administration, Municipal Building, Room 1005, New York, New York 10007."

22.3 Proof of Insurance:

22.3.1 Within ten (10) **Days** of award, the **Contractor** shall, for each policy required under this **Contract**, except for Workers Compensation Insurance and Disability Benefits Insurance and builders' risk insurance, file a Certificate of Insurance with the **Commissioner** pursuant to Article 22.6. For Workers' Compensation Insurance and Disability Benefits Insurance, the **Contractor** shall file proof of insurance in a form acceptable to the **Commissioner** within ten (10) **Days** of award. Accord forms are not acceptable proof of workers' compensation coverage. The **Contractor** must submit one of the following forms to the Department, or another form acceptable to the Department: C-105.2 -- Certificate of Workers' Compensation Insurance, or U-26.3 -- State Insurance Fund Certificate of Workers' Compensation Insurance. For builders' risk insurance, the **Contractor** shall file a Certificate of Insurance with the **Commissioner** at the direction of the **Commissioner** but in any event no later than ten (10) **Days** prior to commencement of the **Work**.

22.3.1(a) All Certificates of Insurance shall be in a form acceptable to the **City** and shall certify the issuance and effectiveness of the types of insurance specified in Schedule A, each with the specified minimum limits and evidence of the compliance with the Additional Insured or Named Insured provisions of Articles 22.1.1(a), 22.1.5, 22.1.7, and 22.1.8, as applicable. All Certificate(s) of Insurance shall be accompanied by either a duly executed "Certification by Broker" in the form contained in Part II of Schedule A or completed copies of all policies referenced in the Certificate of Insurance. In the absence of completed policies, binders are acceptable.

22.3.2 Certificates of Insurance confirming renewals of insurance shall be submitted to the **Commissioner** prior to the expiration date of coverage of policies required under this **Contract**. Such Certificates of Insurance shall comply with the requirements of Article 22.3.1(a) and, if applicable, Article 22.3.1(b).

22.3.3 The **Contractor** shall be obligated to provide the **City** with a copy of any policy required by this Article 22 upon the demand for such policy by the **Commissioner** or the New York City Law Department.

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 hereunder does not excuse the **Contractor** from securing a policy consistent with all provisions of this Article 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.

22.5 The **City** as Additional Insured or Loss Payee under **Subcontractors'** Insurance. The **Contractor** shall ensure that each **Subcontractor** name the **City** as Additional Insured or loss payee, as appropriate, under all policies covering **Work** performed by such **Subcontractor** under this **Contract**. The **City's** coverage as Additional Insured shall include the **City's** officials and employees and be at least as broad as that provided to the **Contractor**. The foregoing requirements shall not apply to insurance provided pursuant to Articles 22.1.2, 22.1.3, and 22.1.4.

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 If the **Contract** involves disposal of hazardous materials, the **Contractor** shall dispose such materials only at sites where the disposal site operator maintains Pollution Legal Liability Insurance in the amount of at least \$2,000,000 for losses arising from such disposal site.

22.8 Materiality/Non-Waiver: The **Contractor's** failure to secure policy(ies) in complete conformity with this Article, or to give the Insurance Company timely notice of any sort required in this **Contract** on behalf of the **City**, or to do anything else required by this Article 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.

22.9 Other Remedies: Insurance coverage in the minimum amounts provided for herein shall not relieve the **Contractor** or **Subcontractors** of any liability under this **Contract**, nor shall it preclude the **City** from exercising any rights or taking such other actions as are 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, and return the balance, if any, without interest, to the **Contractor**.

23.3 Liens: If at any time before or within thirty (30) **Days** after the **Work** is completed and accepted by the **City**, any persons claiming to have performed any labor or furnished any material toward the performance or completion of this **Contract**, shall file with the **Agency** and with the **Treasurer** any notice as is described in the **New York State Lien Law**, or any act of the Legislature of the State of **New York**, the **City** shall retain, from the monies due or to become due under this **Contract**, so much of such monies as shall be sufficient to pay the amount claimed in said notice, together with the reasonable costs of any action or actions brought or that may be brought to enforce such lien. The monies so retained shall be held by the **City** until the lien thereon created by the said act and the filing of the said notice shall be discharged pursuant to **Law**.

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 guarantee are provided for.

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 or lessees of the premises.

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 **Laws** 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 **Department**.

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 a time and material basis 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 on a time and material basis 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.

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

26.2.2 Necessary direct labor, including payroll taxes 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, 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 PRIMEDIA (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 PRIMEDIA (the "Blue Book"). The reasonable rental value is 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 percent of such rental rates; second shift shall be sixty percent of the first shift rate; and third shift shall be forty

percent of the first shift rate. Equipment on standby shall be reimbursed at one-third the prorated monthly rental rate. **Contractor**-owned equipment includes equipment from rental companies affiliated with or controlled by the **Contractor**, as determined by the **Commissioner**. In establishing cost reimbursement for non-operating contractor-owned 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 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 Reasonable rental costs of non-**Contractor**-owned 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

26.2.7 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 shall be based upon the Manual Rate for such insurance for the applicable work classifications/codes, in accordance with the most recent schedule promulgated by the New York Compensation Insurance Rating Board; plus

26.2.8 Additional costs incurred as a result of the **Extra Work** for performance and payment bonds; plus

26.2.9 Ten (10%) 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

26.2.10 Ten (10%) percent of the total of items in Articles 26.2.1 through 26.2.5, plus item 26.2.9, 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

26.2.11 Five (5%) percent of the total of items in Article 26.2.6, 26.2.7, and 26.2.8 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**. The cost of such **Extra Work** and of such omitted or reduced **Work** shall be computed based upon applicable **Contract** unit prices. Where there are no applicable **Contract** unit prices, the cost of such **Extra Work** and of such omitted or reduced **Contract Work** shall

be computed in accordance with items 26.2.1 through 26.2.8. If the cost of such **Extra Work** exceeds the costs of such omitted or reduced **Contract Work**, the **Contract** price shall be increased by the difference, plus percentages for overhead and profit as provided in Articles 26.2.9 through 26.2.11. If the cost of the omitted or reduced **Contract Work** exceeds the cost of the **Extra Work**, then the **Contract** price shall be reduced by the difference.

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 that arise under, or by virtue of, this **Contract** shall be finally resolved in accordance with the provisions of this article 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 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 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 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 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, 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 disputed 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 **Contractor** thus brought into the dispute resolution proceeding shall have the same rights and obligations under this article 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 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. 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 **Agency 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 section 7-201 and 7-203 of the New York City 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 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 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;

27.6.1.1 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

27.6.2 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, 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 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 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 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 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 Corporation Counsel, the Director of the Office of Construction, 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 Laws 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.

27.8 Any termination, cancellation, or alleged breach of the **Contract** prior to or during the pendency of any proceedings pursuant to this article 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.

ARTICLE 28. RECORD KEEPING FOR EXTRA OR DISPUTED WORK

28.1 While the **Contractor** or any of its **Subcontractors** is performing **Extra Work** on a Time and Material Basis ordered by the **Commissioner** under Article 25, or is performing disputed **Work**, or complying with a determination or order under protest in accordance with Articles 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 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** 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 fully 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.

30.2 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, 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, 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, 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** or **Comptroller** 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** or **Comptroller** 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.

30.5 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 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** 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**, officer, 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 **Resident Engineer**, or any other officer, 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 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 hours in duration.

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.

36.1.5 The aforesaid provisions of this article covering every **Contract** for or on behalf of the State or a municipality for the manufacture, sale or distribution of materials, equipment or supplies shall be limited to operations performed within the territorial limits of the State of New York.

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 section 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 all information and reports including an Employment Report before the award of the **Contract** which are required by E.O. 50, the Rules and Regulations promulgated thereunder, and orders of the 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.

Failure to comply with E.O. 50 and the rules and regulations promulgated thereunder, in one or more instances, may result in the **Agency** declaring the **Contractor** to be non-responsible.

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 VIII of the Administrative Code;

36.5.2 every agreement between the **Contractor** and its **Subcontractors** in excess of \$50,000 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.); and

36.5.3 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 Section 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) calendar **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**. Minimum wages shall be the rates fixed by Federal **Law** and regulations.

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.

37.4 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 wage scale as provided in Labor Law Section 220, as amended, or

37.4.1(b) Less than 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) and Minimum Wages (Article 37.2.6), the party responsible therefore 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 suits brought by the Corporation Counsel in the name of the **City**, in addition to damage for any other breach of this **Contract**, 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 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 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, whether such failures were concurrent or consecutive and whether or not such final determinations concerning separate public work projects are rendered

simultaneously, such **Contractor** or **Subcontractor** shall be ineligible to submit a bid on or be awarded any public work 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 work 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 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 work 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 dollars, such notice shall also include a statement that, that each worker, laborer or mechanic 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 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, which signed statement shall be maintained with the payroll records required by this **Contract**; and

37.6.3.1 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:** Provide laminated identification badges which indicate the worker's, laborer's or mechanic's name, trade, employer's name and employment starting date (month/day/year). Further, 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**; 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 in Article 37.6.1 in that language or languages as may be required. The **Contractor** is responsible for all distributions under 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 If this **Contract** is for an amount greater than \$1,000,000, 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 \$750,000, 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** or **Subcontractor(s)** 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.

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 with the provisions of this article 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 for 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** shall maintain on the **Site** the original payrolls or transcripts thereof which the **Contractor** and its **Subcontractor(s)** are required to maintain pursuant to Labor Law Section 220. The **Contractor** and **Subcontractor(s)** shall submit original payrolls or transcripts, subscribed and affirmed by it as true, with each and every payment requisition. 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 original payrolls or transcripts thereof, subscribed and affirmed by it as true, and the statements signed by each worker pursuant to this Chapter VIII. In addition, the **Contractor** and **Subcontractor(s)** shall furnish to the **Engineer** upon written demand any other information to satisfy the **Engineer** that this Chapter VIII and the Labor Law, as to the hours of employment and rates of wages, are being observed. The **Contractor** shall maintain the payrolls or transcripts thereof for six (6) years from the date of completion of the **Work** on this **Contract**.

38.2 When directed by the **Engineer**, the **Contractor** or **Subcontractor** shall provide the **Engineer** with an attendance sheet for each **Day** on which **Work** is performed on the **Site**. Such attendance sheet shall be in a form acceptable to the **Agency** and shall provide information for employees of the **Contractor** and **Subcontractor(s)**.

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** void.

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 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, 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 a month, 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 such satisfactory payment application, 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 **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 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 section 43.5 herein, then the **Contractor** shall pay interest on amounts due to such **Subcontractor** or **Materialman** at a 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 NY General Business Law. Accrual of interest shall commence on the day immediately following the expiration of the seventh day following receipt of payment to the **Contractor** by 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 suppliers 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 When the **Work** in the opinion of the **Commissioner**, has been substantially but not entirely completed, he/she shall issue a certificate of **Substantial Completion**.

44.2 The **Contractor** shall submit with the **Substantial Completion** requisition:

44.2.1 A Final Verified Statement of any and all alleged claims against the **City** and any pending dispute resolution procedures in accord with the **PPB Rules** and this **Contract**, 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.

44.2.1(a) With respect to each such claim, the **Commissioner**, the **Comptroller** and, in the event of litigation, the Corporation Counsel of the **City** 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 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, will have waived any such claims.

44.2.2 A **Final Approved Punch List**.

44.2.3 Where required, a request for a substantial or final extension of time.

44.3 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 where the **Contractor** shall fail 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.

44.4 No further partial payments shall be made to the **Contractor** after the **Commissioner** issues a Certificate of **Substantial Completion**, except the **Substantial Completion** payment and **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.

44.5 The **Contractor** acknowledges that nothing contained in this article 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. 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 and all alleged claims against the **City**, and any pending dispute resolution procedures in accord with the **PPB Rules** and this **Contract**, 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 Corporation Counsel of the **City** 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, is entitled 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 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 to 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 officers, 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, or those for amounts deducted by the **Commissioner** from the final requisition or by the **Comptroller** 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 officer, 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 from commencing an action for breach of **Contract** under this provision to the extent permitted by **Law** and by the terms of the **Contract** 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 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 the 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.

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 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 a lawsuit 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 provision 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 complete 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 previous provisions of this Chapter X shall be in addition to any and all other legal or equitable remedies permissible in the premises.

54.3 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**.

54.4 The expense of such completion, 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**.

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 lawsuit, 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 lawsuit be instituted or maintained on any such claims unless such lawsuit is commenced within six (6) months after the date the **Commissioner** issues a Certificate of **Substantial Completion** pursuant to Article 44; except that:

56.2.1 Any claims arising out of events occurring after the date the **Commissioner** issues a Certificate of **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 becomes 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 lawsuit 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 indemnify the **City** against any and all claims and judgments for damages for any infringement of copyright and patents or use of patented articles, tools, materials, equipment, appliances or processes in the performance or completion of the **Work**, including all costs and expenses which the **City** shall or may incur or be obligated to pay by reason thereof.

ARTICLE 58. NO CLAIM AGAINST OFFICERS, AGENTS OR EMPLOYEES

58.1 No claim whatsoever shall be made by the **Contractor** against any officer, 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. SERVICES OF NOTICES

59.1 The **Contractor** hereby designates the business 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. Actual delivery of any such notice, direction or communication to the aforesaid place, or depositing it in a postpaid wrapper addressed thereto in any post office box (P.O. Box) regularly maintained by the United States Postal Service, shall be conclusively deemed to be sufficient service thereof upon the **Contractor** as the date of such delivery or deposit.

59.2 Such address 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, local taxes and Sales and Compensation Use Taxes of the State of New York and of cities and counties on all materials and supplies 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** or a **Subcontractor**, or to supplies and materials which even though they are consumed, are not incorporated into the completed **Work** (consumable supplies), and the **Contractor** and its **Subcontractors** shall be responsible for and pay any and all applicable taxes, including Sales and Compensation Use Taxes, on such leased tools, machinery, equipment or other property and upon all such unincorporated supplies and materials.

62.2 The **Contractor** agrees to sell and the **City** agrees to purchase all supplies and materials, other than consumable supplies, 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 supplies and materials shall be in full payment and consideration for the sale of such supplies and materials herein.

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, etc., 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** and labor.

62.3 The purchase by the **Contractor** of the supplies and materials sold hereunder shall be a purchase or procurement for resale and therefore not subject to the New York State or **City** Sales or Compensation Use Taxes or any such taxes of cities or counties. The sale of such supplies and materials by the **Contractor** to the **City** is exempt from the aforesaid sales or compensating use taxes. With respect to such supplies and materials, 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 supplies and materials, free of liens and/or encumbrances, and the **Contractor** shall mark or otherwise identify all such materials as the property of the **City**.

62.4 Title to all materials 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 supplies and materials to the **Site** and prior to its becoming a part of the permanent structure and/or construction. Notwithstanding such transfer of title, the **Contractor** shall have the full and continuing responsibility to install such materials and supplies in accordance with the provisions of this **Contract**, protect them, maintain them in a proper condition and forthwith repair, replace and make good any damage thereto, theft or disappearance thereof, and furnish additional materials 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 such supplies and materials are rejected as being defective or otherwise unsatisfactory, title to all such supplies and materials shall be deemed to have been transferred back to the **Contractor**.

62.5 The purchase by **Subcontractors** of supplies and materials to be sold hereunder shall also be a purchase or procurement for resale to the **Contractor** (either directly or through other **Subcontractors**) and therefore not subject to the aforesaid Sales or Compensation Use Taxes, provided that the subcontract agreements provide for the resale of such supplies and materials prior to and separate and apart from the incorporation of such supplies and materials into the permanent structure and/or construction and that such subcontract agreements are in a form similar to this **Contract** with respect to the separation of the sale of materials from the **Work** and labor, services, consumable supplies and any other matters to be provided, and provided further that the subcontract agreements provide separate prices for materials and all other services and matters. Such separation shall actually be followed in practice, including the separation of payments for supplies and materials from the payments for other **Work** and labor and other things to be provided.

62.6 The **Contractor** and its **Subcontractors** and Materialmen shall obtain any and all necessary **Contractor Exempt Purchase Certificates** or **Resale Certificates** from the appropriate governmental **Agency** or **Agencies**, and furnish a **Contractor Exempt Purchase Certificate** or **Resale Certificate** to all persons, firms or corporations from which they purchase supplies and materials for the performance of the **Work** covered by this **Contract**.

62.7 In the event any of the provisions of this article shall be deemed to be in conflict with any other provisions of this **Contract** or create any ambiguity, then the provisions of this article 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 **Agreement**, 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 herein 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 herein 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 herein 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 herein 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, 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 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 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, less salvage value, 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:

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, whichever is less, 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 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 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.

64.2.2 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 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 Material Contracts or Items: On all **Contracts** or items in a **Contract** where time and material records are specified as the basis for payment of the **Work**, 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 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 Cost shall not include overhead.

64.3 In no event shall any payments under this article exceed the **Contract** price for such items.

64.4 All payments pursuant to this article 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, 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 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** of New York, State of New York, 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 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 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 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 United States 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 State of New York, upon request of the **City**, the **Contractor** shall either consent to a transfer of the action to a State Court of competent jurisdiction located in the **City** and State 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 State Court of competent jurisdiction in the **City**.

65.3 If any provision(s) of this article 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 Export Administration Act of 1979, as amended, or the regulations of the United States Department of Commerce 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, 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.

67.2 Unless specifically waived by the **Commissioner** with the approval of the Division of Economic and Financial Opportunity of the 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 enterprise ("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 prime **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 LBE's 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 **Contract**. Remedy for such breach of **Contract** may include the imposition of any or all of the following sanctions:

67.6.1 Reducing a **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 Where non-compliance is by an LBE, de-certifying and declaring the LBE 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 and rules, 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 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. HEALTH INSURANCE COVERAGE

70.1 If the price for which this **Contract** was awarded exceeds \$100,000, or if the price for which this **Contract** was awarded when combined with other construction or services contracts awarded the **Contractor** by the **City** in the year prior to award of this **Contract** exceeds \$100,000, the **Contractor**, following registration of the **Contract**, shall be required to submit responses to requests for information regarding the nature of any health

insurance provided by the Contractor to its employees and their spouses and domestic partners, upon request of the Agency or other designated City agency.

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 9.

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: ~~Forty Seven Million~~ Dollars, (\$ 47,747,747.74), 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.
Seven hundred forty seven thousand, seven hundred forty seven dollars 74/100.

ARTICLE 76. ELECTRONIC FUNDS TRANSFER

76.1 In accordance with Section 6-107.1 of the New York City Administrative Code, the Contractor agrees to accept payments under this Agreement from the City by electronic funds transfer. An electronic funds transfer 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 Agreement, Contractor shall designate one financial institution or other authorized payment agent and shall complete the "EFT Vendor Payment Enrollment Form" (available at <http://www.nyc.gov/dof>) in order to provide the Commissioner of Finance with information necessary for Contractor to receive electronic funds transfer payments through the 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 agreement. 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 agency head may waive the application of the requirements herein to payments on contracts entered into pursuant to §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 contracting agency may waive the requirements hereunder for payments in the following circumstances: (i) for individuals or classes of individuals for whom compliance imposes a hardship; (ii) for classifications or types of checks; or (iii) in other circumstances as may be necessary in the interest of the City.

ARTICLE 77 – 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 Section 6-129 to the Administrative Code of the City of New York. The local law creates a program for participation by minority-owned and women-owned business enterprises (MBEs and WBEs) in City procurement. As stated in the 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 made pursuant to Local Law 129, and the rules of the Department of Small Business Services ("DSBS") promulgated thereunder.

If this Contract is subject to the Minority-Owned and Women-Owned Business Enterprise ("M/WBE") program created by Local Law 129, the specific requirements of M/WBE participation for this Contract are set forth in Schedule B of the Contract (entitled the "Subcontractor Utilization Plan"), and are detailed below. The Contractor must comply with all applicable M/WBE requirements for this Contract. Schedule B of the Contract ("Subcontractor Utilization Plan") is included in the Bid Booklet.

Article I, Part A, below, sets forth provisions related to the participation goals for construction 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 AND PROFESSIONAL SERVICES CONTRACTS

1. The Target Subcontracting Percentage applicable to this Contract is set forth on Schedule B, Part I to this Contract (see Page 1, line (1)). The "Target Subcontracting Percentage" is the percentage of the total Contract which Agency anticipates that the prime contractor for this Contract would in the normal course of business award to one or more subcontractors for amounts under \$1 million for construction and professional services.

A prospective contractor may seek a full or partial pre-award waiver of the **Target Subcontracting Percentage** in accordance with Local Law 129 and Part A, Section 10 below. To apply for the a full or partial waiver of the **Target Subcontracting Percentage**, a prospective contractor must complete Part III (Page 4) of Schedule B, and must submit such request no later than seven (7) days prior to the date and time the bids or proposals are due, in writing to the Agency by e-mail at poped@ddc.nyc.gov or via facsimile at (718) 391-1885. Bidders/proposers who have submitted requests will receive a response by no later than two (2) calendar days prior to the date bids or proposals are due, provided, however, that if that date would fall on a weekend or holiday, a response will be provided by close-of-business on the business day before such weekend or holiday date.

2. The **Subcontractor Participation Goals** established for this Contract are set forth on Schedule B, Part I to this Contract (see Page 1, line (2) and/or line (3)). The **Subcontractor Participation Goals** represent a percentage of the total dollar value of all construction and/or professional services subcontracts under this Agreement for amounts under \$1 million.

3. If **Subcontractor Participation Goals** have been established for this Contract, Contractor agrees or shall agree as a material term of the Agreement that, with respect to the total amount of the Agreement to be awarded to one or more subcontractors pursuant to subcontracts for amounts under \$1 million, Contractor shall be subject to the **Subcontractor Participation Goals**, unless the goals are modified by Agency in accordance with Local Law 129 and Part A, Section 11 below.

4. If **Subcontractor 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, Part II Subcontractor Utilization Plan (see Page 2-3) indicating: (a) the percentage of work it intends to subcontract; (b) the percentage of work it intends to award to subcontractors for amounts under \$1 million; (c) in cases where the prospective contractor intends to award subcontracts for amounts under \$1 million, a description of the type and dollar value of work designated for participation by MBEs and/or WBEs; and (d) the general time frames in which such work by MBEs and/or WBEs is scheduled to occur. In the event that this Subcontractor Utilization Plan indicates that the bidder or proposer, as applicable, does not intend to award the **Target Subcontracting Percentage**, 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 **Target Subcontracting Percentage** in accordance with Local Law 129 and Part A, Section 10 below.

THE BIDDER/PROPOSER MUST COMPLETE THE SUBCONTRACTOR UTILIZATION PLAN INCLUDED HEREIN (SCHEDULE B, PART II). SUBCONTRACTOR UTILIZATION PLANS WHICH DO NOT INCLUDE THE REQUIRED AFFIRMATIONS WILL BE DEEMED TO BE NON-RESPONSIVE, UNLESS A FULL WAIVER OF THE TARGET SUBCONTRACTING PERCENTAGE IS GRANTED (SCHEDULE B PART III). IN THE EVENT THAT THE CITY DETERMINES THAT VENDOR HAS SUBMITTED A SUBCONTRACTOR UTILIZATION PLAN WHERE THE REQUIRED AFFIRMATIONS ARE COMPLETED BUT OTHER ASPECTS OF THE PLAN ARE NOT COMPLETE, OR CONTAIN A COPY OR COMPUTATION ERROR THAT IS AT ODDS WITH THE AFFIRMATION, THE VENDOR 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 PLAN 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 EMAILED OR FAXED (IF THE VENDOR HAS PROVIDED AN EMAIL ADDRESS OR FAX NUMBER), OR NO LATER THAN FIVE (5) DAYS FROM THE DATE OF MAILING OR UPON DELIVERY, IF DELIVERED.

5. Where a Subcontractor Utilization Plan has been submitted, the Contractor shall, within 30 days of issuance by Agency of a notice to proceed, submit a list of proposed persons or entities to which it intends to award subcontracts within the subsequent 12 months. In the case of multi-year contracts, such list shall also be submitted every year thereafter. **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 Subcontractor Participation Goals established for this Contract by proposing one or more subcontractors that are M/WBEs for any portion of the Wicks trade work if the amount to be awarded to such M/WBE subcontractor is under**

\$1 million. 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. M/WBE firms must be certified by DSBS in order for the Contractor to credit such firms' participation toward the attainment of the M/WBE participation goals. Such certification must occur prior to the firms' commencement of work as subcontractors. A list of M/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.

7. Where a Subcontractor 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 paid to subcontractors (including subcontractors that are not MBEs or WBEs); the names, addresses and contact numbers of each MBE or WBE hired as a subcontractor pursuant to such plan as well as 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 paid to subcontractors (including subcontractors that are not MBEs or WBEs); 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 hired pursuant to such plan, 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 Subcontractor Utilization Plan, Agency shall take appropriate action, in accordance with Local Law 129 and Article II below, unless the Contractor has obtained a modification of its Subcontractor Utilization Plan in accordance with Local Law 129 and Part A, Section 11 below.

9. Where a Subcontractor Utilization Plan has been submitted, and the Contractor requests a change order the value of which exceeds 10 percent of the Agreement, Agency shall establish participation goals for the work to be performed pursuant to the change order.

10. **Pre-award waiver of Target Subcontracting Percentage.** Agency may grant a full or partial waiver of the **Target Subcontracting Percentage** to a bidder or proposer, as applicable, who demonstrates—before submission of the bid or proposal—that it has legitimate business reasons for proposing the level of subcontracting in its Subcontractor Utilization Plan. In making its determination, Agency shall consider factors that shall include, but not be limited to, whether the bidder or proposer, 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 for under one million dollars represented by the **Target Subcontracting Percentage**. In making such determination, Agency may consider whether the Subcontractor Utilization Plan is consistent with past subcontracting practices of the bidder or proposer, as applicable, and whether the bidder or proposer, as applicable, has made good faith efforts to identify portions of the Contract that it intends to subcontract.

11. **Modification of Subcontractor Utilization Plan.** A Contractor may request a modification of its Subcontractor Utilization Plan (**Subcontractor Participation Goals**) 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 Subcontractor Utilization Plan as part of its bid submission.** The Agency may grant a request for Modification of a Contractor's Subcontractor 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 **Subcontractor Participation Goals**. In making such determination, Agency shall consider evidence of the following efforts, as applicable, along with any other relevant factors:

- (a) 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;
- (b) The Contractor provided notice of specific opportunities to participate in the Contract, in a timely manner, to minority and women's business organizations;
- (c) The Contractor sent written notices, by certified mail or facsimile, in a timely manner, to advise MBEs and WBEs that their interest in the Contract was solicited;
- (d) 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 Subcontractor Utilization Plan, and for which the Contractor claims an inability to retain MBEs or WBEs;
- (e) 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;
- (f) The Contractor made efforts to negotiate with MBEs and/or WBEs as relevant to perform specific subcontracts;
- (g) Timely written requests for assistance made by the Contractor to Agency's M/WBE liaison officer and to DSBS;
- (h) 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.

12. If this Contract is for an indefinite quantity of construction or professional services or is a requirements type contract and the Contractor has submitted a Subcontractor Utilization Plan and has committed to subcontract work to MBEs and/or WBEs in order to meet the **Subcontractor Participation Goals**, the Contractor will not be deemed in violation of the M/WBE 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 **Subcontractor Participation Goals** have been established for this Contract, Agency shall evaluate and assess the Contractor's performance in meeting those goals, and such evaluation and assessment shall become part of the Contractor's overall contract performance evaluation.

PART B: MISCELLANEOUS

1. The Contractor shall take notice that, if this solicitation requires the establishment of a Subcontractor 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 Subcontractor Utilization Plan.

2. Pursuant to DSBS rules, construction contracts that include a requirement for a Subcontractor Utilization Plan shall not be subject to the law governing Locally Based Enterprises set forth in Administrative Code Section 6-108.1.

3. DSBS is available to assist contractors and potential contractors in determining the availability of MBEs and WBEs to participate as subcontractors, and in identifying opportunities that are appropriate for participation by MBEs and WBEs in contracts.

4. Prospective contractors are encouraged to enter into joint ventures with MBEs and WBEs.

5. By submitting a bid or proposal the Contractor hereby acknowledges its understanding of the M/WBE requirements set forth herein and the pertinent provisions of Local Law 129 of 2005, and any rules promulgated thereunder, and if awarded this Contract, the Contractor hereby agrees to comply with the M/WBE requirements of

this Contract and pertinent provisions of Local Law 129 of 2005, 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 M/WBE's to meet the required **Subcontractor 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 Subcontractor Utilization Plan, Agency shall send a written notice to the Contractor describing the alleged noncompliance and offering 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 this Section 6-129, including, but not limited any Subcontractor 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) assess liquidated damages or reduction of fees, provided that liquidated damages may be based on amounts representing costs of delays in carrying out the purposes of the program established by Section 6-129, 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) exercise 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) take any other appropriate remedy.
4. If a Subcontractor Utilization Plan has been submitted, and pursuant to this Article II, Section 3, the Contractor has been found to have failed to award subcontracts to MBEs and/or WBEs sufficient to meet the Subcontractor Participation Goals contained in its Subcontractor Utilization Plan or the Subcontractor 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 subcontracts required to be awarded to MBE and/or WBE subcontractors to meet the Subcontractor Participation Goals and the dollar amount the Contractor actually awarded and paid to MBE and/or WBE subcontractors. In view of the difficulty of accurately ascertaining the loss which the City will suffer by reason of Contractor's failure to meet the Subcontractor 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 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), 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 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 Subcontractor Utilization Plan shall be a factor in the evaluation of its performance. Whenever a contracting agency determines that a contractor's compliance with a Subcontractor Utilization Plan has been unsatisfactory, the agency shall, after consultation with the city chief procurement officer, file an advice of caution form for inclusion in VENDEX as caution data.

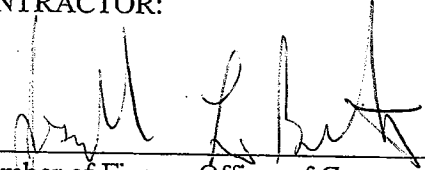
Deputy

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

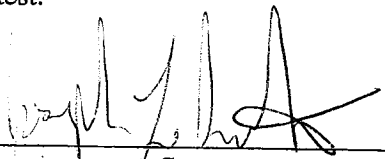
By: 
Deputy Commissioner

CONTRACTOR:

By: 
(Member of Firm or Officer of Corporation)

Title: Director

(Where Contractor is a Corporation, add):
Attest:


Secretary

(Seal)

ACKNOWLEDGEMENT OF PRINCIPAL, IF A CORPORATION

State of NY County of Queens ss:

On this 9 day of January, 2014, before me personally came Joseph Lobatto
to me known who, being by me duly sworn did depose and say that he resides at Queens, NY
that he is the Director

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

VICTORIA AYO-VAUGHAN
Notary Public, State of New York
Registration #01AY5014042
Qualified In Queens County
Commission Expires July 15, 2015

ACKNOWLEDGEMENT OF PRINCIPAL, IF A PARTNERSHIP

State of _____ County of _____ ss:

On this _____ day of _____, _____, before me personally appeared _____
to me known, and known to me to be one of the members of the firm of _____

described in and who executed the foregoing instrument; and he
acknowledged to me that he executed the same as and for the act and deed of said firm.

Notary Public or Commissioner of Deeds

ACKNOWLEDGEMENT OF PRINCIPAL, IF AN INDIVIDUAL

State of _____ County of _____ ss:

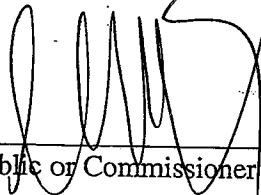
On this _____ day of _____, _____, before me personally appeared _____
to me known, and known to me to be the person described in and who executed the foregoing instrument;
and acknowledged that he executed the same.

Notary Public or Commissioner of Deeds

ACKNOWLEDGEMENT BY COMMISSIONER

State of New York County of Queens ss:

On this 10th day of January, 2014, before me personally came Eric Macfarkne to me known, and known to be the Deputy Commissioner of the Department of Design and Construction of The City of New York, the person described as such in and who as such executed the foregoing instrument and acknowledged to me that he executed the same as Deputy Commissioner for the purposes therein mentioned.



Notary Public or Commissioner of Deeds

VICTORIA AYO-VAUGHAN
Notary Public, State of New York
Registration #01AY5014042
Qualified In Queens County
Commission Expires July 15, 20 15

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 Seven million Seven hundred forty Seven
thousand Seven hundred forty seven dollars 1674.


Dollars (\$ 47,747,747.74)

is chargeable to the fund of the Department of Design and Construction entitled Code

5E818

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 82 to 85): Use if the total contract price is more than \$5 Million.

PERFORMANCE BOND #2 (Page 1)

PERFORMANCE BOND #2

Bond No. PRF09149152

KNOW ALL PERSONS BY THESE PRESENTS:

That we, DiFazio Industries

38 Kinsey Place

Staten Island, NY 10303

hereinafter referred to as the "Principal,"

and, Fidelity and Deposit Company of Maryland

1400 American Lane, Tower 1, 18th Floor

Shaumburg, IL 60196-1056

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 Seven Million Seven Hundred Forty Seven Thousand Seven Hundred Forty

Seven And 74/100

(\$ 47,747,747.74) Dollars, lawful money of the United States for the payment of which said sum of money well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal is about to enter, or has entered, into a Contract in writing with the City for

FMS ID: SE818; E-PIN: 85013B0093001; DDC PIN: 8502011SE0027C

CONSTRUCTION OF SANITARY AND STORM SEWERS IN: SHELDON AVENUE BETWEEN ELLSWORTH AVENUE AND BMP-SB1 A POINT APPROXIMATELY 1,000 FEET EAST OF DELMAR AVENUE, ETC - BOROUGH OF STATEN ISLAND

a copy of which Contract is annexed to and hereby made a part of this bond as though herein set forth in full;

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

Performance Bond #2 (Pages 82 to 85): Use if the total contract price is more than \$5 Million.

PERFORMANCE BOND #2 (Page 2)

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

The Surety (Sureties), for value received, hereby stipulates and agrees, upon written notice from the City that the City has determined that the Principal is in default of the Contract, to either (1) pay the full amount of the above penal sum in complete discharge and exoneration of this bond and of all the liabilities of the Surety relating to this bond, or (2) fully perform and complete the Work to be performed under the Contract, pursuant to the terms, conditions, and covenants thereof. The Surety (Sureties) further agrees, at its option, either to tender the penal sum or to commence and diligently perform the Work specified in the Contract, including physical site work, within twenty-five (25) business days after written notice thereof from the City and to complete all Work within the time set forth in the Contract or such other time as agreed to between the City and Surety in accordance with the Contract. The Surety and the City reserve all rights and defenses each may have against the other; provided, however, that the Surety expressly agrees that its reservation of rights shall not provide a basis for non-performance of its obligation to commence and to complete all Work as provided herein.

The Surety (Sureties), for value received, for itself and its successors and assigns, hereby stipulates and agrees that the obligation of said Surety (Sureties) and its bond shall be in no way impaired or affected by any extension of time, modification, omission, addition, or change in or to the said Contract or the Work to be performed thereunder, or by any payment thereunder before the time required therein, or by any waiver of any provisions thereof, or by any assignment, subletting or other transfer thereof or of any Work to be performed or any moneys due or to become due thereunder; and said Surety (Sureties) does hereby waive notice of any and all of such extensions, modifications, omissions, additions, changes, payments, waivers, assignments, subcontracts and transfers, and hereby expressly stipulates and agrees that any and all things done and omitted to be done by and in relation to assignees, subcontractors, and other transferees shall have the same effect as to said Surety (Sureties) as though done or omitted to be done by or in relation to said Principal.

Performance Bond #2 (Pages 82 to 85): 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

_____ 2nd _____ day of _____ January _____ 20 14 _____

(Seal) _____
DiFazio Industries (L.S.)
Principal

By: _____


(Seal) _____
Surety
Fidelity and Deposit Company of Maryland

By: _____
Sandra Diaz, Attorney-in-Fact

(Seal) _____
Surety

By: _____

(Seal) _____
Surety

By: _____

(Seal) _____
Surety

By: _____

(Seal) _____
Surety

By: _____

Bond Premium Rate Sliding scale

Bond Premium Cost \$337,574.00

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 82 to 85): Use if the total contract price is more than \$5 Million.

PERFORMANCE BOND #2 (Page 4)

ACKNOWLEDGMENT OF PRINCIPAL IF A CORPORATION

State of NEW YORK County of RICHMOND ss:

On this 3 day of JANUARY, 2014 before me personally
came PAUL VIGNA
to me known, who, being by me duly sworn did depose and say that he resides
at MIDDLETON

_____ ; that he/she is the VICE PRESIDENT
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.

CESAR PIEDRAHITA
Notary Public, State of New York
No. 01PI6151715
Qualified in Richmond County
Commission Expires Aug. 21, 2014

ACKNOWLEDGMENT OF PRINCIPAL IF A PARTNERSHIP

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 _____

_____ ; that he/she is _____ partner of
_____, a limited/general partnership existing under the laws of the State of
_____, the partnership described in and which executed the foregoing instrument;
and that he/she signed his/her name to the foregoing instrument as the duly authorized and binding act of
said partnership.

Notary Public or Commissioner of Deeds

ACKNOWLEDGMENT OF PRINCIPAL IF AN INDIVIDUAL

State of _____ County of _____ ss:

On this _____ day of _____, 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.

Payment Bond (Pages 86 to 89): Use for any contract for which a Payment Bond is required.

PAYMENT BOND (Page 1)

PAYMENT BOND

Bond No. PRF09149152

KNOW ALL PERSONS BY THESE PRESENTS, That we, DiFazio Industries

38 Kinsey Place

Staten Island, NY 10303

hereinafter referred to as the "Principal", and Fidelity and Deposit Company of Maryland

1400 American Lane, Tower I, 18th Floor

Shaumburg, IL 60196-1056

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 Seven Million Seven Hundred Forty Seven Thousand Seven Hundred Forty

Seven And 74/100

(\$47,747,747.74) Dollars, lawful money of the United States, for the payment of which said sum of money well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal is about to enter, or has entered, into a Contract in writing with the City for

FMS ID: SE818; E-PIN: 85013B0093001; DDC PIN: 8502011SE0027C

CONSTRUCTION OF SANITARY AND STORM SEWERS IN: SHELDON AVENUE BETWEEN ELLSWORTH AVENUE AND

BMP-SB1 A POINT APPROXIMATELY 1,000 FEET EAST OF DELMAR AVENUE, ETC - BOROUGH OF STATEN ISLAND

a copy of which Contract is annexed to and hereby made a part of this bond as though herein set forth in full;

NOW, THEREFORE, the conditions of this obligation are such that if the Principal, his or its representatives or assigns 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 86 to 89): 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 placed in this bond.

And the Surety (Sureties), for value received, for itself and its successors and assigns, hereby stipulates and agrees that the obligation of said Surety (Sureties), and its 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 86 to 89): 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 2nd day of January, 2014.

(Seal)

DiFazio Industries (L.S.)
Principal

By: 

(Seal)

Fidelity and Deposit Company of Maryland
Surety

By: 

Sandra Diaz, Attorney-in-Fact

(Seal)

Surety

By: _____

(Seal)

Surety

By: _____

(Seal)

Surety

By: _____

If the Contractor (Principal) is a partnership, the bond should be signed by each of the individuals who are partners.

If the Contractor (Principal) is a corporation, the bond should be signed in its correct corporate name by a duly authorized officer, agent, or attorney-in-fact.

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

Payment Bond (Pages 86 to 89): Use for any contract for which a Payment Bond is required.

PAYMENT BOND (Page 4)

ACKNOWLEDGMENT OF PRINCIPAL, IF A CORPORATION

State of New York County of Richmond ss:

On this 8 day of JANUARY 2014, before me personally came MARC DREBIN to me known, who, being by me duly sworn did depose and say that he resides at MIDDLEBURY that he is the VICE-PRESIDENT of the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation, and that he signed his name thereto by like order.

CESAR PIEDRAHITA
Notary Public, State of New York
No. 01PI6151715
Qualified in Richmond County
Commission Expires Aug. 21, 2014

[Signature]
Notary Public or Commissioner of Deeds

ACKNOWLEDGMENT OF PRINCIPAL, IF A PARTNERSHIP

State of _____ County of _____ ss:

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

Notary Public or Commissioner of Deeds

ACKNOWLEDGMENT OF PRINCIPAL, IF AN INDIVIDUAL

State of _____ County of _____ ss:

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

Notary Public or Commissioner of Deeds

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

Affix Acknowledgments and Justification of Sureties.

ACKNOWLEDGEMENT OF SURETY

STATE OF New York,)
COUNTY OF New York,)

ON THE 2ND DAY OF JANUARY, 2014 , BEFORE ME PERSONALLY CAME SANDRA DIAZ TO ME KNOWN, WHO, BEING BY ME DULY SWORN, DID DEPOSE AND SAY THAT (S)HE RESIDES AT NEW YORK, NY THAT (S)HE IS THE ATTORNEY-IN-FACT OF FIDELITY AND DEPOSIT COMPANY OF MARYLAND THE CORPORATION DESCRIBED IN AND WHICH EXECUTED THE ABOVE INSTRUMENT; THAT (S)HE KNOWS THE SEAL OF SAID CORPORATION; THAT ONE OF THE SEALS AFFIXED TO THE FOREGOING INSTRUMENT IS SUCH SEAL; THAT IT WAS SO AFFIXED BY ORDER OF THE BOARD OF DIRECTORS OF SAID CORPORATION; AND THAT (S)HE SIGNED HIS/HER NAME THERETO BY LIKE ORDER.

Aklima B. Noorhassan

Notary Public

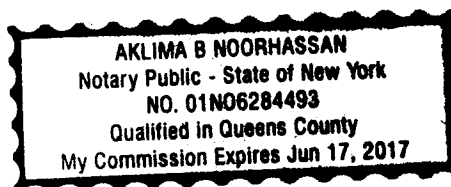


EXHIBIT A
STATE OF NEW YORK
NO. 0110628483
Sealed in Queens County
Commission Expires July 17, 2013

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

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Maryland, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Maryland (herein collectively called the "Companies"), by **GEOFFREY DELISIO, Vice President**, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint **Vivian CARTI, Debra A. DEMING, Cynthia FARRELL, Thomas RHATIGAN, Sandra DIAZ, Jessica IANNOTTA, Sonia ROGERS, Valorie SPATES, Kevin T. WALSH, JR. and Evangelina L. DOMINICK**, all of New York, New York, **EACH** its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: **any and all bonds and undertakings**, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

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

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said **ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND**, this 6th day of August, A.D. 2013.

ATTEST:

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



Eric D. Barnes

By: _____
*Assistant Secretary
Eric D. Barnes*

Geoffrey Delisio

*Vice President
Geoffrey Delisio*

State of Maryland
City of Baltimore

On this 6th day of August, A.D. 2013, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **GEOFFREY DELISIO, Vice President, and ERIC D. BARNES, Assistant Secretary**, of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, depose and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

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

Maria D. Adamski



Maria D. Adamski, Notary Public
My Commission Expires: July 8, 2015

EXTRACT FROM BY-LAWS OF THE COMPANIES

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

CERTIFICATE

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

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

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

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

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

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this 2nd day of January, 2014.



James M. Carroll, Vice President

FIDELITY AND DEPOSIT COMPANY

OF MARYLAND

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

Statement of Financial Condition
As Of December 31, 2012

ASSETS

Bonds	\$ 157,177,826
Stocks	23,000,311
Cash and Short Term Investments.....	119,155
Reinsurance Recoverable.....	17,923,564
Other Accounts Receivable.....	35,473,256
TOTAL ADMITTED ASSETS	\$ 233,694,113

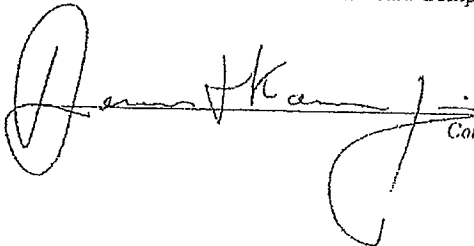
LIABILITIES, SURPLUS AND OTHER FUNDS

Reserve for Taxes and Expenses.....	\$ 74,782
Ceded Reinsurance Premiums Payable.....	48,323,524
Securities Lending Collateral Liability.....	1,716,240
TOTAL LIABILITIES.....	\$ 50,114,546
Capital Stock, Paid Up.....	\$ 5,000,000
Surplus	178,579,567
Surplus as regards Policyholders.....	183,579,567
TOTAL.....	\$ 233,694,113

Securities carried at \$59,468,002 in the above statement are deposited as required by law.

Securities carried on the basis prescribed by the National Association of Insurance Commissioners. On the basis of December 31, 2012 market quotations for all bonds and stocks owned, the Company's total admitted assets would be \$243,518,971 and surplus as regards policyholders \$193,404,425.

I, DENNIS F. KERRIGAN, Corporate Secretary of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing statement is a correct exhibit of the assets and liabilities of the said Company on the 31st day of December, 2012.



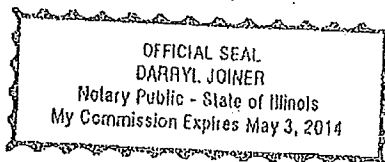
 Corporate Secretary

State of Illinois }
 City of Schaumburg } SS:

Subscribed and sworn to, before me, a Notary Public of the State of Illinois, in the City of Schaumburg, this 15th day of March, 2013.



 Notary Public



CERTIFICATE OF SOLVENCY UNDER SECTION 1111 OF THE NEW YORK
INSURANCE LAW

STATE OF NEW YORK
DEPARTMENT OF FINANCIAL SERVICES

It is hereby certified that

FIDELITY AND DEPOSIT COMPANY OF MARYLAND

Of, Owings Mills, Maryland

a corporation organized under the laws of the State of Maryland and duly authorized to transact the business of insurance in this State, is qualified to become surety or guarantor on all bonds, undertakings, recognizances, guaranties and other obligations required or permitted by law; and that the said corporation is possessed of a capital and surplus including gross paid-in and contributed surplus and unassigned funds (surplus) aggregating the sum of \$197,217,528 (Capital \$5,000,000) as is shown by its sworn financial statement for the First Quarter of March, 31, 2012, on file in this Department, prior to audit.

The said corporation cannot lawfully expose itself to loss on any one risk or hazard to an amount exceeding 10% of its surplus to policyholders, unless it shall be protected in excess of that amount in the manner provided in Section 4118 of the Insurance Law of this State.



In Witness Whereof, I have here-
unto set my hand and affixed the
official seal of this Department
at the City of Albany, this 12th
day of July, 2012

Benjamin M. Lawsky
Superintendent

By *Jacqueline Catalfamo*
Jacqueline Catalfamo
Special Deputy Superintendent

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. 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.

Pursuant to Labor Law §220 (3) 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.

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

Prevailing Rate Schedule Information: The information below is intended to assist you in meeting your prevailing wage rate obligation.

Covered Workers: Any and all individuals who are engaged, employed or otherwise occupied as Workers, Laborers or Mechanics on the public work site.

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 1, 2013 THROUGH JUNE 30, 2013

List of Amended Classifications

1. BOILERMAKER
2. CEMENT MASON
3. DERRICKPERSON AND RIGGER
4. DRIVER: TRUCK (TEAMSTER)
5. ENGINEER - FIELD (BUILDING CONSTRUCTION)
6. ENGINEER - OPERATING
7. HEAT AND FROST INSULATOR
8. HOUSE WRECKER
9. IRON WORKER - ORNAMENTAL
10. IRON WORKER - STRUCTURAL
11. MASON TENDER
12. MASON TENDER (INTERIOR DEMOLITION WORKER)
13. MOSAIC MECHANIC
14. PAPERHANGER
15. PLASTERER
16. PLASTERER - TENDER
17. PLUMBER
18. PLUMBER (MECHANICAL EQUIPMENT AND SERVICE)
19. PLUMBER (RESIDENTIAL RATES FOR 1, 2 AND 3 FAMILY HOME CONSTRUCTION)
20. ROOFER

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

21. SHEET METAL WORKER

22. SIGN ERECTOR

23. STEAMFITTER

24. STEAMFITTER - REFRIGERATION AND AIR CONDITIONER

25. TILE FINISHER

26. TILE LAYER - SETTER

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

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

ASBESTOS HANDLER

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

Asbestos Handler

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$35.10

Supplemental Benefit Rate per Hour: \$14.85

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)

BLASTER

Blaster

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$43.20

Supplemental Benefit Rate per Hour: \$37.29

Blaster (Hydraulic)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$43.95

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

Supplemental Benefit Rate per Hour: \$37.29

Blaster - Trac Drill Hydraulic

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$38.96

Supplemental Benefit Rate per Hour: \$37.29

Blaster - Wagon: Air Trac: Quarry Bar: Drillrunners

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$38.24

Supplemental Benefit Rate per Hour: \$37.29

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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$37.29

Supplemental Benefit Rate per Hour: \$37.29

Blaster - Powder Carriers

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$33.73

Supplemental Benefit Rate per Hour: \$37.29

Blaster - Hydraulic Trac Drill Chuck Tender

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$32.57

Supplemental Benefit Rate per Hour: \$37.29

Blaster - Chuck Tender & Nipper

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$31.88

Supplemental Benefit Rate per Hour: \$37.29

Blaster - Magazine Keepers: (Watch Person)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$19.26

Supplemental Benefit Rate per Hour: \$37.29

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

Overtime Description

For Blaster - Magazine Keepers: (Watch Person) only - time and one half the regular rate for work after an 8 hour day, Saturday, Sunday and holidays listed below.

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: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$47.98

Supplemental Benefit Rate per Hour: \$37.88

Supplemental Note: The above rate applies to repair or maintenance and new construction; For time and one half overtime - \$56.36; For double overtime - \$74.86.

Effective Period: 1/1/2013 - 3/31/2013

Wage Rate per Hour: \$49.47

Supplemental Benefit Rate per Hour: \$39.48

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

Supplemental Note: The above rate applies to repair or maintenance and new construction; For time and one half overtime - \$58.78; For double overtime - \$78.07.

Effective Period: 4/1/2013 - 6/30/2013

Wage Rate per Hour: \$49.47

Supplemental Benefit Rate per Hour: \$39.78

Supplemental Note: The above rate applies to repair or maintenance and new construction; For time and one half overtime - \$59.08; For double overtime - \$78.37.

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)

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

BRICKLAYER

Bricklayer

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$46.44

Supplemental Benefit Rate per Hour: \$27.53

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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$46.15

Supplemental Benefit Rate per Hour: \$38.50

Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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

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

Overtime Holidays

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

New Year's Day
Washington's Birthday
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays

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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$46.74

Supplemental Benefit Rate per Hour: \$42.37

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 10:00 P.M. shall work eight and one half hours allowing for one half hour for lunch, but will be paid for 9 hours including benefits at the straight time rate for 8 hours.

(Carpenters District Council)

CEMENT & CONCRETE WORKER

Cement & Concrete Worker

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$38.98

Supplemental Benefit Rate per Hour: \$25.67

Supplemental Note: \$28.42 on Saturdays; \$31.17 on Sundays & Holidays

Overtime Description

Time and one half the regular rate after 7 hour day (time and one half the regular rate after an 8 hour day when working with Dockbuilders on pile cap forms and for work below street level to the top of the foundation wall, not to exceed 2 feet or 3 feet above the sidewalk-brick shelf, when working on the foundation and structure.)

Overtime

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

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

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

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

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: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$42.50

Supplemental Benefit Rate per Hour: \$39.06

Supplemental Note: Overtime supplemental benefit rate per hour: \$57.56

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$37.63

Supplemental Benefit Rate per Hour: \$39.06

Supplemental Note: Overtime supplemental benefit rate per hour: \$57.56

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

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.

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

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.

(Local #780)

CORE DRILLER

Core Driller

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$35.44**

Supplemental Benefit Rate per Hour: **\$19.75**

Core Driller Helper

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$28.60**

Supplemental Benefit Rate per Hour: **\$19.75**

Core Driller Helper(Third year in the industry)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$25.74**

Supplemental Benefit Rate per Hour: **\$19.75**

Core Driller Helper (Second year in the industry)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$22.88**

Supplemental Benefit Rate per Hour: **\$19.75**

Core Driller Helper (First year in the industry)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$20.02**

Supplemental Benefit Rate per Hour: **\$19.75**

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.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
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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: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$40.50**

Supplemental Benefit Rate per Hour: **\$42.07**

Supplemental Note: The above supplemental rate applies for work performed in Manhattan, Bronx, Brooklyn and Queens. **\$43.49** - For work performed in Staten Island.

Effective Period: 1/1/2013 - 6/30/2013

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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$30.00**

Supplemental Benefit Rate per Hour: **\$31.32**

Overtime Description

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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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$58.95

Supplemental Benefit Rate per Hour: \$42.37

Diver Tender (Marine)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$42.10

Supplemental Benefit Rate per Hour: \$42.37

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).

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§220 PREVAILING WAGE SCHEDULE

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: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$46.74
Supplemental Benefit Rate per Hour: \$42.37

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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
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None

Shift Rates

Off shift work, commencing between 5:00 P.M. and 10:00 P.M., shall work eight and one half hours allowing for one half hour for lunch but will be paid the straight time hourly wage for 9 hours and the straight time supplemental benefits for 8 hours.

(Carpenters District Council)

DRIVER: TRUCK (TEAMSTER)

Driver - Automobile Chauffeur (Dump Truck)

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$35.84**

Supplemental Benefit Rate per Hour: **\$36.93**

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$37.01**

Supplemental Benefit Rate per Hour: **\$38.65**

Driver - Heavy Equipment Trailer Driver

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$37.34**

Supplemental Benefit Rate per Hour: **\$36.93**

Note: For time and one half overtime Wage Rate - \$53.76; for double time overtime Wage Rate - \$71.68

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$38.51**

Supplemental Benefit Rate per Hour: **\$38.65**

Note: For time and one half overtime Wage Rate - \$55.51; for double time overtime Wage Rate - \$74.01

Driver - Euclid & Turnapull Operator

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$36.41**

Supplemental Benefit Rate per Hour: **\$36.93**

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$37.57**

Supplemental Benefit Rate per Hour: **\$38.65**

Driver - Six Wheeler(3 Axle) Tractors & Trailers

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Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$36.84**

Supplemental Benefit Rate per Hour: **\$36.93**

Note: For time and one half overtime Wage Rate - \$54.62; for double time overtime Wage Rate - \$72.82

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$38.01**

Supplemental Benefit Rate per Hour: **\$38.65**

Note: For time and one half overtime Wage Rate - \$56.36; for double time overtime Wage Rate - \$75.14

Driver - Boom Truck

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$37.09**

Supplemental Benefit Rate per Hour: **\$36.93**

Note: For time and one half overtime Wage Rate - \$54.62; for double time overtime Wage Rate - \$72.82

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$38.26**

Supplemental Benefit Rate per Hour: **\$38.65**

Note: For time and one half overtime Wage Rate - \$56.36; for double time overtime Wage Rate - \$75.14

Overtime Description

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

Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

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

President's Day

Columbus Day

Veteran's Day

Day after Thanksgiving

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

New Year's Day

Memorial Day

Independence Day

Labor Day

Presidential Election Day

Thanksgiving Day

Christmas Day

Paid Holidays

New Year's Day

President's Day

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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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$37.47**

Supplemental Benefit Rate per Hour: **\$38.65**

Overtime Description

For Paid Holidays: Employees working two (2) days in the calendar week in which the holiday falls are to paid for these holidays, provided they shape each remaining workday during that calendar week.

Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

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

President's Day

Columbus Day

Veteran's Day

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

New Year's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

Paid Holidays

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

ay after Thanksgiving

Christmas Day

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

(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: 7/1/2012 - 6/30/2013
Wage Rate per Hour: **\$51.00**
Supplemental Benefit Rate per Hour: **\$42.45**

Electrician "A" (Regular Day Overtime)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: **\$76.50**
Supplemental Benefit Rate per Hour: **\$45.13**

Electrician "A" (Day Shift)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: **\$51.00**
Supplemental Benefit Rate per Hour: **\$42.45**

Electrician "A" (Day Shift Overtime After 8 hours)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: **\$76.50**
Supplemental Benefit Rate per Hour: **\$45.13**

Electrician "A" (Swing Shift)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: **\$59.84**
Supplemental Benefit Rate per Hour: **\$48.20**

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

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: **\$89.76**
Supplemental Benefit Rate per Hour: **\$51.36**

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Electrician "A" (Graveyard Shift)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$67.03

Supplemental Benefit Rate per Hour: \$53.07

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

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$100.55

Supplemental Benefit Rate per Hour: \$56.60

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.

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,

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

maintain and repair all kinds of lighting fixtures and local lighting controls and washing and cleaning of foregoing fixtures.

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$25.30

Supplemental Benefit Rate per Hour: \$17.52

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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$37.95

Supplemental Benefit Rate per Hour: \$18.85

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

(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)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
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Alarm Technician

Effective Period: 7/1/2012 - 3/9/2013

Wage Rate per Hour: \$29.90

Supplemental Benefit Rate per Hour: \$13.70

Supplemental Note: \$12.20 only after 8 hours worked in a day

Effective Period: 3/10/2013 - 6/30/2013

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

Plus one Personal Day per year

Sick Days:

One day per Year

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(Local #3)

ELECTRICIAN-STREET LIGHTING WORKER

Electrician - Electro Pole Electrician

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$51.00

Supplemental Benefit Rate per Hour: \$44.18

Electrician - Electro Pole Foundation Installer

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$38.66

Supplemental Benefit Rate per Hour: \$34.12

Electrician - Electro Pole Maintainer

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$33.10

Supplemental Benefit Rate per Hour: \$30.84

Overtime Description

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

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

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

Overtime Holidays

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

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Paid Holidays

None

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(Local #3)

ELEVATOR CONSTRUCTOR

Elevator Constructor

Effective Period: 7/1/2012 - 3/16/2013

Wage Rate per Hour: **\$55.20**

Supplemental Benefit Rate per Hour: **\$32.78**

Effective Period: 3/17/2013 - 6/30/2013

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

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

(Local #1)

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ELEVATOR REPAIR & MAINTENANCE

Elevator Service/Modernization Mechanic

Effective Period: 7/1/2012 - 3/16/2013

Wage Rate per Hour: \$43.79

Supplemental Benefit Rate per Hour: \$31.37

Effective Period: 3/17/2013 - 6/30/2013

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

Engineer - Heavy Construction Operating Engineer I

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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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$58.75

Supplemental Benefit Rate per Hour: \$31.07

Supplemental Note: \$55.74 on overtime

Shift Wage Rate: \$94.00

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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$57.00

Supplemental Benefit Rate per Hour: \$31.07

Supplemental Note: \$55.74 on overtime

Shift Wage Rate: \$91.20

Engineer - Heavy Construction Maintenance Engineer I

Installing, Repairing, Maintaining, Dismantling and Manning of all equipment including Steel Cutting, Bending and Heat Sealing Machines, Mechanical Heaters, Grout Pumps, Bentonite Pumps & Plants, Screening Machines, Fusion Coupling Machines, Tunnel Boring Machines Moles and Machines of a similar nature, Power Packs, Mechanical Hydraulic Jacks; all drill rigs including but not limited to Churn, Rotary Caisson, Raised Bore & Drills of a similar nature; Personnel, Inspection & Safety Boats or any boats used to perform functions of same, Mine Hoists, Whirlies, all Climbing Cranes, all Tower Cranes, including but not limited to Truck Mounted and Crawler Type and machines of similar nature; Maintaining Hydraulic Drills and machines of a similar nature; Well Point System-Installation and dismantling; Burning, Welding, all Pumps regardless of size and/or motor power, except River Cofferdam Pumps and Wells Point Pumps; Motorized Buggies (three or more); equipment used in the cleaning and televising of sewers, but not limited to jet-rodder/vacuum truck, vacall/vactor, closed circuit television inspection equipment; high powered water pumps, jet pumps; screed machines and concrete finishing machines of a similar nature; vermeers.

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$56.74

Supplemental Benefit Rate per Hour: \$31.07

Supplemental Note: \$55.74 on overtime

Shift Wage Rate: \$90.78

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Engineer - Heavy Construction Maintenance Engineer II

On Base Mounted Tower Cranes

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$74.44**

Supplemental Benefit Rate per Hour: **\$31.07**

Supplemental Note: **\$55.74** on overtime

Shift Wage Rate: **\$119.10**

Engineer - Heavy Construction Maintenance Engineer III

On Generators, Light Towers

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$37.56**

Supplemental Benefit Rate per Hour: **\$31.07**

Supplemental Note: **\$55.74** on overtime

Shift Wage Rate: **\$60.10**

Engineer - Heavy Construction Maintenance Engineer IV

On Pumps and Mixers including mud sucking

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$38.53**

Supplemental Benefit Rate per Hour: **\$31.07**

Supplemental Note: **\$55.74** on overtime

Shift Wage Rate: **\$61.65**

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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$54.09**

Supplemental Benefit Rate per Hour: **\$31.07**

Supplemental Note: **\$55.74** on overtime

Shift Wage Rate: **\$86.54**

Engineer - Heavy Construction Oilers I

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

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$51.19**

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Supplemental Benefit Rate per Hour: **\$31.07**
Supplemental Note: \$55.74 on overtime
Shift Wage Rate: **\$81.90**

Engineer - Heavy Construction Oilers II

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

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: **\$35.50**
Supplemental Benefit Rate per Hour: **\$31.07**
Supplemental Note: \$55.74 on overtime
Shift Wage Rate: **\$56.80**

Engineer - Steel Erection Maintenance Engineers

Derrick, Travelers, Tower, Crawler Tower and Climbing Cranes

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: **\$54.33**
Supplemental Benefit Rate per Hour: **\$29.66**
Supplemental Note: \$53.17 on overtime
Shift Wage Rate: **\$86.93**

Engineer - Steel Erection Oiler I

On a Truck Crane

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: **\$50.91**
Supplemental Benefit Rate per Hour: **\$29.66**
Supplemental Note: \$53.17 on overtime
Shift Wage Rate: **\$81.46**

Engineer - Steel Erection Oiler II

On a Crawler Crane

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: **\$39.04**
Supplemental Benefit Rate per Hour: **\$29.66**
Supplemental Note: \$53.17 on overtime
Shift Wage Rate: **\$62.46**

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.

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Overtime

Double time the regular rate after an 8 hour day.
Double time the regular time rate for Saturday.
Double time the regular rate for Sunday.
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

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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$51.62

Supplemental Benefit Rate per Hour: \$29.66

Supplemental Note: \$53.17 on overtime

Engineer - Building Work Maintenance Engineers II

On Pumps, Generators, Mixers and Heaters

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$40.34

Supplemental Benefit Rate per Hour: \$29.66

Supplemental Note: \$53.17 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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
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Cranes: Driving and Operating Fuel and Grease Trucks, Cherrypickers (hydraulic cranes) over 70,000 GVW, and machines of a similar nature.

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$49.12

Supplemental Benefit Rate per Hour: \$29.66

Supplemental Note: \$53.17 on overtime

Engineer - Building Work Oilers II

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

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$36.75

Supplemental Benefit Rate per Hour: \$29.66

Supplemental Note: \$53.17 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)

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

ENGINEER - CITY SURVEYOR AND CONSULTANT

Party Chief

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$34.61

Supplemental Benefit Rate per Hour: \$17.30

Instrument Person

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$28.59

Supplemental Benefit Rate per Hour: \$17.30

Rodperson

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$24.79

Supplemental Benefit Rate per Hour: \$17.30

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.)

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Field Engineer - BC Party Chief

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$53.64**

Supplemental Benefit Rate per Hour: **\$26.95**

Supplemental Note: Overtime Benefit Rate - \$37.48 per hour (time & one half) \$48.00 per hour (double time).

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$55.74**

Supplemental Benefit Rate per Hour: **\$29.73**

Supplemental Note: Overtime Benefit Rate - \$41.40 per hour (time & one half) \$53.06 per hour (double time).

Field Engineer - BC Instrument Person

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$41.94**

Supplemental Benefit Rate per Hour: **\$26.95**

Supplemental Note: Overtime Benefit Rate - \$37.48 per hour (time & one half) \$48.00 per hour (double time).

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$43.30**

Supplemental Benefit Rate per Hour: **\$29.73**

Supplemental Note: Overtime Benefit Rate - \$41.40 per hour (time & one half) \$53.06 per hour (double time).

Field Engineer - BC Rodperson

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$27.52**

Supplemental Benefit Rate per Hour: **\$26.95**

Supplemental Note: Overtime Benefit Rate - \$37.48 per hour (time & one half) \$48.00 per hour (double time).

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$27.97**

Supplemental Benefit Rate per Hour: **\$29.73**

Supplemental Note: Overtime Benefit Rate - \$41.40 per hour (time & one half) \$53.06 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

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

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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$60.28

Supplemental Benefit Rate per Hour: \$29.73

Supplemental Note: Overtime benefit rate - \$41.40 per hour (time & one half), \$53.06 per hour (double time).

Field Engineer - HC Instrument Person

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$44.28

Supplemental Benefit Rate per Hour: \$29.73

Supplemental Note: Overtime benefit rate - \$41.40 per hour (time & one half), \$53.06 per hour (double time).

Field Engineer - HC Rodperson

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$37.11

Supplemental Benefit Rate per Hour: \$29.73

Supplemental Note: Overtime benefit rate - \$41.40 per hour (time & one half), \$53.06 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

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

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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$54.50**

Supplemental Benefit Rate per Hour: **\$26.95**

Supplemental Note: Overtime benefit rate - \$37.48 per hour (time & one half), \$48.00 per hour (double time).

Field Engineer - Steel Erection Instrument Person

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$42.63**

Supplemental Benefit Rate per Hour: **\$26.95**

Supplemental Note: Overtime benefit rate - \$37.48 per hour (time & one half), \$48.00 per hour (double time).

Field Engineer - Steel Erection Rodperson

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$28.84**

Supplemental Benefit Rate per Hour: **\$26.95**

Supplemental Note: Overtime benefit rate - \$37.48 per hour (time & one half), \$48.00 per hour (double time).

Overtime Description

Time and one half the regular rate for Saturday for the first eight hours worked.

Double time the regular rate for Saturday for work performed in excess of eight hours.

Overtime

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

Double time the regular rate for Sunday.

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

Paid Holidays

New Year's Day

Lincoln's Birthday

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

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

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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$64.38

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$103.01

Operating Engineer - Road & Heavy Construction II

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

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$66.70

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: 51.85 overtime hours

Shift Wage Rate: \$106.72

Operating Engineer - Road & Heavy Construction III

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$68.86

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$110.18

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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$67.21

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Supplemental Benefit Rate per Hour: \$28.65
Supplemental Note: \$51.85 overtime hours
Shift Wage Rate: \$107.54

Operating Engineer - Road & Heavy Construction V

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

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$65.86
Supplemental Benefit Rate per Hour: \$28.65
Supplemental Note: \$51.85 overtime hours
Shift Wage Rate: \$105.38

Operating Engineer - Road & Heavy Construction VI

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

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$62.51
Supplemental Benefit Rate per Hour: \$28.65
Supplemental Note: \$51.85 overtime hours
Shift Wage Rate: \$100.02

Operating Engineer - Road & Heavy Construction VII

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

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$50.27
Supplemental Benefit Rate per Hour: \$28.65
Supplemental Note: \$51.85 overtime hours
Shift Wage Rate: \$80.43

Operating Engineer - Road & Heavy Construction VIII

Utility Compressors

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate per Hour: \$36.37
Supplemental Benefit Rate per Hour: \$28.65
Supplemental Note: \$51.85 overtime hours
Shift Wage Rate: \$46.38

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate per Hour: \$38.78
Supplemental Benefit Rate per Hour: \$28.65
Supplemental Note: \$51.85 overtime hours

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Shift Wage Rate: \$49.16

Operating Engineer - Road & Heavy Construction IX

Horizontal Boring Rig

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$56.24

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$89.98

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$59.39

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$95.02

Operating Engineer - Road & Heavy Construction X

Elevators (manually operated as personnel hoist).

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$54.50

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$87.20

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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$42.11

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$67.38

Operating Engineer - Road & Heavy Construction XII

All Drills and Machines of a similar nature.

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$63.18

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$101.09

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Operating Engineer - Road & Heavy Construction XIII

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

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$61.14**

Supplemental Benefit Rate per Hour: **\$28.65**

Supplemental Note: **\$51.85** overtime hours

Shift Wage Rate: **\$97.82**

Operating Engineer - Road & Heavy Construction XIV

Concrete Mixer

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$58.34**

Supplemental Benefit Rate per Hour: **\$28.65**

Supplemental Note: **\$51.85** overtime hours

Shift Wage Rate: **\$93.49**

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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$39.03**

Supplemental Benefit Rate per Hour: **\$28.65**

Supplemental Note: **\$51.85** overtime hours

Shift Wage Rate: **\$62.45**

Operating Engineer - Road & Heavy Construction XVI

Concrete Breaking Machines, Single Drum Hoists, Locomotives (over ten tons) and Dinkies over ten tons, Hydraulic Crane-Second Engineer.

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$55.73**

Supplemental Benefit Rate per Hour: **\$28.65**

Supplemental Note: **\$51.85** overtime hours

Shift Wage Rate: **\$89.17**

Operating Engineer - Road & Heavy Construction XVII

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

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Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$56.19

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$89.90

Operating Engineer - Road & Heavy Construction XVIII

Tower Crane

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$81.09

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$129.74

Operating Engineer - Paving I

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

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$59.25

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$94.80

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$62.51

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$100.02

Operating Engineer - Paving II

Asphalt Roller

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$57.65

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$92.24

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$60.85

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$97.36

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Operating Engineer - Paving III

Asphalt Plants

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$48.46

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$77.54

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$51.32

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$82.11

Operating Engineer - Concrete I

Cranes

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$63.49

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Operating Engineer - Concrete II

Compressors

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$36.91

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Operating Engineer - Concrete III

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

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$50.31

Supplemental Benefit Rate per Hour: \$28.65

Supplemental Note: \$51.85 overtime hours

Operating Engineer - Steel Erection I

Three Drum Derricks

Effective Period: 7/1/2012 - 12/31/2012

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Wage Rate per Hour: **\$67.62**
Supplemental Benefit Rate per Hour: **\$28.65**
Supplemental Note: **\$51.85** overtime hours
Shift Wage Rate: **\$108.19**

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate per Hour: **\$70.50**
Supplemental Benefit Rate per Hour: **\$28.65**
Supplemental Note: **\$51.85** overtime hours
Shift Wage Rate: **\$112.80**

Operating Engineer - Steel Erection II

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

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate per Hour: **\$64.91**
Supplemental Benefit Rate per Hour: **\$28.65**
Supplemental Note: **\$51.85** overtime hours
Shift Wage Rate: **\$103.86**

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate per Hour: **\$67.71**
Supplemental Benefit Rate per Hour: **\$28.65**
Supplemental Note: **\$51.85** overtime hours
Shift Wage Rate: **\$108.34**

Operating Engineer - Steel Erection III

Compressors, Welding Machines.

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate per Hour: **\$37.87**
Supplemental Benefit Rate per Hour: **\$28.65**
Supplemental Note: **\$51.85** overtime hours
Shift Wage Rate: **\$60.59**

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate per Hour: **\$39.86**
Supplemental Benefit Rate per Hour: **\$28.65**
Supplemental Note: **\$51.85** overtime hours
Shift Wage Rate: **\$63.78**

Operating Engineer - Steel Erection IV

Compressors - Not Combined with Welding Machine.

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate per Hour: **\$36.00**

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Supplemental Benefit Rate per Hour: \$28.65
Supplemental Note: \$51.85 overtime hours
Shift Wage Rate: \$57.60

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate per Hour: \$37.93
Supplemental Benefit Rate per Hour: \$28.65
Supplemental Note: \$51.85 overtime hours
Shift Wage Rate: \$60.69

Operating Engineer - Building Work I

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

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate per Hour: \$53.09
Supplemental Benefit Rate per Hour: \$28.65
Supplemental Note: \$51.85 overtime hours

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate per Hour: \$55.46
Supplemental Benefit Rate per Hour: \$28.65
Supplemental Note: \$51.85 overtime hours

Operating Engineer - Building Work II

Compressors, Welding Machines (Cutting Concrete-Tank Work), Paint Spraying, Sandblasting, Pumps (with the exclusion of Concrete Pumps), House Car (settlement basis only), All Engines irrespective of Power (Power-Pac) used to drive Auxiliary Equipment, Air, Hydraulic, etc.

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate per Hour: \$39.35
Supplemental Benefit Rate per Hour: \$28.65
Supplemental Note: \$51.85 overtime hours

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate per Hour: \$41.32
Supplemental Benefit Rate per Hour: \$28.65
Supplemental Note: \$51.85 overtime hours

Operating Engineer - Building Work III

Double Drum

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate per Hour: \$60.66
Supplemental Benefit Rate per Hour: \$28.65
Supplemental Note: \$51.85 overtime hours

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Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$63.25**

Supplemental Benefit Rate per Hour: **\$28.65**

Supplemental Note: **\$51.85** overtime hours

Operating Engineer - Building Work IV

Stone Derrick, Cranes, Hydraulic Cranes Boom Trucks.

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$64.35**

Supplemental Benefit Rate per Hour: **\$28.65**

Supplemental Note: **\$51.85** overtime hours

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$67.05**

Supplemental Benefit Rate per Hour: **\$28.65**

Supplemental Note: **\$51.85** overtime hours

Operating Engineer - Building Work V

Dismantling and Erection of Cranes, Relief Engineer.

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$59.17**

Supplemental Benefit Rate per Hour: **\$28.65**

Supplemental Note: **\$51.85** overtime hours

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$61.72**

Supplemental Benefit Rate per Hour: **\$28.65**

Supplemental Note: **\$51.85** overtime hours

Operating Engineer - Building Work VI

4 Pole Hoist, Single Drum Hoists.

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$58.53**

Supplemental Benefit Rate per Hour: **\$28.65**

Supplemental Note: **\$51.85** overtime hours

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$61.06**

Supplemental Benefit Rate per Hour: **\$28.65**

Supplemental Note: **\$51.85** overtime hours

Overtime Description

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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
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

Shifts may be worked at the single time rate at other than the regular working hours (8:00 A.M. to 4:30 P.M.) on the following work ONLY: Heavy construction jobs on work below the street level, over railroad tracks and on building jobs.

(Operating Engineer Local #14)

FLOOR COVERER

(Interior vinyl composition tile, sheath vinyl linoleum and wood parquet tile including site preparation and synthetic turf not including site preparation)

Floor Coverer

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$46.15**

Supplemental Benefit Rate per Hour: **\$38.50**

Overtime

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

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Overtime Holidays

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

New Year's Day
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: 7/1/2012 - 10/31/2012

Wage Rate per Hour: **\$40.00**

Supplemental Benefit Rate per Hour: **\$32.89**

Supplemental Note: Supplemental Benefit Overtime Rate: **\$40.54**

Effective Period: 11/1/2012 - 6/30/2013

Wage Rate per Hour: **\$40.50**

Supplemental Benefit Rate per Hour: **\$33.24**

Supplemental Note: Supplemental Benefit Overtime Rate: **\$41.24**

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.

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

Double time the regular time rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays

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

New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays

None

Shift Rates

Shifts shall be any 7 hours beyond 4:00 P.M. for which the glazier shall receive 8 hours pay for 7 hours worked.

(Local #1281)

GLAZIER - REPAIR & MAINTENANCE

(For the Installation of Glass - All repair and maintenance work on a particular building, whenever performed, where the total cumulative contract value is under \$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: 7/1/2012 - 4/30/2013

Wage Rate per Hour: \$23.40

Supplemental Benefit Rate per Hour: \$18.04

Effective Period: 5/1/2013 - 6/30/2013

Wage Rate per Hour: \$23.50

Supplemental Benefit Rate per Hour: \$18.54

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

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: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$54.28**

Supplemental Benefit Rate per Hour: **\$31.36**

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$55.98**

Supplemental Benefit Rate per Hour: **\$32.36**

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

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

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.

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$33.00**

Supplemental Benefit Rate per Hour: **\$24.15**

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$33.51**

Supplemental Benefit Rate per Hour: **\$24.64**

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: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$23.05**

Supplemental Benefit Rate per Hour: **\$17.85**

Effective Period: 1/1/2013 - 6/30/2013

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

Wage Rate per Hour: **\$23.25**

Supplemental Benefit Rate per Hour: **\$18.35**

Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$41.50**

Supplemental Benefit Rate per Hour: **\$39.52**

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

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$42.00**

Supplemental Benefit Rate per Hour: **\$42.89**

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

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

Double time the regular rate for Sunday.

Overtime Holidays

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

New Year's Day
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: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$45.05

Supplemental Benefit Rate per Hour: \$57.85

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

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$46.00

Supplemental Benefit Rate per Hour: \$61.23

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.

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

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

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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$38.70

Supplemental Benefit Rate per Hour: \$31.75

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).

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

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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$24.25

Supplemental Benefit Rate per Hour: \$12.30

Landscaper (3 - 6 years experience)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$23.25

Supplemental Benefit Rate per Hour: \$12.30

Landscaper (up to 3 years experience)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$20.75

Supplemental Benefit Rate per Hour: \$12.30

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

Groundperson

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$20.75
Supplemental Benefit Rate per Hour: \$12.30

Tree Remover / Pruner

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$29.25
Supplemental Benefit Rate per Hour: \$12.30

Landscaper Sprayer (Pesticide Applicator)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$19.25
Supplemental Benefit Rate per Hour: \$12.30

Watering - Plant Maintainer

Effective Period: 7/1/2012 - 6/30/2013
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
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)

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

MARBLE MECHANIC

Marble Setter

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$49.19**

Supplemental Benefit Rate per Hour: **\$32.24**

Marble Finisher

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$39.05**

Supplemental Benefit Rate per Hour: **\$31.43**

Marble Polisher

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$34.73**

Supplemental Benefit Rate per Hour: **\$24.60**

Overtime Description

Supplemental Benefit contributions are to be made at the applicable overtime rates. Time and one half the regular rate after a 7 hour day or time and one half the regular rate after an 8 hour day - chosen by Employer at the start of the project and then would last for the full duration of the project.

Overtime

Time and one half the regular rate for Saturday.

Double-time the regular rate for Sunday.

Overtime Holidays

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

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Paid Holidays

None

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§220 PREVAILING WAGE SCHEDULE

(Local #7)

MASON TENDER

Mason Tender

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$34.24**

Supplemental Benefit Rate per Hour: **\$24.40**

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$34.50**

Supplemental Benefit Rate per Hour: **\$25.14**

Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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

Overtime Holidays

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

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

Shift Rates

The Employer may work two (2) shifts with the first shift at the straight time wage rate and the second shift receiving eight (8) hours paid for seven (7) hours work at the straight time wage rate.

(Local #79)

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

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: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$33.87**

Supplemental Benefit Rate per Hour: **\$19.22**

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$34.07**

Supplemental Benefit Rate per Hour: **\$19.77**

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: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$23.07**

Supplemental Benefit Rate per Hour: **\$13.53**

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$23.27**

Supplemental Benefit Rate per Hour: **\$14.08**

Overtime

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

Time and one half the regular rate for Sunday.

Overtime Holidays

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

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

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§220 PREVAILING WAGE SCHEDULE

(Local #79)

METALLIC LATHER

Metallic Lather

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$41.23

Supplemental Benefit Rate per Hour: \$38.35

Supplemental Note: Supplemental benefits for overtime are paid at the appropriate overtime rate.

Overtime Description

Overtime would be time and one half the regular rate after a seven (7) or eight (8) hours workday, which would be set at the start of the job.

Overtime

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

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

New Year's Day

Washington's Birthday

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

Paid Holidays

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

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

Shift Rates

There shall be either two (2) or three (3) shifts, each shift shall be eight (8) hours with nine (9) hours pay, including one half (1/2) hour for lunch. Off-Hour Start shall commence after 3:30 P.M. and shall conclude by 6:00 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)

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

MILLWRIGHT

Millwright

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$46.19

Supplemental Benefit Rate per Hour: \$45.67

Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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

Overtime Holidays

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

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

Paid Holidays

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

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

Shift Rates

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

(Local #740)

MOSAIC MECHANIC

Mosaic Mechanic - Mosaic & Terrazzo Mechanic

Effective Period: 7/1/2012 - 12/31/2012

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

Wage Rate per Hour: \$43.93

Supplemental Benefit Rate per Hour: \$33.08

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$44.05 per hour.

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$44.39

Supplemental Benefit Rate per Hour: \$35.12

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$46.09 per hour.

Mosaic Mechanic - Mosaic & Terrazzo Finisher

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$42.36

Supplemental Benefit Rate per Hour: \$33.08

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$44.05 per hour.

Effective Period: 1/1/2013 - 6/30/2013

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.

Mosaic Mechanic - Machine Operator Grinder

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$42.36

Supplemental Benefit Rate per Hour: \$33.08

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$44.05 per hour.

Effective Period: 1/1/2013 - 6/30/2013

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.

Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

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

New Year's Day

Washington's Birthday

Good Friday

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

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

Paid Holidays

None

(Local #7)

PAINTER

Painter - Brush & Roller

Effective Period: 7/1/2012 - 10/31/2012

Wage Rate per Hour: **\$35.50**

Supplemental Benefit Rate per Hour: **\$25.12**

Supplemental Note: **\$29.75 on overtime**

Effective Period: 11/1/2012 - 4/30/2013

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

Supplemental Benefit Rate per Hour: **\$25.12**

Supplemental Note: **\$29.75 on overtime**

Effective Period: 5/1/2013 - 6/30/2013

Wage Rate per Hour: **\$37.50**

Supplemental Benefit Rate per Hour: **\$25.12**

Supplemental Note: **\$29.75 on overtime**

Spray & Scaffold / Decorative / Sandblast

Effective Period: 7/1/2012 - 10/31/2012

Wage Rate per Hour: **\$38.50**

Supplemental Benefit Rate per Hour: **\$25.12**

Supplemental Note: **\$29.75 on overtime**

Effective Period: 11/1/2012 - 4/30/2013

Wage Rate per Hour: **\$39.00**

Supplemental Benefit Rate per Hour: **\$25.12**

Supplemental Note: **\$29.75 on overtime**

Effective Period: 5/1/2013 - 6/30/2013

Wage Rate per Hour: **\$40.50**

Supplemental Benefit Rate per Hour: **\$25.12**

Supplemental Note: **\$29.75 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.

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

Overtime Holidays

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

- New Year's Day
- President's Day
- Memorial Day
- Independence Day
- Labor Day
- Columbus Day
- Thanksgiving Day
- Christmas Day

Paid Holidays

None

(District Council of Painters #9)

PAINTER - SIGN

City of New York

Designer

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$36.15

Supplemental Benefit Rate per Hour: \$9.66

Journey person

Wage Rate per Hour: \$33.62

Effective Period: 7/1/2012 - 6/30/2013

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

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

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.

(Local #8A-28A)

PAINTER - STRIPER

Striper (paint)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$33.00

Supplemental Benefit Rate per Hour: \$11.52

Supplemental Note: Overtime Supplemental Benefit rate - \$7.42; New Hire Rate (0-3 months) - \$0.00

Lineperson (thermoplastic)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$37.00

Supplemental Benefit Rate per Hour: \$11.52

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.

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

Vacation

Employees with one to two years service shall accrue vacation based on hours worked: 250 hours worked - 1 day vacation; 500 hours worked - 2 days vacation; 750 hours worked - 3 days vacation; 900 hours worked - 4 days vacation; 1,000 hours worked - 5 days vacation. Employees with two to five years service receive two weeks vacation. Employees with five to twenty years service receive three weeks vacation. Employees with twenty to twenty-five years service receive four weeks vacation. Employees with 25 or more years service receive five weeks vacation. Vacation must be taken during winter months. 2 Personal Days except employees hired after 4/1/12 who do not have 2 years of service.

(Local #917)

PAINTER - STRUCTURAL STEEL

Painters on Structural Steel

Effective Period: 7/1/2012 - 9/30/2012

Wage Rate per Hour: \$46.25

Supplemental Benefit Rate per Hour: \$31.58

Effective Period: 10/1/2012 - 6/30/2013

Wage Rate per Hour: \$47.00

Supplemental Benefit Rate per Hour: \$32.08

Painter - Power Tool

Effective Period: 7/1/2012 - 9/30/2012

Wage Rate per Hour: \$52.25

Supplemental Benefit Rate per Hour: \$31.58

Effective Period: 10/1/2012 - 6/30/2013

Wage Rate per Hour: \$53.00

Supplemental Benefit Rate per Hour: \$32.08

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

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

Paid Holidays

None

Shift Rates

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

(Local #806)

PAPERHANGER

Paperhanger

Effective Period: 7/1/2012 - 4/30/2013:

Wage Rate per Hour: **\$37.44**

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: 5/1/2013 - 6/30/2013:

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.

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.

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

(District Council of Painters #9)

PAVER AND ROADBUILDER

Paver & Roadbuilder - Formsetter

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$42.86**

Supplemental Benefit Rate per Hour: **\$32.15**

Paver & Roadbuilder - Laborer

Paving and road construction work, regardless of material used, including but not limited to preparation of job sites, removal of old surfaces, asphalt and/or concrete, by whatever method, including but not limited to milling; laying of concrete; laying of asphalt for temporary, patchwork, and utility paving (but not production paving); site preparation and incidental work before the installation of rubberized materials and similar surfaces; installation and repair of temporary construction fencing; slurry seal coating, maintenance of safety surfaces; play equipment installation, and other related work.

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$38.99**

Supplemental Benefit Rate per Hour: **\$32.15**

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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$45.00**

Supplemental Benefit Rate per Hour: **\$32.15**

Production Paver & Roadbuilder - Raker

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$44.49**

Supplemental Benefit Rate per Hour: **\$32.15**

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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$41.20**

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Supplemental Benefit Rate per Hour: \$32.15

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 15%, except if an employee works on production paving on New Year's Day or Christmas Day, they receive the single time rate plus one day's pay for the holiday worked.

Employees who work on a holiday listed below receive the straight time rate plus one day's pay for the holiday.

Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Paid Holidays

Memorial Day

Independence Day

Labor Day

Columbus Day

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 fifteen percent (15%) over the single time rate, except that production paving work shall be paid at 25% over the single time rate. 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: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$40.78

Supplemental Benefit Rate per Hour: \$26.80

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$40.78

Supplemental Benefit Rate per Hour: \$27.55

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Overtime

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

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 (1/2) hour to eat with this time being included in the seven (7) hours of work.

(Local #530)

PLASTERER - TENDER

Plasterer - Tender

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$34.24**

Supplemental Benefit Rate per Hour: **\$24.40**

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$34.50**

Supplemental Benefit Rate per Hour: **\$25.14**

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Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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

Overtime Holidays

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

New Year's Day

Washington's Birthday

Memorial Day

Independence Day

Labor Day

Presidential Election Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

Shift Rates

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

(Mason Tenders District Council)

PLUMBER

Plumber

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$51.76**

Supplemental Benefit Rate per Hour: **\$37.19**

Supplemental Note: Overtime supplemental benefit rate per hour: **\$74.10**

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$52.36**

Supplemental Benefit Rate per Hour: **\$37.34**

Supplemental Note: Overtime supplemental benefit rate per hour: **\$74.40**

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 million or less, and for public works jobs where the plumbing contract 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

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trades at the site are working an eighth hour at straight time, then the plumber shall also work an eighth hour at straight time.

Overtime

Double time the regular time rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays

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

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

Shift Rates

Shift work, when directly specified in public agency or authority documents where plumbing contract is \$8 million or less, will be permitted. 30% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shifts Monday to Friday. 50% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shift work performed on weekends. For shift work on holidays, double time wages and fringe benefits shall be paid.

(Plumbers Local #1)

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

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate per Hour: \$32.96
Supplemental Benefit Rate per Hour: \$15.93

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate per Hour: \$33.21
Supplemental Benefit Rate per Hour: \$16.43

Overtime

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

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Overtime Holidays

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

New Year's Day
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: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$36.69

Supplemental Benefit Rate per Hour: \$25.46

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$37.11

Supplemental Benefit Rate per Hour: \$25.56

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

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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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$52.31

Supplemental Benefit Rate per Hour: \$31.56

Overtime

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

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Overtime Holidays

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

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Paid Holidays

None

Shift Rates

All work outside the regular workday (8:00 A.M. to 3:30 P.M.) is to be paid at time and one half the regular hourly rate

(Plumbers Local #1)

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POINTER - WATERPROOFER, CAULKER MECHANIC (EXTERIOR BUILDING RENOVATION)

Pointer - Waterproofer, Caulker Mechanic

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$44.63

Supplemental Benefit Rate per Hour: \$23.10

Overtime

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

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

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

Overtime Holidays

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

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

Shift Rates

All work outside the regular work day (an eight hour workday between the hours of 6:00 A.M. and 4:30 P.M.) is to be paid at time and one half the regular rate.

(Bricklayer District Council)

ROOFER

Roofer

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$38.00

Supplemental Benefit Rate per Hour: \$27.07

Effective Period: 1/1/2013 - 6/30/2013

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Wage Rate per Hour: \$39.00

Supplemental Benefit Rate per Hour: \$27.37

Overtime

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

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

Overtime Holidays

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

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Presidential Election Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

Shift Rates

Second shift - Regular hourly rate plus a 10% differential. Third shift - Regular hourly rate plus a 15% differential.

(Local #8)

**SANDBLASTER - STEAMBLASTER
(Exterior Building Renovation)**

Sandblaster / Steamblaster

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$44.63

Supplemental Benefit Rate per Hour: \$23.10

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).

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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: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$45.65**

Supplemental Benefit Rate per Hour: **\$40.50**

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

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$45.65**

Supplemental Benefit Rate per Hour: **\$42.00**

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

Sheet Metal Worker - Duct Cleaner

Effective Period: 7/1/2012 - 6/30/2013

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: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$36.52**

Supplemental Benefit Rate per Hour: **\$40.50**

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§220 PREVAILING WAGE SCHEDULE

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$36.52

Supplemental Benefit Rate per Hour: \$42.00

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 journeyman engaged in fan maintenance shall work in excess of forty (40) hours in any work week.

(Local #28)

SHEET METAL WORKER - SPECIALTY (Decking & Siding)

Sheet Metal Specialty Worker

The first worker to perform this work must be paid at the rate of the Sheet Metal Worker. The second and third workers shall be paid the Specialty Worker Rate. The ratio of One Sheet Metal Worker, then Two Specialty Workers shall be utilized thereafter.

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§220 PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$40.09

Supplemental Benefit Rate per Hour: \$22.06

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: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$41.55

Supplemental Benefit Rate per Hour: \$39.32

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$42.80

Supplemental Benefit Rate per Hour: \$42.17

Overtime

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

Time and one half the regular rate for Saturday.

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Time and one half the regular rate for Sunday.

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: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$50.75

Supplemental Benefit Rate per Hour: \$49.68

Supplemental Note: Overtime supplemental benefit rate: \$98.62

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$51.25

Supplemental Benefit Rate per Hour: \$50.54

Supplemental Note: Overtime supplemental benefit rate: \$100.34

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
Independence Day
Labor Day

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§220 PREVAILING WAGE SCHEDULE

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: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$50.75

Supplemental Benefit Rate per Hour: \$49.68

Supplemental Note: Overtime supplemental benefit rate: \$98.62

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$51.25

Supplemental Benefit Rate per Hour: \$50.54

Supplemental Note: Overtime supplemental benefit rate: \$100.34

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

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None

Shift Rates

May be performed outside of the regular workday except Saturday, Sunday and Holidays. A shift shall consist of eight working hours. All work performed in excess of eight hours shall be paid at double time. No shift shall commence after 7:00 P.M. on Friday or 7:00 P.M. the day before holidays. All work performed after 12:01 A.M. Saturday or 12:01 A.M. the day before a Holiday will be paid at double time. When shift work is performed the wage rate for regular time worked is a thirty percent premium together with fringe benefits.

On Transit Authority projects, where work is performed in the vicinity of tracks all shift work on weekends and holidays may be performed at the regular shift rates.

Local #638

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

Refrigeration and Air Conditioner Mechanic

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$36.30

Supplemental Benefit Rate per Hour: \$11.76

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$37.05

Supplemental Benefit Rate per Hour: \$12.26

Refrigeration and Air Conditioner Service Person V (4th year)

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$29.82

Supplemental Benefit Rate per Hour: \$10.71

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$30.44

Supplemental Benefit Rate per Hour: \$11.13

Refrigeration and Air Conditioner Service Person IV (3rd year)

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$24.71

Supplemental Benefit Rate per Hour: \$9.80

Effective Period: 1/1/2013 - 6/30/2013

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Wage Rate per Hour: \$25.22
Supplemental Benefit Rate per Hour: \$10.16

Refrigeration and Air Conditioner Service Person III (2nd year)

Filter changing and maintenance thereof, oil and greasing, tower and coil cleaning, scraping and painting, general housekeeping, taking of water samples.

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate per Hour: \$21.21
Supplemental Benefit Rate per Hour: \$9.12

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate per Hour: \$21.65
Supplemental Benefit Rate per Hour: \$9.44

Refrigeration and Air Conditioner Service Person II (2nd six months)

Filter changing and maintenance thereof, oil and greasing, tower and coil cleaning, scraping and painting, general housekeeping, taking of water samples.

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate per Hour: \$17.60
Supplemental Benefit Rate per Hour: \$8.50

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate per Hour: \$17.96
Supplemental Benefit Rate per Hour: \$8.78

Refrigeration and Air Conditioner Service Person I (1st six months)

Filter changing and maintenance thereof, oil and greasing, tower and coil cleaning, scraping and painting, general housekeeping, taking of water samples.

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate per Hour: \$10.95
Supplemental Benefit Rate per Hour: \$7.90

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate per Hour: \$11.18
Supplemental Benefit Rate per Hour: \$8.10

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

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

New Year's Day
Independence Day
Labor Day
Veteran's Day
Thanksgiving Day
Christmas Day

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

Martin Luther King Jr. Day
President's Day
Memorial Day
Columbus Day

Paid Holidays

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

(Local #638B)

STONE MASON - SETTER

Stone Mason - Setters

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$47.72

Supplemental Benefit Rate per Hour: \$35.28

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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
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Thanksgiving Day
Christmas Day

Paid Holidays

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

Shift Rates

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

(Bricklayers District Council)

TAPER

Drywall Taper

Effective Period: 7/1/2012 - 12/25/2012

Wage Rate per Hour: \$43.32

Supplemental Benefit Rate per Hour: \$21.66

Effective Period: 12/26/2012 - 6/30/2013

Wage Rate per Hour: \$43.82

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.

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§220 PREVAILING WAGE SCHEDULE

Shift Rates

Time and one half the regular rate outside the regular work hours (8:00 A.M. through 3:30 P.M.)

(Local #1974)

**TELECOMMUNICATION WORKER
(Voice Installation Only)**

Telecommunication Worker

Effective Period: 7/1/2012 - 6/30/2013

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

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

Shift Rates

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

Vacation

After 6 months.....one week.
After 12 months but less than 7 years.....two weeks.
After 7 or more but less than 15 years.....three weeks.
After 15 years or more but less than 25 years.....four weeks.

(C.W.A.)

TILE FINISHER

Tile Finisher

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$38.17**

Supplemental Benefit Rate per Hour: **\$26.76**

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$38.49**

Supplemental Benefit Rate per Hour: **\$27.42**

Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Overtime Holidays

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

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Paid Holidays

None

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

Shift Rates

Off shift work day (work performed outside the regular 8:00 A.M. to 3:30 P.M. workday): shift differential of one and one quarter (1¼) times the regular straight time rate of pay for the seven hours of actual off-shift work.

(Local #7)

TILE LAYER - SETTER

Tile Layer - Setter

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$47.75

Supplemental Benefit Rate per Hour: \$30.83

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$48.55

Supplemental Benefit Rate per Hour: \$31.46

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)

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

TIMBERPERSON

Timberperson

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$42.63

Supplemental Benefit Rate per Hour: \$41.99

Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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

Overtime Holidays

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

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

Paid Holidays

None

Shift Rates

Off shift work, commencing between 5:00 P.M. and 10:00 P.M., shall work eight and one half hours but will be paid for 9 hours, including benefits at the straight time rate for 8 hours.

(Local #1536)

TUNNEL WORKER

Blasters, Mucking Machine Operators (Compressed Air Rates)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$52.00

Supplemental Benefit Rate per Hour: \$46.85

Tunnel Workers (Compressed Air Rates)

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

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$50.19

Supplemental Benefit Rate per Hour: \$45.29

Top Nipper (Compressed Air Rates)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$49.27

Supplemental Benefit Rate per Hour: \$44.51

Outside Lock Tender, Outside Gauge Tender, Muck Lock Tender (Compressed Air Rates)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$48.37

Supplemental Benefit Rate per Hour: \$43.67

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

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$48.37

Supplemental Benefit Rate per Hour: \$43.67

Changehouse Attendant: Powder Watchperson (Compressed Air Rates)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$42.09

Supplemental Benefit Rate per Hour: \$41.41

Blasters (Free Air Rates)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$49.62

Supplemental Benefit Rate per Hour: \$44.75

Tunnel Workers (Free Air Rates)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$47.48

Supplemental Benefit Rate per Hour: \$42.84

All Others (Free Air Rates)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$43.87

Supplemental Benefit Rate per Hour: \$39.62

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

Microtunneling (Free Air Rates)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$37.98

Supplemental Benefit Rate per Hour: \$34.27

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.

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.**

(NO TEXT ON THIS PAGE)

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 1, 2013 THROUGH JUNE 30, 2013

List of Amended Classifications

1. Boilermaker
2. House Wrecker
3. Iron Worker - Ornamental
4. Iron Worker - Structural
5. Mason Tender
6. Plasterer
7. Plumber

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

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ASBESTOS HANDLER
(Ratio of Apprentice Journeyman: 1 to 1, 1 to 3)

Asbestos Handler (First 1000 Hours)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 78% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$14.85

Asbestos Handler (Second 1000 Hours)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 80% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$14.85

Asbestos Handler (Third 1000 Hours)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 83% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$14.85

Asbestos Handler (Fourth 1000 Hours)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 89% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$14.85

(Local #78)

BOILERMAKER
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

Boilermaker (First Year)

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate Per Hour: 65% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$27.41

Effective Period: 1/1/2013 - 3/31/2013
Wage Rate Per Hour: 65% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$28.45

Effective Period: 4/1/2013 - 6/30/2013
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: \$28.75

Boilermaker (Second Year: 1st Six Months)

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate Per Hour: 70% of Journeyman's rate

Supplemental Benefit Rate Per Hour: \$28.91

Effective Period: 1/1/2013 - 3/31/2013

Wage Rate Per Hour: 70% of Journeyman's rate

Supplemental Benefit Rate Per Hour: \$30.03

Effective Period: 4/1/2013 - 6/30/2013

Wage Rate Per Hour: 70% of Journeyman's rate

Supplemental Benefit Rate Per Hour: \$30.33

Boilermaker (Second Year: 2nd Six Months)

Effective Period: 7/1/2012 - 12/31/2012

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

Supplemental Benefit Rate Per Hour: \$30.40

Effective Period: 1/1/2013 - 3/31/2013

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

Supplemental Benefit Rate Per Hour: \$31.61

Effective Period: 4/1/2013 - 6/30/2013

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

Supplemental Benefit Rate Per Hour: \$31.91

Boilermaker (Third Year: 1st Six Months)

Effective Period: 7/1/2012 - 12/31/2012

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

Supplemental Benefit Rate Per Hour: \$31.89

Effective Period: 1/1/2013 - 3/31/2013

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

Supplemental Benefit Rate Per Hour: \$33.19

Effective Period: 4/1/2013 - 6/30/2013

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

Supplemental Benefit Rate Per Hour: \$33.49

Boilermaker (Third Year: 2nd Six Months)

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate Per Hour: 85% of Journeyman's rate

Supplemental Benefit Rate Per Hour: \$33.38

Effective Period: 1/1/2013 - 3/31/2013

Wage Rate Per Hour: 85% of Journeyman's rate

Supplemental Benefit Rate Per Hour: \$34.76

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

Effective Period: 4/1/2013 - 6/30/2013
Wage Rate Per Hour: 85% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$35.06

Boilermaker (Fourth Year: 1st Six Months)

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate Per Hour: 90% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$34.88

Effective Period: 1/1/2013 - 3/31/2013
Wage Rate Per Hour: 90% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$36.34

Effective Period: 4/1/2013 - 6/30/2013
Wage Rate Per Hour: 90% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$36.64

Boilermaker (Fourth Year: 2nd Six Months)

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate Per Hour: 95% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$36.38

Effective Period: 1/1/2013 - 3/31/2013
Wage Rate Per Hour: 95% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$37.90

Effective Period: 4/1/2013 - 6/30/2013
Wage Rate Per Hour: 95% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$38.20

(Local #5)

BRICKLAYER

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

Bricklayer (First 750 Hours)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 50% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$16.60

Bricklayer (Second 750 Hours)

Effective Period: 7/1/2012 - 6/30/2013

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

Wage Rate Per Hour: 60% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$16.60

Bricklayer (Third 750 Hours)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$16.60

Bricklayer (Fourth 750 Hours)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 80% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$16.60

Bricklayer (Fifth 750 Hours)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 90% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$16.60

Bricklayer (Sixth 750 Hours)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 95% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$16.60

(Bricklayer District Council)

CARPENTER

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

Carpenter (First Year)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 40% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$27.69

Carpenter (Second Year)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: \$27.69

Carpenter (Third Year)

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

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 65% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$27.69

Carpenter (Fourth Year)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 80% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$27.69

(Carpenters District Council)

CEMENT MASON
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

Cement Mason (First Year)

Effective Period: 7/1/2012 - 6/30/2013
Wage and Supplemental Rate Per Hour: 50% of Journeyman's Rate

Cement Mason (Second Year)

Effective Period: 7/1/2012 - 6/30/2013
Wage and Supplemental Rate Per Hour: 60% of Journeyman's Rate

Cement Mason (Third Year)

Effective Period: 7/1/2012 - 6/30/2013
Wage and Supplemental Rate Per Hour: 70% of Journeyman's Rate

Effective Period: 7/1/2012 - 6/30/2013
(Local #780) Wage Rate Per Hour: 80% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$27.69

CEMENT AND CONCRETE WORKER
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

Cement & Concrete Worker (0 - 500 hours)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 50% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$17.54

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

Cement & Concrete Worker (501 - 1000 hours)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 65% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$18.37

Cement & Concrete Worker (1001 - 2000 hours)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 65% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$23.75

Cement & Concrete Worker (2001 - 4000 hours)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 80% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$24.57

(Cement Concrete Workers District Council)

DERRICKPERSON & RIGGER (STONE)

Ratio of Apprentice to Journeyman: 1 to 1, 1 to 6)

Derrickperson & Rigger (stone) - First Year

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 50% of Journeyman's rate
Supplemental Benefit Rate Per Hour: 50% of Journeyman's rate

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

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 70% of Journeyman's rate
Supplemental Benefit Rate Per Hour: 75% of Journeyman's rate

Derrickperson & Rigger (stone) - Second Year: 2nd Six Months

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 80% of Journeyman's rate
Supplemental Benefit Rate Per Hour: 75% of Journeyman's rate

Derrickperson & Rigger (stone) - Third Year

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 90% of Journeyman's rate
Supplemental Benefit Rate Per Hour: 75% of Journeyman's rate

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

(Local #197)

DOCKBUILDER/PILE DRIVER
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 6)

Dockbuilder/Pile Driver (First Year)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 40% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$27.69

Dockbuilder/Pile Driver (Second Year)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 50% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$27.69

Dockbuilder/Pile Driver (Third Year)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 65% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$27.69

Dockbuilder/Pile Driver (Fourth Year)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 80% of Journeyman's rate
Supplemental Benefit Rate Per Hour: \$27.69

(Carpenters District Council)

ELECTRICIAN
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

Electrician (First Year - Hired before 5/10/07)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$14.25
Supplemental Benefit Rate per Hour: \$11.19
Overtime Wage Rate Per Hour: \$21.38

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

Overtime Supplemental Rate Per Hour: \$11.96

Electrician (First Year - Hired on or After 5/10/07)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$11.50

Supplemental Benefit Rate per Hour: \$9.86

Overtime Wage Rate Per Hour: \$17.25

Overtime Supplemental Rate Per Hour: \$10.48

Electrician (Second Year - Hired before 5/10/07)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$17.05

Supplemental Benefit Rate per Hour: \$12.54

Overtime Wage Rate Per Hour: \$25.58

Overtime Supplemental Rate Per Hour: \$13.47

Electrician (Second Year - Hired on or After 5/10/07)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$13.50

Supplemental Benefit Rate per Hour: \$10.83

Overtime Wage Rate Per Hour: \$20.25

Overtime Supplemental Rate Per Hour: \$11.56

Electrician (Third Year - Hired before 5/10/07)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$19.15

Supplemental Benefit Rate per Hour: \$13.56

Overtime Wage Rate Per Hour: \$28.73

Overtime Supplemental Rate Per Hour: \$14.60

Electrician (Third Year - Hired on or After 5/10/07)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$15.50

Supplemental Benefit Rate per Hour: \$11.79

Overtime Wage Rate Per Hour: \$23.25

Overtime Supplemental Rate Per Hour: \$12.63

Electrician (Fourth Year - Hired before 5/10/07)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$21.10

Supplemental Benefit Rate per Hour: \$14.50

Overtime Wage Rate Per Hour: \$31.65

Overtime Supplemental Rate Per Hour: \$15.65

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

Electrician (Fourth Year - Hired on or After 5/10/07)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$17.50
Supplemental Benefit Rate per Hour: \$12.76
Overtime Wage Rate Per Hour: \$26.25
Overtime Supplemental Rate Per Hour: \$13.71

Electrician (Fifth Year - Hired before 5/10/07)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$25.30
Supplemental Benefit Rate per Hour: \$17.52
Overtime Wage Rate Per Hour: \$37.95
Overtime Supplemental Rate Per Hour: \$18.85

Electrician (Fifth Year - Hired on or After 5/10/07)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$21.50
Supplemental Benefit Rate per Hour: \$15.71
Overtime Wage Rate Per Hour: \$32.25
Overtime Supplemental Rate Per Hour: \$16.84

Overtime Description

For "A" rated Apprentices (work in excess of 7 hours per day)
For "M" rated Apprentices (work in excess of 8 hours per day)

International Brotherhood of Electrical Workers

(Local #3)

ELEVATOR CONSTRUCTOR

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

Elevator (Constructor) - First Year

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 50% of Journeyman's rate
Supplemental Rate Per Hour: \$25.40
Effective 3/17/2013 - Supplemental Rate Per Hour: \$26.87

Elevator (Constructor) - Second Year

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 55% of Journeyman's rate
Supplemental Rate Per Hour: \$26.43
Effective 3/17/2013 - Supplemental Rate Per Hour: \$27.92

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

Elevator (Constructor) - Third Year

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 65% of Journeyman's rate
Supplemental Rate Per Hour: \$27.84
Effective 3/17/2013 - Supplemental Rate Per Hour: \$29.38

Elevator (Constructor) - Fourth Year

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 75% of Journeyman's rate
Supplemental Rate Per Hour: \$29.25
Effective 3/17/2013 - Supplemental Benefit 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: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 50% of Journeyman's rate
Supplemental Benefit Per Hour: \$25.33
Effective 3/17/2013 - Supplemental Benefit Per Hour: \$26.79

Elevator Service/Modernization Mechanic (Second Year)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 55% of Journeyman's rate
Supplemental Benefit Per Hour: \$25.65
Effective 3/17/2013 - Supplemental Benefit Per Hour: \$27.12

Elevator Service/Modernization Mechanic (Third Year)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 65% of Journeyman's rate
Supplemental Benefit Per Hour: \$26.92
Effective 3/17/2013 - Supplemental Benefit Per Hour: \$28.43

Elevator Service/Modernization Mechanic (Fourth Year)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 75% of Journeyman's rate
Supplemental Benefit Per Hour: \$28.19

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

Effective 3/17/2013 - Supplemental Benefit Per Hour: \$29.74

(Local #1)

ENGINEER

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

Engineer - First Year

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$21.64

Supplemental Benefit Rate per Hour: \$20.07

Engineer - Second Year

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$27.05

Supplemental Benefit Rate per Hour: \$20.07

Engineer - Third Year

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$29.75

Supplemental Benefit Rate per Hour: \$20.07

Engineer - Fourth Year

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$32.45

Supplemental Benefit Rate per Hour: \$20.07 (Effective 5/1/2013)

(Local #15)

ENGINEER - OPERATING

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

Operating Engineer - First Year

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate Per Hour 40% of Journeyman's Rate

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

Supplemental Benefit Per Hour: \$18.65

Operating Engineer - Second Year

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 50% of Journeyman's Rate
Supplemental Benefit Per Hour: \$18.65

Operating Engineer - Third Year

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 60% of Journeyman's Rate
Supplemental Benefit Per Hour: \$18.65

(Local #14)

FLOOR COVERER

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

Floor Coverer (First Year)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 40% of Journeyman's rate
Supplemental Rate Per Hour: \$25.75

Floor Coverer (Second Year)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 50% of Journeyman's rate
Supplemental Rate Per Hour: \$25.75

Floor Coverer (Third Year)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 65% of Journeyman's rate
Supplemental Rate Per Hour: \$25.75

Floor Coverer (Fourth Year)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 80% of Journeyman's rate
Supplemental Rate Per Hour: \$25.75

(Carpenters District Council)

GLAZIER

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

Glazier (First Year)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 40% of Journeyman's rate
Supplemental Rate Per Hour: \$11.97

Glazier (Second Year)

Effective Period: 7/1/2012 - 10/31/2012
Wage Rate Per Hour: 50% of Journeyman's rate
Supplemental Rate Per Hour: \$21.01

Effective Period: 11/1/2012 - 6/30/2013
Wage Rate Per Hour: 50% of Journeyman's rate
Supplemental Rate Per Hour: \$21.13

Glazier (Third Year)

Effective Period: 7/1/2012 - 10/31/2012
Wage Rate Per Hour: 60% of Journeyman's rate
Supplemental Rate Per Hour: \$23.38

Effective Period: 11/1/2012 - 6/30/2013
Wage Rate Per Hour: 50% of Journeyman's rate
Supplemental Rate Per Hour: \$23.54

Glazier (Fourth Year)

Effective Period: 7/1/2012 - 10/31/2012
Wage Rate Per Hour: 80% of Journeyman's rate
Supplemental Rate Per Hour: \$28.14

Effective Period: 11/1/2012 - 6/30/2013
Wage Rate Per Hour: 50% 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: 7/1/2012 - 6/30/2013

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

Heat & Frost Insulator (Second Year)

Effective Period: 7/1/2012 - 6/30/2013

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

Heat & Frost Insulator (Third Year)

Effective Period: 7/1/2012 - 6/30/2013

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

Heat & Frost Insulator (Fourth Year)

Effective Period: 7/1/2012 - 6/30/2013

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: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$20.06

Supplemental Benefit Rate per Hour: \$15.45

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$20.21

Supplemental Benefit Rate per Hour: \$15.80

House Wrecker - Second Year

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$21.06

Supplemental Benefit Rate per Hour: \$15.45

Effective Period: 1/1/2013 - 6/30/2013

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

Wage Rate per Hour: \$21.26
Supplemental Benefit Rate per Hour: \$15.80

House Wrecker - Third Year

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate per Hour: \$22.56
Supplemental Benefit Rate per Hour: \$15.45

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate per Hour: \$22.81
Supplemental Benefit Rate per Hour: \$15.80

House Wrecker - Fourth Year

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate per Hour: \$25.06
Supplemental Benefit Rate per Hour: \$15.45

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate per Hour: \$25.36
Supplemental Benefit Rate per Hour: \$15.80

Iron Worker (Local #79)

IRON WORKER - ORNAMENTAL
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Iron Worker (Ornamental) - 1st Four Months - Hired on or Before 8/1/08

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 60% of Journeyperson's rate
Supplemental Rate Per Hour: \$32.06

Iron Worker (Ornamental) 5 - 10 Months - Hired on or Before 8/1/08

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 65% of Journeyperson's rate
Supplemental Rate Per Hour: \$32.89

Iron Worker (Ornamental) 11 - 16 Months - Hired on or Before 8/1/08

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Rate Per Hour: \$33.73

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

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate Per Hour: 70% of Journeyman's rate
Supplemental Rate Per Hour: \$34.34

Iron Worker (Ornamental) 17 - 22 Months - Hired on or Before 8/1/08

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 80% of Journeyman's rate
Supplemental Rate Per Hour: \$35.39

Iron Worker (Ornamental) 23 - 28 Months - Hired on or Before 8/1/08

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 85% of Journeyman's rate
Supplemental Rate Per Hour: \$36.22

Iron Worker (Ornamental) 29 - 36 Months - Hired on or Before 8/1/08

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 95% of Journeyman's rate
Supplemental Rate Per Hour: \$37.89

Iron Worker (Ornamental) - 1st Ten Months - Hired After 8/1/08

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate Per Hour: 50% of Journeyman's rate
Supplemental Rate Per Hour: \$30.40

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate Per Hour: 50% of Journeyman's rate
Supplemental Rate Per Hour: \$33.39

Iron Worker (Ornamental) - 11 - 16 Months - Hired After 8/1/08

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate Per Hour: 55% of Journeyman's rate
Supplemental Rate Per Hour: \$31.23

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate Per Hour: 55% of Journeyman's rate
Supplemental Rate Per Hour: \$34.34

Iron Worker (Ornamental) - 17 - 22 Months - Hired After 8/1/08

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate Per Hour: 60% of Journeyman's rate
Supplemental Rate Per Hour: \$32.06

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate Per Hour: 60% of Journeyman's rate
Supplemental Rate Per Hour: \$35.29

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

Iron Worker (Ornamental) - 23 - 28 Months - Hired After 8/1/08

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate Per Hour: 70% of Journeyman's rate
Supplemental Rate Per Hour: \$33.73

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate Per Hour: 70% of Journeyman's rate
Supplemental Rate Per Hour: \$37.19

Iron Worker (Ornamental) - 29 - 36 Months - Hired After 8/1/08

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate Per Hour: 80% of Journeyman's rate
Supplemental Rate Per Hour: \$35.39

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate Per Hour: 80% of Journeyman's rate
Supplemental Rate Per Hour: \$39.09

(Local #580)

**IRON WORKER - STRUCTURAL
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 6)**

Iron Worker (Structural) - 1st Six Months

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate per Hour: \$23.62
Supplemental Benefit Rate per Hour: \$41.21

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate per Hour: \$24.10
Supplemental Benefit Rate per Hour: \$43.12

Iron Worker (Structural) - 7- 18 Months

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate per Hour: \$24.22
Supplemental Benefit Rate per Hour: \$41.21

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate per Hour: \$24.70
Supplemental Benefit Rate per Hour: \$43.12

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

Iron Worker (Structural) - 19 - 36 months

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$24.82

Supplemental Benefit Rate per Hour: \$41.21

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$25.30

Supplemental Benefit Rate per Hour: \$43.12

(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: 7/1/2012 - 6/30/2013

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

Supplemental Rate Per Hour: \$31.75

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

Effective Period: 7/1/2012 - 6/30/2013

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

Supplemental Rate Per Hour: \$31.75

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

Effective Period: 7/1/2012 - 6/30/2013

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

Supplemental Rate Per Hour: \$31.75

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

Effective Period: 7/1/2012 - 6/30/2013

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

Supplemental Rate Per Hour: \$31.75

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

(Local #731)

MARBLE MECHANICS
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

Cutters & Setters - First 750 Hours

Effective Period: 7/1/2012 - 6/30/2013

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: 7/1/2012 - 6/30/2013

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

Cutters & Setters - Third 750 Hours

Effective Period: 7/1/2012 - 6/30/2013

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

Cutters & Setters - Fourth 750 Hours

Effective Period: 7/1/2012 - 6/30/2013

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

Cutters & Setters - Fifth 750 Hours

Effective Period: 7/1/2012 - 6/30/2013

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

Cutters & Setters - Sixth 750 Hours

Effective Period: 7/1/2012 - 6/30/2013

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

Polishers & Finishers - First 750 Hours

Effective Period: 7/1/2012 - 6/30/2013

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

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

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

Polishers & Finishers - Second 750 Hours

Effective Period: 7/1/2012 - 6/30/2013

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

Polishers & Finishers - Third 750 Hours

Effective Period: 7/1/2012 - 6/30/2013

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

Polishers & Finishers - Fourth 750 Hours

Effective Period: 7/1/2012 - 6/30/2013

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

(Local #7)

MASON TENDER

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

Mason Tender - First Year

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$20.33

Supplemental Benefit Rate per Hour: \$16.16

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$20.48

Supplemental Benefit Rate per Hour: \$16.51

Mason Tender - Second Year

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$21.33

Supplemental Benefit Rate per Hour: \$16.16

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$21.53

Supplemental Benefit Rate per Hour: \$16.51

Mason Tender - Third Year

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$22.83

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

Supplemental Benefit Rate per Hour: \$16.16

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$23.08

Supplemental Benefit Rate per Hour: \$16.51

Mason Tender - Fourth Year

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$25.33

Supplemental Benefit Rate per Hour: \$16.16

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$25.63

Supplemental Benefit Rate per Hour: \$16.51

(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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$27.91

Supplemental Benefit Rate per Hour: \$22.79

Metallic Lather (Second Year - Called Prior to 6/29/11)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$32.51

Supplemental Benefit Rate per Hour: \$24.44

Metallic Lather (Third Year - Called Prior to 6/29/11)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$37.57

Supplemental Benefit Rate per Hour: \$25.59

Metallic Lather (First Year -Called On Or After 6/29/11)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$17.71

Supplemental Benefit Rate per Hour: \$19.85

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

Metallic Lather (Second Year - Called On Or After 6/29/11)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$22.71
Supplemental Benefit Rate per Hour: \$19.85

Metallic Lather (Third Year - Called On Or After 6/29/11)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$27.71
Supplemental Benefit Rate per Hour: \$19.85

(Local #46)

MILLWRIGHT

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

Millwright (First Year)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$25.40
Supplemental Benefit Rate per Hour: \$28.67

Millwright (Second Year)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$30.02
Supplemental Benefit Rate per Hour: \$31.87

Millwright (Third Year)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$34.64
Supplemental Benefit Rate per Hour: \$36.19

Millwright (Fourth Year)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$43.88
Supplemental Benefit Rate per Hour: \$41.50

(Local #740)

PAVER AND ROADBUILDER

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

Paver and Roadbuilder - First Year (Minimum 1000 hours)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$25.72

Supplemental Benefit Rate per Hour: \$15.75

Paver and Roadbuilder - Second Year (Minimum 1000 hours)

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$27.29

Supplemental Benefit Rate per Hour: \$15.75

(Local #1010)

PAINTER

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

Painter - Brush & Roller - First Year

Effective Period: 7/1/2012 - 10/31/2012

Wage Rate per Hour: \$14.20

Supplemental Benefit Rate per Hour: \$10.88

Effective Period: 11/1/2012 - 6/30/2013

Wage Rate per Hour: \$14.40

Supplemental Benefit Rate per Hour: \$10.88

Painter - Brush & Roller - Second Year

Effective Period: 7/1/2012 - 10/31/2012

Wage Rate per Hour: \$17.75

Supplemental Benefit Rate per Hour: \$14.73

Effective Period: 11/1/2012 - 6/30/2013

Wage Rate per Hour: \$18.00

Supplemental Benefit Rate per Hour: \$14.73

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

Painter - Brush & Roller - Third Year

Effective Period: 7/1/2012 - 10/31/2012

Wage Rate per Hour: \$21.30

Supplemental Benefit Rate per Hour: \$17.64

Effective Period: 11/1/2012 - 6/30/2013

Wage Rate per Hour: \$21.60

Supplemental Benefit Rate per Hour: \$17.64

Painter - Brush & Roller - Fourth Year

Effective Period: 7/1/2012 - 10/31/2012

Wage Rate per Hour: \$28.40

Supplemental Benefit Rate per Hour: \$23.02

Effective Period: 11/1/2012 - 6/30/2013

Wage Rate per Hour: \$28.80

Supplemental Benefit Rate per Hour: \$23.02

(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: 7/1/2012 - 6/30/2013

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

Painters - Structural Steel (Second Year)

Effective Period: 7/1/2012 - 6/30/2013

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

Painters - Structural Steel (Third Year)

Effective Period: 7/1/2012 - 6/30/2013

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: 7/1/2012 - 12/31/2012
Wage Rate Per Hour: 40% of Journeyman's rate
Supplemental Rate Per Hour: \$14.61

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate Per Hour: 40% of Journeyman's rate
Supplemental Rate Per Hour: \$15.36

Plasterer - First Year: 2nd Six Months

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate Per Hour: 45% of Journeyman's rate
Supplemental Rate Per Hour: \$15.09

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate Per Hour: 45% of Journeyman's rate
Supplemental Rate Per Hour: \$15.84

Plasterer - Second Year: 1st Six Months

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate Per Hour: 55% of Journeyman's rate
Supplemental Rate Per Hour: \$17.06

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate Per Hour: 55% of Journeyman's rate
Supplemental Rate Per Hour: \$17.81

Plasterer - Second Year: 2nd Six Months

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate Per Hour: 60% of Journeyman's rate
Supplemental Rate Per Hour: \$18.14

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate Per Hour: 60% of Journeyman's rate
Supplemental Rate Per Hour: \$18.89

Plasterer - Third Year: 1st Six Months

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate Per Hour: 70% of Journeyman's rate
Supplemental Rate Per Hour: \$20.31

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

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate Per Hour: 70% of Journeyman's rate
Supplemental Rate Per Hour: \$21.06

Plasterer - Third Year: 2nd Six Months

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate Per Hour: 75% of Journeyman's rate
Supplemental Rate Per Hour: \$21.39

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate Per Hour: 75% of Journeyman's rate
Supplemental Rate Per Hour: \$22.14

(Local #530)

PLUMBER

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

Plumber - First Year: 1st Six Months

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$14.00
Supplemental Benefit Rate per Hour: \$0.71

Plumber - First Year: 2nd Six Months

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$14.00
Supplemental Benefit Rate per Hour: \$2.96

Plumber - Second Year

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate per Hour: \$17.96
Supplemental Benefit Rate per Hour: \$16.25

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate per Hour: \$18.26
Supplemental Benefit Rate per Hour: \$16.32

Plumber - Third Year

Effective Period: 7/1/2012 - 12/31/2012

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

Wage Rate per Hour: \$20.06
Supplemental Benefit Rate per Hour: \$16.25

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate per Hour: \$20.36
Supplemental Benefit Rate per Hour: \$16.32

Plumber - Fourth Year

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate per Hour: \$22.91
Supplemental Benefit Rate per Hour: \$16.25

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate per Hour: \$23.21
Supplemental Benefit Rate per Hour: \$16.32

Plumber - Fifth Year: 1st Six Months

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate per Hour: \$24.31
Supplemental Benefit Rate per Hour: \$16.25

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate per Hour: \$24.61
Supplemental Benefit Rate per Hour: \$16.32

Plumber - Fifth Year: 2nd Six Months

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate per Hour: \$36.38
Supplemental Benefit Rate per Hour: \$16.25

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate per Hour: \$36.68
Supplemental Benefit Rate per Hour: \$16.32

(Plumbers Local #1)

POINTER - WATERPROOFER, CAULKER MECHANIC (EXTERIOR BUILDING RENOVATION)

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

Pointer - Waterproofer, Caulker Mechanic - First Year

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

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$25.00

Supplemental Benefit Rate per Hour: \$3.45

Pointer - Waterproofer, Caulker Mechanic - Second Year

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$27.25

Supplemental Benefit Rate per Hour: \$8.40

Pointer - Waterproofer, Caulker Mechanic - Third Year

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$32.23

Supplemental Benefit Rate per Hour: \$11.15

Pointer - Waterproofer, Caulker Mechanic - Fourth Year

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$38.66

Supplemental Benefit Rate per Hour: \$11.15

(Bricklayer District Council)

ROOFER

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

Roofer - First Year

Effective Period: 7/1/2012 - 6/30/2013

Wage and Supplemental Rate Per Hour: 35% of Journeyman's Rate

Roofer - Second Year

Effective Period: 7/1/2012 - 6/30/2013

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

Roofer - Third Year

Effective Period: 7/1/2012 - 6/30/2013

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

Roofer - Fourth Year

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

Effective Period: 7/1/2012 - 6/30/2013
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: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 30% of Journeyman's rate
Supplemental Rate Per Hour: \$15.37

Sheet Metal Worker - Second Year

Effective Period: 7/1/2012 - 6/30/2013
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: 7/1/2012 - 6/30/2013
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: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 45% of Journeyman's rate
Supplemental Rate Per Hour: \$21.87

Sheet Metal Worker - Fourth Year (1st Six Months)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 50% of Journeyman's rate
Supplemental Rate Per Hour: \$23.69

Sheet Metal Worker - Fourth Year (2nd Six Months)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 55% of Journeyman's rate
Supplemental Rate Per Hour: \$25.33

Sheet Metal Worker - Fifth Year (1st Six Months)

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

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 60% of Journeyman's rate
Supplemental Rate Per Hour: \$27.47

Sheet Metal Worker - Fifth Year(2nd Six Months)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 70% of Journeyman's rate
Supplemental Rate Per Hour: \$31.23

(Local #28)

SIGN ERECTOR
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

Sign Erector - First Year: 1st Six Months

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 35% of Journeyman's rate
Supplemental Rate Per Hour: \$5.96

Sign Erector - First Year: 2nd Six Months

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 40% of Journeyman's rate
Supplemental Rate Per Hour: \$6.75

Sign Erector - Second Year: 1st Six Months

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 45% of Journeyman's rate
Supplemental Rate Per Hour: \$7.55

Sign Erector - Second Year: 2nd Six Months

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 50% of Journeyman's rate
Supplemental Rate Per Hour: \$8.34

Sign Erector - Third Year: 1st Six Months

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 55% of Journeyman's rate
Supplemental Rate Per Hour: \$9.13

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

Sign Erector - Third Year: 2nd Six Months

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 60% of Journeyperson's rate
Supplemental Rate Per Hour: \$9.92

Sign Erector - Fourth Year: 1st Six Months

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 65% of Journeyperson's rate
Supplemental Rate Per Hour: \$10.72

Sign Erector - Fourth Year: 2nd Six Months

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Rate Per Hour: \$11.51

Sign Erector - Fifth Year

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Rate Per Hour: \$12.30

Sign Erector - Sixth Year

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate Per Hour: 80% of Journeyperson's rate
Supplemental Rate Per Hour: \$12.30

(Local #137)

STEAMFITTER

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

Steamfitter - First Year

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate and Supplemental Per Hour: 40% of Journeyperson's rate

Steamfitter - Second Year

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate and Supplemental Rate Per Hour: 50% of Journeyperson's rate.

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

Steamfitter - Third Year

Effective Period: 7/1/2012 - 6/30/2013

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

Steamfitter - Fourth Year

Effective Period: 7/1/2012 - 6/30/2013

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

Steamfitter - Fifth Year

Effective Period: 7/1/2012 - 6/30/2013

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

(Local #638)

STONE MASON - SETTER

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

Stone Mason - Setters - First 750 Hours

Effective Period: 7/1/2012 - 6/30/2013

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

Stone Mason - Setters - Second 750 Hours

Effective Period: 7/1/2012 - 6/30/2013

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

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

Stone Mason - Setters - Third 750 Hours

Effective Period: 7/1/2012 - 6/30/2013

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: 7/1/2012 - 6/30/2013

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

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

Stone Mason - Setters - Fifth 750 Hours

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

Effective Period: 7/1/2012 - 6/30/2013
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: 7/1/2012 - 6/30/2013
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: 7/1/2012 - 6/30/2013
Wage and Supplemental Rate Per Hour: 40% of Journeyperson's rate

Drywall Taper - Second Year

Effective Period: 7/1/2012 - 6/30/2013
Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

Drywall Taper - Third Year

Effective Period: 7/1/2012 - 6/30/2013
Wage and Supplemental Rate Per Hour: 80% of Journeyperson's rate

(Local #1974)

TILE LAYER - SETTER

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

Tile Layer - Setter - First 750 Hours

Effective Period: 7/1/2012 - 6/30/2013
Wage and Supplemental Rate Per Hour: 50% of Journeyperson's rate

Tile Layer - Setter - Second 750 Hours

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

Effective Period: 7/1/2012 - 6/30/2013

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

Tile Layer - Setter - Third 750 Hours

Effective Period: 7/1/2012 - 6/30/2013

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

Tile Layer - Setter - Fourth 750 Hours

Effective Period: 7/1/2012 - 6/30/2013

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

Tile Layer - Setter - Fifth 750 Hours

Effective Period: 7/1/2012 - 6/30/2013

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

Tile Layer - Setter - Sixth 750 Hours

Effective Period: 7/1/2012 - 6/30/2013

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)

Timberperson - First Year

Effective Period: 7/1/2012 - 6/30/2013

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

Supplemental Rate Per Hour: \$27.49

Timberperson - Second Year

Effective Period: 7/1/2012 - 6/30/2013

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

Supplemental Rate Per Hour: \$27.49

Timberperson - Third Year

Effective Period: 7/1/2012 - 6/30/2013

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

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

Supplemental Rate Per Hour: \$27.49

Timberperson - Fourth Year

Effective Period: 7/1/2012 - 6/30/2013

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

Supplemental Rate Per Hour: \$27.49

(Local #1536)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§6-109 PREVAILING WAGE SCHEDULE

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.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§6-109 PREVAILING WAGE SCHEDULE

The living wage rates listed in this schedule may not include all hourly wage calculations for overtime, shift differential, Holiday, Saturday, Sunday or other premium time work. Similarly, this schedule does not set forth every living wage practice with which employers must comply.

Some of the rates in this schedule are based on collective bargaining agreements. These agreements are available for inspection by appointment. Requests for appointments may be made by calling (212) 669-4443, Monday through Friday between the hours of 9 a.m. and 5 p.m.

Answers to questions concerning prevailing wage practices may be obtained from the Classification Unit by calling (212) 669-7974. Please direct all other compliance issues to; Bureau of Labor Law, Attn: Wasyl Kinach, P.E., Office of the Comptroller, 1 Centre Street, Room 1122, New York, N.Y. 10007; Fax (212) 669-4002.

Contractors are solely responsible for maintaining original payroll records, which delineate, among other things, the hours each employee worked within a given classification. Contractors using rates and/or classifications not promulgated by the Comptroller do so at their own risk. Additionally, prior to bid, an agency's chief contracting officer must contact the Bureau of Labor Law to obtain a wage determination for a work classification not published in this schedule.

The information listed below is intended to assist you in meeting your living wage and prevailing wage obligation. Contractors are advised to review the Comptroller's Living Wage Schedule prior to submitting a bid for City work. Any wage rate error made by the contracting agency in the contract documents will not preclude a finding against the contractor for an underpayment of the applicable living wage or the applicable prevailing wage.

This schedule sets forth the living wage and benefit rates required to be annexed to and form part of the contract specifications for work covered by New York City Administrative Code § 6-109. Contractors performing such work are required to pay not less 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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§6-109 PREVAILING WAGE SCHEDULE

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OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§6-109 PREVAILING WAGE SCHEDULE

BUILDING CLEANER AND MAINTAINER (OFFICE)

Office Building Class "A" Cleaner/Porter, Elevator Operator, Exterminator, Fire Safety Director (Over 280,000 square feet gross area)

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$22.65**

Supplemental Benefit Rate per Hour: **\$9.13**

Supplemental Note: for new employee 0-12 months of employment - \$6.64; for new employee 13-24 months of employment - \$8.81

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$22.97**

Supplemental Benefit Rate per Hour: **\$9.51**

Supplemental Note: for new employee 0-12 months of employment - \$6.92; for new employee 13-24 months of employment - \$9.18

NEW HIRE: Cleaner/Porter, Elevator Operator, Exterminator, Fire Safety Director may be paid 75% of the wage rate above for the first 21 months of employment, 85% of the wage rate above for the 22nd through 42nd months of employment, and upon the completion of 42 months of employment employee shall be paid the full wage rate. Note: New Hires hired before January 1, 2012 will continue to receive 80% of the wage rate above for the first 30 months, and upon the completion of 30 months of employment employee shall be paid the full wage rate. Upon completion of two years of employment the new hire receives the full supplemental benefit rate.

Office Building Class "B" Cleaner/Porter, Elevator Operator, Exterminator, Fire Safety Director (Over 120,000 and less than 280,000 square feet gross area)

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$22.62**

Supplemental Benefit Rate per Hour: **\$9.13**

Supplemental Note: for new employee 0-12 months of employment - \$6.64; for new employee 13-24 months of employment - \$8.81

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$22.94**

Supplemental Benefit Rate per Hour: **\$9.51**

Supplemental Note: for new employee 0-12 months of employment - \$6.92; for new employee 13-24 months of employment - \$9.18

NEW HIRE: Cleaner/Porter, Elevator Operator, Exterminator, Fire Safety Director may be paid 75% of the wage rate above for the first 21 months of employment, 85% of the wage rate above for the 22nd through 42nd months of employment, and upon the completion of 42 months of employment employee shall be paid the full wage rate. Note: New Hires hired before January 1, 2012 will continue to receive 80% of the wage rate above for the first 30 months, and upon the completion of 30 months of employment employee shall be paid the full wage rate. Upon completion of two years of employment the new hire receives the full supplemental benefit rate.

Office Building Class "C" Cleaner/Porter, Elevator Operator, Exterminator, Fire Safety Director (Less than 120,000 square feet gross area)

Effective Period: 7/1/2012 - 12/31/2012

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§6-109 PREVAILING WAGE SCHEDULE

Wage Rate per Hour: **\$22.57**

Supplemental Benefit Rate per Hour: **\$9.13**

Supplemental Note: for new employee 0-12 months of employment - \$6.64; for new employee 13-24 months of employment - \$8.81

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$22.90**

Supplemental Benefit Rate per Hour: **\$9.51**

Supplemental Note: for new employee 0-12 months of employment - \$6.92; for new employee 13-24 months of employment - \$9.18

NEW HIRE: Cleaner/Porter, Elevator Operator, Exterminator, Fire Safety Director may be paid 75% of the wage rate above for the first 21 months of employment, 85% of the wage rate above for the 22nd through 42nd months of employment, and upon the completion of 42 months of employment employee shall be paid the full wage rate. Note: New Hires hired before January 1, 2012 will continue to receive 80% of the wage rate above for the first 30 months, and upon the completion of 30 months of employment employee shall be paid the full wage rate. Upon completion of two years of employment the new hire receives the full supplemental benefit rate.

Overtime

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

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

Time and one half the regular hourly rate after 40 hours in any work week.

Paid Holidays

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Vacation

Less than 6 months of work.....no vacation

6 months of work.....three (3) days

1 year of work.....ten (10) days

5 years of work.....fifteen (15) days

15 years of work.....twenty (20) days

21 years of work.....twenty-one (21) days

22 years of work.....twenty-two (22) days

23 years of work.....twenty-three (23) days

24 years of work.....twenty-four (24) days

25 years or more of work.....twenty-five (25) days

Plus two Personal Days per year.

Sick Leave:

10 sick days per year.

Unused sick leave paid in the succeeding January, one full day pay for each unused sick day.

(Local #32 B/J)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
\$6-109 PREVAILING WAGE SCHEDULE

BUILDING CLEANER AND MAINTAINER (RESIDENTIAL)

Residential Building Class "A" Cleaner/Porter

Residential Buildings Class "A": buildings where the assessed value of the land and building, based upon the 1935 assessment, divided by the number of rooms in the building, gives an assessed value of over \$4000.00 a room.

Effective Period: 7/1/2012 - 4/20/2013

Wage Rate per Hour: **\$20.77**

Supplemental Benefit Rate per Hour: **\$8.68**

Supplemental Note: for new employee 0-12 months of employment - \$6.37; for new employee 13-24 months of employment - \$8.43

Effective 1/1/2013 - \$9.43; for new employee 0-12 months of employment - \$6.92; for new employee 13-24 months of employment - \$9.18

Effective Period: 4/21/2013 - 6/30/2013

Wage Rate per Hour: **\$21.34**

Supplemental Benefit Rate per Hour: **\$9.43**

Supplemental Note: for new employee 0-12 months of employment - \$6.92; for new employee 13-24 months of employment - \$9.18

NEW HIRE: Porter/Cleaner, may be paid a starting rate of 80% of the hourly rate published above. Upon completion of 30 months of employment, the new hire shall be paid the full wage rate. Upon completion of two years of employment the new hire receives the full supplemental benefit rate.

Residential Building Class "B" Cleaner/Porter

Residential Building Class "B": buildings where the assessed value of the land and building, based upon the 1935 assessment, divided by the number of rooms in the building, gives an assessed value of over \$2000.00 a room and not over \$4000.00 a room.

Effective Period: 7/1/2012 - 4/20/2013

Wage Rate per Hour: **\$20.71**

Supplemental Benefit Rate per Hour: **\$8.68**

Supplemental Note: for new employee 0-12 months of employment - \$6.37; for new employee 13-24 months of employment - \$8.43

Effective 1/1/2013 - \$9.43; for new employee 0-12 months of employment - \$6.92; for new employee 13-24 months of employment - \$9.18

Effective Period: 4/21/2013 - 6/30/2013

Wage Rate per Hour: **\$21.28**

Supplemental Benefit Rate per Hour: **\$9.43**

Supplemental Note: for new employee 0-12 months of employment - \$6.92; for new employee 13-24 months of employment - \$9.18

NEW HIRE: Porter/Cleaner, may be paid a starting rate of 80% of the hourly rate published above. Upon completion of 30 months of employment, the new hire shall be paid the full wage rate. Upon completion of two years of employment the new hire receives the full supplemental benefit rate.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§6-109 PREVAILING WAGE SCHEDULE

Residential Building Class "C" Cleaner/Porter

Residential Building Class "C": buildings where the assessed value of the land and building, based upon the 1935 assessment, divided by the number of rooms in the building, gives an assessed value of \$2000.00 or less a room.

Effective Period: 7/1/2012 - 4/20/2013

Wage Rate per Hour: **\$20.65**

Supplemental Benefit Rate per Hour: **\$8.68**

Supplemental Note: for new employee 0-12 months of employment - \$6.37; for new employee 13-24 months of employment - \$8.43

Effective 1/1/2013 - \$9.43; for new employee 0-12 months of employment - \$6.92; for new employee 13-24 months of employment - \$9.18

Effective Period: 4/21/2013 - 6/30/2013

Wage Rate per Hour: **\$21.23**

Supplemental Benefit Rate per Hour: **\$9.43**

Supplemental Note: for new employee 0-12 months of employment - \$6.92; for new employee 13-24 months of employment - \$9.18

NEW HIRE: Porter/Cleaner, may be paid a starting rate of 80% of the hourly rate published above. Upon completion of 30 months of employment, the new hire shall be paid the full wage rate. Upon completion of two years of employment the new hire receives the full supplemental benefit rate.

Overtime

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

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

Time and one half the regular hourly rate after 40 hours in any work week.

Paid Holidays

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

Vacation

- 6 months.....three (3) days
 - 1 year.....ten (10) days
 - 5 years.....fifteen (15) days
 - 15 years.....twenty (20) days
 - 21 years.....twenty-one (21) days
 - 22 years.....twenty-two (22) days
 - 23 years.....twenty-three (23) days
 - 24 years.....twenty-four (24) days
 - 25 years.....twenty-five (25) days
- Plus two Personal Days per year.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§6-109 PREVAILING WAGE SCHEDULE

SICK LEAVE

After 1 year of service.....ten (10) days per year

(Local #32 B/J)

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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$10.00

Supplemental Benefit Rate per Hour: \$1.50

(NYC Administrative Code §6-109)

CLEANER (PARKING GARAGE)

Garage Cleaner

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$10.00

Supplemental Benefit Rate per Hour: \$1.50

Overtime

Time and one half the regular rate after an 8 hour day or after 40 hours in any work week.

(NYC Administrative Code §6-109)

FOOD SERVICE EMPLOYEES

Cook

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$15.40

Supplemental Benefit Rate per Hour: \$1.72

Cafeteria Attendant

Effective Period: 7/1/2012 - 6/30/2013

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§6-109 PREVAILING WAGE SCHEDULE

Wage Rate per Hour: **\$10.24**
Supplemental Benefit Rate per Hour: **\$1.72**

Counter Attendant

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: **\$10.31**
Supplemental Benefit Rate per Hour: **\$1.72**

Kitchen Helper / Dishwasher

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: **\$9.83**
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

Gardener

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: **\$17.04**
Supplemental Benefit Rate per Hour: **\$1.72**

Overtime

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

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: 7/1/2012 - 6/30/2013

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§6-109 PREVAILING WAGE SCHEDULE

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: 7/1/2012 - 6/30/2013

Wage Rate per Hour: **\$10.00**
Supplemental Benefit Rate per Hour: **\$1.50**

(NYC Administrative Code §6-109)

SECURITY GUARD (ARMED)

Security Guard (Armed)

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$27.75**
Supplemental Benefit Rate per Hour: **\$4.73**

Supplemental Note: for new employee 0-30 days of employment - \$4.09; for new employee 31-120 days of employment - \$4.26; for new employee 121 days - 2 years of employment - \$4.37

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$28.00**
Supplemental Benefit Rate per Hour: **\$4.90**

Supplemental Note: for new employee 0-30 days of employment - \$4.26; for new employee 31-120 days of employment - \$4.43; for new employee 121 days - 2 years of employment - \$4.54

Months of employment shall be defined as an Employee's length of service with the Employer or at the Facility, whichever is greater.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§6-109 PREVAILING WAGE SCHEDULE

Overtime Description

A guard who works a holiday is paid the regular rate plus receives the paid holiday.
Supplemental Benefits shall be paid for each hour paid, up to forty (40) paid hours per week.

Overtime

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

Vacation

Months on payroll	Vacation with Pay
6	3 days
12	5 days
24	10 days
60	15 days
180	20 days
300	25 days

Sick Leave

Employees accrue paid sick leave at the rate of one (1) sick day for every six (6) months worked, up to a maximum of six (6) days a year.

(Local #32B/J)

SECURITY GUARD (UNARMED)

Security Guard (Unarmed) 0 - 6 months

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$12.60

Supplemental Benefit Rate per Hour: \$4.37

Supplemental Note: for new employee 0-30 days of employment - \$4.09; for new employee 31-120 days of employment - \$4.26

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$12.85

Supplemental Benefit Rate per Hour: \$4.54

Supplemental Note: for new employee 0-30 days of employment - \$4.26; for new employee 31-120 days of employment - \$4.43

Security Guard (Unarmed) 7 - 12 months

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§6-109 PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate per Hour: \$13.10
Supplemental Benefit Rate per Hour: \$4.37

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate per Hour: \$13.35
Supplemental Benefit Rate per Hour: \$4.54

Security Guard (Unarmed) 13 - 18 months

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate per Hour: \$13.60
Supplemental Benefit Rate per Hour: \$4.37

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate per Hour: \$13.85
Supplemental Benefit Rate per Hour: \$4.54

Security Guard (Unarmed) 19 - 24 months

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate per Hour: \$14.10
Supplemental Benefit Rate per Hour: \$4.37

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate per Hour: \$14.35
Supplemental Benefit Rate per Hour: \$4.54

Security Guard (Unarmed) 25 - 30 months

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate per Hour: \$14.60
Supplemental Benefit Rate per Hour: \$4.73

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate per Hour: \$14.85
Supplemental Benefit Rate per Hour: \$4.90

Security Guard (Unarmed) 31 months or more

Effective Period: 7/1/2012 - 12/31/2012
Wage Rate per Hour: \$14.75
Supplemental Benefit Rate per Hour: \$4.73

Effective Period: 1/1/2013 - 6/30/2013
Wage Rate per Hour: \$15.15
Supplemental Benefit Rate per Hour: \$4.90

Months of employment shall be defined as an Employee's length of service with the Employer or at the Facility, whichever is greater.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§6-109 PREVAILING WAGE SCHEDULE

Overtime Description

A guard who works a holiday is paid the regular rate plus receives the paid holiday.
Supplemental Benefits shall be paid for each hour paid, up to forty (40) paid hours per week.

Overtime

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

Vacation

Months on payroll	Vacation with Pay
6	3 days
12	5 days
24	10 days
60	15 days
180	20 days
300	25 days

Sick Leave

Employees accrue paid sick leave at the rate of one (1) sick day for every six (6) months worked, up to a maximum of six (6) days a year.

(Local #32B/J)

SERVICES TO PERSONS WITH CEREBRAL PALSY

Services To Person With Cerebral Palsy

'Services to Persons with Cerebral Palsy' means provision of services which enable persons with cerebral palsy and related disabilities to lead independent and productive lives through an agency that provides health care, education, employment, housing and technology resources to such persons under contract with the city or the department of education.

Effective Period: 7/1/2012 - 6/30/2013

Wage Rate per Hour: \$10.00

Supplemental Benefit Rate per Hour: \$1.50

(NYC Administrative Code §6-109)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§6-109 PREVAILING WAGE SCHEDULE

TEMPORARY OFFICE SERVICES

Administrative Assistant

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$31.02
Supplemental Benefit Rate per Hour: None

Cashier

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$11.50
Supplemental Benefit Rate per Hour: None

Clerk (various)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$14.60
Supplemental Benefit Rate per Hour: None

Computer Assistant

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$20.61
Supplemental Benefit Rate per Hour: None

Data Entry Operator

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$15.73
Supplemental Benefit Rate per Hour: None

Receptionist

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$14.71
Supplemental Benefit Rate per Hour: None

Secretary (various)

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$18.72
Supplemental Benefit Rate per Hour: None

Word Processor

Effective Period: 7/1/2012 - 6/30/2013
Wage Rate per Hour: \$19.50
Supplemental Benefit Rate per Hour: None

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§6-109 PREVAILING WAGE SCHEDULE

Overtime

Time and one half the regular rate after a 40 hour 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

Window Cleaner

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$26.12**

Supplemental Benefit Rate per Hour: **\$9.13**

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$26.44**

Supplemental Benefit Rate per Hour: **\$9.51**

Power Operated Scaffolds, Manual Scaffolds, and Boatswain Chairs

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$28.37**

Supplemental Benefit Rate per Hour: **\$9.13**

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$28.69**

Supplemental Benefit Rate per Hour: **\$9.51**

Window Cleaner Apprentice (0 - 3 months)

Employee must be a registered apprentice with the New York State Department of Labor

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$19.35**

Supplemental Benefit Rate per Hour: **\$0.00**

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: **\$19.59**

Supplemental Benefit Rate per Hour: **\$0.00**

Window Cleaner Apprentice (4 - 7 months)

Employee must be a registered apprentice with the New York State Department of Labor

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: **\$20.92**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§6-109 PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: \$9.13

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$21.18

Supplemental Benefit Rate per Hour: \$9.51

Window Cleaner Apprentice (8 - 11 months)

Employee must be a registered apprentice with the New York State Department of Labor

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$22.17

Supplemental Benefit Rate per Hour: \$9.13

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$22.44

Supplemental Benefit Rate per Hour: \$9.51

Window Cleaner Apprentice (12 - 15 months)

Employee must be a registered apprentice with the New York State Department of Labor

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$23.43

Supplemental Benefit Rate per Hour: \$9.13

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$23.72

Supplemental Benefit Rate per Hour: \$9.51

Window Cleaner Apprentice (16 - 17 months)

Employee must be a registered apprentice with the New York State Department of Labor

Effective Period: 7/1/2012 - 12/31/2012

Wage Rate per Hour: \$24.70

Supplemental Benefit Rate per Hour: \$9.13

Effective Period: 1/1/2013 - 6/30/2013

Wage Rate per Hour: \$25.01

Supplemental Benefit Rate per Hour: \$9.51

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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK
§6-109 PREVAILING WAGE SCHEDULE

New Year's Day
Martin Luther King Jr. Day
President's Birthday
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day
Personal Day

Vacation

After 7 months but less than 1 year of service.....5 days
1 year but less than 5 years of service.....10 days
5 years of service but less than 15 years of service.....15 days
15 years of service but less than 21 years of service.....20 days
21 years.....21 days
22 years.....22 days
23 years.....23 days
24 years.....24 days
25 years or more of service.....25 days
Plus 1 day per year for medical visit

SICK LEAVE:

10 days after one year worked. Unused sick days to be paid in cash.

(Local #32 B/J)

(NO TEXT ON THIS PAGE)



Leonard A. Mancusi
SENIOR ASSISTANT COMPTROLLER

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

TELEPHONE: (212) 669-367
FAX NUMBER: (212) 669-844

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

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NEW YORK CITY DEPARTMENT OF
DESIGN + CONSTRUCTION

**INFRASTRUCTURE DIVISION
BUREAU OF DESIGN**

VOLUME 2 OF 3

Contractor

Dated _____, 20__

**APPROVED AS TO FORM
CERTIFIED AS TO LEGAL AUTHORITY**

Acting Corporation Counsel

Dated _____, 20__

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NEW YORK CITY DEPARTMENT OF
DESIGN + CONSTRUCTION

**INFRASTRUCTURE DIVISION
BUREAU OF DESIGN**

VOLUME 2 OF 3

PROJECT ID: SE818

FOR THE CONSTRUCTION OF SANITARY AND STORM SEWERS IN: SHELDON AVENUE BETWEEN ELLSWORTH AVENUE AND BMP-SB1 A POINT APPROXIMATELY 1,000-FEET EAST OF DELMAR AVENUE; SINCLAIR AVENUE BETWEEN ELLSWORTH AVENUE AND DEAD END; STAFFORD AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; VINELAND AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; CROWN AVENUE BETWEEN NIPPON AVENUE AND BELFIELD AVENUE; WOODROW ROAD BETWEEN POWELL STREET AND BELFIELD AVENUE; CASTOR PLACE BETWEEN HUGUENOT AVENUE AND ANACONDA STREET; SPERRY PLACE BETWEEN ANACONDA STREET AND EVERTON AVENUE; POWELL STREET BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; WALKER PLACE BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; DAHLIA STREET BETWEEN WOODROW ROAD AND SHIFT PLACE; HUGUENOT AVENUE BETWEEN RENSSELAER AVENUE AND SHIFT PLACE; CARDIFF STREET BETWEEN CASTOR PLACE AND ROSEDALE AVENUE; BOULDER STREET BETWEEN WOODROW ROAD AND ROSEDALE AVENUE; NIPPON AVENUE BETWEEN RENSSELAER AVENUE AND WOODROW ROAD; ANACONDA STREET BETWEEN SPERRY PLACE AND DELMAR AVENUE; BALLARD AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; DELMAR AVENUE BETWEEN RENSSELAER AVENUE AND ANACONDA STREET; CROWN PLACE BETWEEN CROWN AVENUE AND DEAD END; EVERTON AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; AND, HEENAN AVENUE BETWEEN VINELAND AVENUE AND DEAD END

INCLUDING WATER MAIN WORK

Together With All Work Incidental Thereto
BOROUGH OF STATEN ISLAND
CITY OF NEW YORK

Difazio Industries, Inc.
Contractor

Dated _____, 20____

APPROVED AS TO FORM
CERTIFIED AS TO LEGAL AUTHORITY

David V. V.
Acting Corporation Counsel ^{EVH} 3-26-2013

Dated March 26, 2013



**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 3 OF 3

**SCHEDULE A
ADDENDA NOS. 1 TO 5**

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED FOR:

PROJECT ID: SE818

FOR THE CONSTRUCTION OF SANITARY AND STORM SEWERS IN: SHELDON AVENUE BETWEEN ELLSWORTH AVENUE AND BMP-SB1 A POINT APPROXIMATELY 1,000-FEET EAST OF DELMAR AVENUE; SINCLAIR AVENUE BETWEEN ELLSWORTH AVENUE AND DEAD END; STAFFORD AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; VINELAND AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; CROWN AVENUE BETWEEN NIPPON AVENUE AND BELFIELD AVENUE; WOODROW ROAD BETWEEN POWELL STREET AND BELFIELD AVENUE; CASTOR PLACE BETWEEN HUGUENOT AVENUE AND ANACONDA STREET; SPERRY PLACE BETWEEN ANACONDA STREET AND EVERTON AVENUE; POWELL STREET BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; WALKER PLACE BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; DAHLIA STREET BETWEEN WOODROW ROAD AND SHIFT PLACE; HUGUENOT AVENUE BETWEEN RENSSELAER AVENUE AND SHIFT PLACE; CARDIFF STREET BETWEEN CASTOR PLACE AND ROSEDALE AVENUE; BOULDER STREET BETWEEN WOODROW ROAD AND ROSEDALE AVENUE; NIPPON AVENUE BETWEEN RENSSELAER AVENUE AND WOODROW ROAD; ANACONDA STREET BETWEEN SPERRY PLACE AND DELMAR AVENUE; BALLARD AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; DELMAR AVENUE BETWEEN RENSSELAER AVENUE AND ANACONDA STREET; CROWN PLACE BETWEEN CROWN AVENUE AND DEAD END; EVERTON AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; AND, HEENAN AVENUE BETWEEN VINELAND AVENUE AND DEAD END

INCLUDING WATER MAIN WORK

Together With All Work Incidental Thereto
**BOROUGH OF STATEN ISLAND
CITY OF NEW YORK**

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

March 13, 2013



13-087



SCHEDULE "A"
(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)
(GENERAL CONDITIONS OTHER THAN ARTICLE 22)

<u>REFERENCE</u>	<u>ITEM</u>	<u>REQUIREMENTS</u>
Section 26 Information For Bidders	Bid Security	See Attachment 1 (page A-1 of the Bid Booklet)
	Performance Security	See Attachment 1 (page A-1 of the Bid Booklet)
	Payment Security	
Article 14 Contract	Date for Substantial Completion	See Page SA-2
Article 15 Contract	Liquidated Damages	For Each Consecutive Calendar Day Over Completion Time: <u>\$1,500.00</u>
Article 17 Contract	Subcontracts	Not to Exceed <u>35%</u> of Contract Price
Article 24 Contract	Deposit as Guarantee to be Held for the Thirty-Six (36) Month Maintenance Period	Percent of Contract Price <u>1%</u>
	Maintenance Period for Bluebelt Landscaping Work	Thirty-Six (36) Months
	Maintenance Period for All Other Work	Eighteen (18) Months, excluding Trees Twenty-Four (24) Months for Tree Planting
Article 77 Contract	M/WBE Program	See Subcontract Utilization Plan in the Bid Booklet
Section 6.40 Standard Highway Specifications	Liquidated Damages For Engineer's Field Office	For Each Calendar Day of Deficiency <u>\$250.00</u>
	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 in Schedule "A" 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.	
Section 6.70 Standard Highway Specifications	Liquidated Damages For Maintenance And Protection Of Traffic	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: <u>\$250.00</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: <u>\$500.00</u>

SCHEDULE "A"

(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)(GENERAL CONDITIONS OTHER THAN ARTICLE 22)

(Continued)

Section 7.13 Standard Highway Specifications	Liquidated Damages For Maintenance Of Site	For Each Calendar Day, For Each Occurrence <u>\$250.00</u>
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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.

SCHEDULE "A"
(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)
(GENERAL CONDITIONS OTHER THAN ARTICLE 22)

(Continued)

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 the 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 the 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-ccds shall be added to the above Final Contract Duration.

SCHEDULE "A"
(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)
(GENERAL CONDITIONS RELATING TO ARTICLE 22 - INSURANCE)

PART I. MINIMUM LIMITS AND SPECIAL CONDITIONS

Insurance indicated by a blackened box (■) or by an X in a box (☒) to left will be required under this contract.

<u>TYPES OF INSURANCE</u> (per Article 22 in its entirety, including listed paragraph)	<u>MINIMUM LIMITS AND SPECIAL CONDITIONS</u>
<input checked="" type="checkbox"/> Commercial General Liability Art. 22.1.1	\$3,000,000 per Occurrence \$6,000,000 Aggregate (applicable separately to this Project) Additional Insureds: (1) <u>City of New York, including its officials and employees.</u> (2) <u>National Grid</u> (3)
<input checked="" type="checkbox"/> Workers' Compensation Art. 22.1.2 <input checked="" type="checkbox"/> Disability Benefits Insurance Art. 22.1.2 <input checked="" type="checkbox"/> Employers' Liability Art. 22.1.3	Workers' Compensation: Statutory per New York State law without regard to jurisdiction. Disability Benefits Insurance: Statutory per New York State law without regard to jurisdiction.
<input type="checkbox"/> Jones Act Art. 22.1.4 <input type="checkbox"/> U.S. Longshoremen's and Harbor Workers Compensation Act Art. 22.1.4	Employers' Liability: <u>\$1,000,000</u> each Accident <input type="checkbox"/> Additional Requirements: (1) (2)

SCHEDULE "A"
(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)
(GENERAL CONDITIONS RELATING TO ARTICLE 22 - INSURANCE)

PART I (Continued)

Insurance indicated by a blackened box (■) or by an X in a box (☒) to left will be required under this contract.

<u>TYPES OF INSURANCE</u> (per Article 22 in its entirety, including listed paragraph)		<u>MINIMUM LIMITS AND SPECIAL CONDITIONS</u>
<input type="checkbox"/> Builders' Risk	Art. 22.1.5	_____ % of Total Value of Work City of New York and the Contractor named as Loss Payee for the Work in order of precedence, as their interests may appear.
<input checked="" type="checkbox"/> Comprehensive Business Auto Coverage	Art. 22.1.6	\$1,000,000 per Accident If vehicles are used for transporting hazardous materials, the Contractor shall provide pollution liability broadened coverage for covered autos (endorsement CA 99 48) as well as proof of MCS 90. Additional Insureds: (1) <u>City of New York, including its officials and employees.</u> (2)
<input type="checkbox"/> Pollution/Environmental Liability	Art. 22.1.7	\$ _____ per Occurrence \$ _____ Aggregate Additional Insureds: (1) <u>City of New York, including its officials and employees.</u> (2)

SCHEDULE "A"
(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)
(GENERAL CONDITIONS RELATING TO ARTICLE 22 - INSURANCE)
PART I (Continued)

Insurance indicated by a blackened box (■) or by an X in a box (☒) to left will be required under this contract.

<u>TYPES OF INSURANCE</u> (per Article 22 in its entirety, including listed paragraph)	<u>MINIMUM LIMITS AND SPECIAL CONDITIONS</u>
<input type="checkbox"/> Marine Protection and Indemnity Art. 22.1.8(a)	\$ _____ per Occurrence \$ _____ Aggregate Additional Insureds: (1) <u>City of New York, including its officials and employees.</u> (2)
<input type="checkbox"/> Ship Repairers Legal Liability Art. 22.1.8(b)	\$ _____ each Occurrence [Contracting agency to fill in total value of City vessels involved]
<input type="checkbox"/> Collision Liability/Towers Liability Art. 22.1.8(c)	\$ _____ per Occurrence \$ _____ Aggregate Additional Insureds: (1) <u>City of New York, including its officials and employees.</u> (2)
<input type="checkbox"/> Marine Pollution Liability Art. 22.1.8(d)	\$ _____ each Occurrence Additional Insureds: (1) <u>City of New York, including its officials and employees.</u> (2)

SCHEDULE "A"
(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)
(GENERAL CONDITIONS RELATING TO ARTICLE 22 - INSURANCE)

PART I (Continued)

Insurance indicated by a blackened box (■) or by an X in a box (☒) to left will be required under this contract.

<p align="center"><u>TYPES OF INSURANCE</u> (per Article 22 in its entirety, including listed paragraph)</p>	<p align="center"><u>MINIMUM LIMITS AND SPECIAL CONDITIONS</u></p>
<p>[OTHER] Art. 22.1.9</p> <p><input type="checkbox"/> Railroad Protection Liability Policy</p> <p>(ISO-RIMA or equivalent form) approved by Permittor covering the work to be performed at the designated site and affording protection for damages arising out of bodily injury or death, physical damage to or destruction of property, including damage to the Insured's own property and conforming to the following.</p> <ul style="list-style-type: none"> • 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 No. and the name of the railroad property where the work is being performed and the Agency Permit. • Evidence of Railroad Protection Liability Insurance, must be provided in the form of the Original Policy. <u>A detailed Insurance Binder (ACORD or Manuscript Form) will be accepted pending issuance of the Original Policy, which must be provided within thirty (30) days of the Binder Approval.</u> 	<p>\$2,000,000 per Occurrence</p> <p>\$6,000,000 Aggregate</p> <p>Named Insureds: (1) (2)</p>

SCHEDULE "A"
(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)
(GENERAL CONDITIONS RELATING TO ARTICLE 22 - INSURANCE)

PART I (Continued)

Insurance indicated by a blackened box (■) or by an X in a box (☒) to left will be required under this contract.

[OTHER]	Art. 22.1.9	
<input type="checkbox"/> 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. 22.1.9	Fire insurance, extended coverage and vandalism, malicious mischief and burglary, and theft insurance coverage in the amount of \$40,000.
<input checked="" type="checkbox"/> Engineer's Field Office Section 6.40, Standard Highway Specifications		
[OTHER]	Art. 22.1.9	<input type="checkbox"/> The Following Additional Insurance Must Be Provided: <u>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.</u>

SCHEDULE "A"
(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)
(GENERAL CONDITIONS RELATING TO ARTICLE 22 - INSURANCE)

PART II. BROKER'S CERTIFICATION

[Pursuant to Article 22.3.1(a) 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 complete copies of all policies referenced in the Certificate Of Insurance. In the absence of completed policies, binders are acceptable.]

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.

[Name Of Broker (Typewritten)]

[Address Of Broker (Typewritten)]

[Signature Of Authorized Official Or Broker]

[Name And Title Of Authorized Official (Typewritten)]

Sworn to before me this

_____ day of _____, 200__

NOTARY PUBLIC

SCHEDULE "A"
(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)
(GENERAL CONDITIONS RELATING TO ARTICLE 22 - INSURANCE)

PART III. 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

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 Cruz, 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 February 2010

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)
(GENERAL CONDITIONS OTHER THAN ARTICLE 22)

<u>REFERENCE</u>	<u>ITEM</u>	<u>REQUIREMENTS</u>
Section 26 Information For Bidders	Bid Security	See Attachment 1 (page A-1 of the Bid Booklet)
	Performance Security Payment Security	See Attachment 1 (page A-1 of the Bid Booklet)
Article 14 Contract	Date for Substantial Completion	See Page SA-2
Article 15 Contract	Liquidated Damages	For Each Consecutive Calendar Day Over Completion Time: <u>\$1,500.00</u>
Article 17 Contract	Subcontracts	Not to Exceed <u>35%</u> of Contract Price
Article 24 Contract	Deposit as Guarantee to be Held for the Thirty-Six (36) Month Maintenance Period	Percent of Contract Price <u>1%</u>
	Maintenance Period for Bluebelt Landscaping Work	Thirty-Six (36) Months
	Maintenance Period for All Other Work	Eighteen (18) Months, excluding Trees Twenty-Four (24) Months for Tree Planting
Article 77 Contract	M/WBE Program	See Subcontract Utilization Plan in the Bid Booklet
Section 6.40 Standard Highway Specifications	Liquidated Damages For Engineer's Field Office	For Each Calendar Day of Deficiency <u>\$250.00</u>
		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 in Schedule "A" 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.
Section 6.70 Standard Highway Specifications	Liquidated Damages For Maintenance And Protection Of Traffic	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: <u>\$250.00</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: <u>\$500.00</u>

SCHEDULE "A"
(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)
(GENERAL CONDITIONS OTHER THAN ARTICLE 22)
(Continued)

Section 7.13 Standard Highway Specifications	Liquidated Damages For Maintenance Of Site	For Each Calendar Day, For Each Occurrence <u>\$250.00</u>
--	---	---

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.

SCHEDULE "A"
(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)
(GENERAL CONDITIONS OTHER THAN ARTICLE 22)

(Continued)

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 the 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 the 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-ccds shall be added to the above Final Contract Duration.

SCHEDULE "A"
(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)
(GENERAL CONDITIONS RELATING TO ARTICLE 22 - INSURANCE)

PART I. MINIMUM LIMITS AND SPECIAL CONDITIONS

Insurance indicated by a blackened box (■) or by an X in a box (☒) to left will be required under this contract.

<u>TYPES OF INSURANCE</u> (per Article 22 in its entirety, including listed paragraph)	<u>MINIMUM LIMITS AND SPECIAL CONDITIONS</u>
<input checked="" type="checkbox"/> Commercial General Liability Art. 22.1.1	\$3,000,000 per Occurrence \$6,000,000 Aggregate (applicable separately to this Project) Additional Insureds: (1) <u>City of New York, including its officials and employees.</u> (2) <u>National Grid</u> (3)
<input checked="" type="checkbox"/> Workers' Compensation Art. 22.1.2	Workers' Compensation: Statutory per New York State law without regard to jurisdiction. Disability Benefits Insurance: Statutory per New York State law without regard to jurisdiction.
<input checked="" type="checkbox"/> Disability Benefits Insurance Art. 22.1.2	
<input checked="" type="checkbox"/> Employers' Liability Art. 22.1.3	
<input type="checkbox"/> Jones Act Art. 22.1.4	Employers' Liability: \$1,000,000 each Accident
<input type="checkbox"/> U.S. Longshoremen's and Harbor Workers Compensation Act Art. 22.1.4	<input type="checkbox"/> Additional Requirements: (1) (2)

SCHEDULE "A"
(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)
(GENERAL CONDITIONS RELATING TO ARTICLE 22 - INSURANCE)

PART I (Continued)

Insurance indicated by a blackened box (■) or by an X in a box (☒) 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
<input type="checkbox"/> Builders' Risk Art. 22.1.5	% of Total Value of Work City of New York and the Contractor named as Loss Payee for the Work in order of precedence, as their interests may appear.
<input checked="" type="checkbox"/> Comprehensive Business Auto Coverage Art. 22.1.6	\$1,000,000 per Accident If vehicles are used for transporting hazardous materials, the Contractor shall provide pollution liability broadened coverage for covered autos (endorsement CA 99 48) as well as proof of MCS 90. Additional Insureds: (1) <u>City of New York, including its officials and employees.</u> (2)
<input type="checkbox"/> Pollution/Environmental Liability Art. 22.1.7	\$ _____ per Occurrence \$ _____ Aggregate Additional Insureds: (1) <u>City of New York, including its officials and employees.</u> (2)

SCHEDULE "A"
(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)
(GENERAL CONDITIONS RELATING TO ARTICLE 22 - INSURANCE)

PART I (Continued)

Insurance indicated by a blackened box (■) or by an X in a box (☒) 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
<input type="checkbox"/> Marine Protection and Indemnity	Art. 22.1.8(a)	\$ _____ per Occurrence \$ _____ Aggregate Additional Insureds: (1) <u>City of New York, including its officials and employees.</u> (2)
<input type="checkbox"/> Ship Repairers Legal Liability	Art. 22.1.8(b)	\$ _____ each Occurrence [Contracting agency to fill in total value of City vessels involved]
<input type="checkbox"/> Collision Liability/Towers Liability	Art. 22.1.8(c)	\$ _____ per Occurrence \$ _____ Aggregate Additional Insureds: (1) <u>City of New York, including its officials and employees.</u> (2)
<input type="checkbox"/> Marine Pollution Liability	Art. 22.1.8(d)	\$ _____ each Occurrence Additional Insureds: (1) <u>City of New York, including its officials and employees.</u> (2)

SCHEDULE "A"
(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)
(GENERAL CONDITIONS RELATING TO ARTICLE 22 - INSURANCE)

PART I (Continued)

Insurance indicated by a blackened box (■) or by an X in a box (☒) to left will be required under this contract.

<p align="center">TYPES OF INSURANCE (per Article 22 in its entirety, including listed paragraph)</p>	<p align="center">MINIMUM LIMITS AND SPECIAL CONDITIONS</p>
<p>[OTHER] Art. 22.1.9</p> <p><input type="checkbox"/> Railroad Protection Liability Policy</p> <p>(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.</p> <ul style="list-style-type: none"> • 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 No. and the name of the railroad property where the work is being performed and the Agency Permit. • Evidence of Railroad Protection Liability Insurance, must be provided in the form of the Original Policy. <u>A detailed Insurance Binder (ACORD or Manuscript Form) will be accepted pending issuance of the Original Policy, which must be provided within thirty (30) days of the Binder Approval.</u> 	<p><u>\$2,000,000</u> per Occurrence</p> <p><u>\$6,000,000</u> Aggregate</p> <p>Named Insureds: (1) (2)</p>

SCHEDULE "A"
(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)
(GENERAL CONDITIONS RELATING TO ARTICLE 22 - INSURANCE)

PART I (Continued)

Insurance indicated by a blackened box (■) or by an X in a box (☒) to left will be required under this contract.

[OTHER]	Art. 22.1.9	
<input type="checkbox"/> Professional Liability <p>(A) The Contractor's Professional Engineer shall maintain and submit evidence of Professional Liability Insurance in the minimum amount of <u>\$1,000,000</u> 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.</p> <p>(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.</p>		
[OTHER]	Art. 22.1.9	<input checked="" type="checkbox"/> 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 <u>\$40,000</u> .
[OTHER]	Art. 22.1.9	
<input type="checkbox"/> The Following Additional Insurance Must Be Provided: <p><u>Umbrella/Excess Liability Insurance</u> - The Contractor shall provide <u>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.</u></p>		

SCHEDULE "A"
(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)
(GENERAL CONDITIONS RELATING TO ARTICLE 22 - INSURANCE)

PART II. BROKER'S CERTIFICATION

[Pursuant to Article 22.3.1(a) 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 complete copies of all policies referenced in the Certificate Of Insurance. In the absence of completed policies, binders are acceptable.]

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.

[Name Of Broker (Typewritten)]

[Address Of Broker (Typewritten)]

[Signature Of Authorized Official Or Broker]

[Name And Title Of Authorized Official (Typewritten)]

Sworn to before me this

_____ day of _____, 200__

NOTARY PUBLIC

SCHEDULE "A"
(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)
(GENERAL CONDITIONS RELATING TO ARTICLE 22 - INSURANCE)

PART III. 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: SE818

FOR THE CONSTRUCTION OF SANITARY AND STORM SEWERS IN: SHELDON AVENUE BETWEEN ELLSWORTH AVENUE AND BMP-SB1 A POINT APPROXIMATELY 1,000-FEET EAST OF DELMAR AVENUE; SINCLAIR AVENUE BETWEEN ELLSWORTH AVENUE AND DEAD END; STAFFORD AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; VINELAND AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; CROWN AVENUE BETWEEN NIPPON AVENUE AND BELFIELD AVENUE; WOODROW ROAD BETWEEN POWELL STREET AND BELFIELD AVENUE; CASTOR PLACE BETWEEN HUGUENOT AVENUE AND ANACONDA STREET; SPERRY PLACE BETWEEN ANACONDA STREET AND EVERTON AVENUE; POWELL STREET BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; WALKER PLACE BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; DAHLIA STREET BETWEEN WOODROW ROAD AND SHIFT PLACE; HUGUENOT AVENUE BETWEEN RENSSELAER AVENUE AND SHIFT PLACE; CARDIFF STREET BETWEEN CASTOR PLACE AND ROSEDALE AVENUE; BOULDER STREET BETWEEN WOODROW ROAD AND ROSEDALE AVENUE; NIPPON AVENUE BETWEEN RENSSELAER AVENUE AND WOODROW ROAD; ANACONDA STREET BETWEEN SPERRY PLACE AND DELMAR AVENUE; BALLARD AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; DELMAR AVENUE BETWEEN RENSSELAER AVENUE AND ANACONDA STREET; CROWN PLACE BETWEEN CROWN AVENUE AND DEAD END; EVERTON AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; AND, HEENAN AVENUE BETWEEN VINELAND AVENUE AND DEAD END

INCLUDING WATER MAIN WORK

Together With All Work Incidental Thereto
BOROUGH OF STATEN ISLAND
CITY OF NEW YORK

ADDENDUM NO. 1

DATED: November 26, 2012

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)

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:"

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, VG/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.

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

ATTACH TO CONTRACT DOCUMENTS

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

PROJECT ID: SE818

FOR THE CONSTRUCTION OF SANITARY AND STORM SEWERS IN: SHELDON AVENUE BETWEEN ELLSWORTH AVENUE AND BMP-SB1 A POINT APPROXIMATELY 1,000-FEET EAST OF DELMAR AVENUE; SINCLAIR AVENUE BETWEEN ELLSWORTH AVENUE AND DEAD END; STAFFORD AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; VINELAND AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; CROWN AVENUE BETWEEN NIPPON AVENUE AND BELFIELD AVENUE; WOODROW ROAD BETWEEN POWELL STREET AND BELFIELD AVENUE; CASTOR PLACE BETWEEN HUGUENOT AVENUE AND ANACONDA STREET; SPERRY PLACE BETWEEN ANACONDA STREET AND EVERTON AVENUE; POWELL STREET BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; WALKER PLACE BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; DAHLIA STREET BETWEEN WOODROW ROAD AND SHIFT PLACE; HUGUENOT AVENUE BETWEEN RENSSELAER AVENUE AND SHIFT PLACE; CARDIFF STREET BETWEEN CASTOR PLACE AND ROSEDALE AVENUE; BOULDER STREET BETWEEN WOODROW ROAD AND ROSEDALE AVENUE; NIPPON AVENUE BETWEEN RENSSELAER AVENUE AND WOODROW ROAD; ANACONDA STREET BETWEEN SPERRY PLACE AND DELMAR AVENUE; BALLARD AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; DELMAR AVENUE BETWEEN RENSSELAER AVENUE AND ANACONDA STREET; CROWN PLACE BETWEEN CROWN AVENUE AND DEAD END; EVERTON AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; AND, HEENAN AVENUE BETWEEN VINELAND AVENUE AND DEAD END

INCLUDING WATER MAIN WORK

Together With All Work Incidental Thereto

BOROUGH OF STATEN ISLAND

ADDENDUM NO. 2

DATED: March 11, 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
- E. SPECIAL PROVISIONS

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 notified that the construction work will be phased into three separate areas. See Sheet No. 2 of the contract drawings.
- (10) The Contractor is advised that the Department of Design and Construction has contacted The United States Army Corps of Engineers pertaining to required permits needed to perform the proposed modification work on the specified outfall. No work shall commence until the above-mentioned permits have been obtained for this project by the City. It is the Contractor's responsibility to comply with the permit requirements.
- (11) The Contractor is advised that the Department of Design and Construction is in the process of filing permit application with the New York State Department of Environmental Conservation (NYSDEC), under the Environmental Conservation Law, Article 25 Tidal Wetlands. No work shall commence until the above-mentioned permit has been obtained for this project by the City. It is the Contractor's responsibility to comply with the permit requirements and to update the said permit. No separate or additional payment shall be made to the Contractor for updating of said permits. The cost of such work shall be deemed included in the prices bid for all contract items of work.
- (12) The Contractor is advised that the Department of Design and Construction is in the process of filing permit application with the New York State Department of State (NYS DOS); Costal Management Program Consistency Determination. No work shall commence until the above-mentioned permit has been obtained for this project by the City. It is the Contractor's responsibility to comply with the permit requirements.
- (13) The Contractor is advised that the Department of Design and Construction is in the process of filing permit application with the New York State Department of City Planning (NYSDCP); Water Revitalization Program, Consistency Determination. No work shall commence until the above-mentioned permit has been obtained for this project by the City. It is the Contractor's responsibility to comply with the permit requirements.

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 Mr. Noel Leon at (718) 802-3013.

- (2) NATIONAL GRID

There are NATIONAL GRID facilities in the area of construction. The Contractor shall notify NATIONAL GRID at least seventy-two (72) hours prior to the start of construction by contacting Mr. Neville Jacobs Jr. at (718) 963-5612 or at NEVILLE.JACOBS@us.ngrid.com.

(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. Joseph Maresca at (718) 977-8138.

(4) TIME WARNER CABLE OF NEW YORK CITY

There are TIME WARNER CABLE facilities in the area of construction. The Contractor shall notify TIME WARNER CABLE at least seventy-two (72) hours prior to the start of construction by contacting Mr. Marcello DeMaio at (917) 417-9552.

(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. Edward Durkin or Mr. Nick Varone at (212) 374-8194.

(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. John Kilcullen at (718) 390-2084.

(5) N.Y.C. TRANSIT AUTHORITY

- (a) 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.

Arrangements shall be made through:

Ms. Sarah Wyss
Director Of Short Range, Bus Service Planning (SRB)
New York City Transit
2 Broadway, Room B17.50
New York, N.Y. 10004
Telephone No. (646) 252-5517

sarah.wyss@nyc.com

- (4) **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.

- (5) **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 the Traffic Stipulations (three (3) pages) that are attached to the end of this addendum, and as directed by the Engineer.

- (6) **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.

- (7) **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.

- (8) **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.

(9) **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.

(10) **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.

(11) 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).

(12) Refer to Section 2.15 - Concrete, Subsection 2.15.3 - Modifications, Page II-26:

Delete from **Subsection 2.15.3, Reference Number D 16.8** 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.

(13) 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.

(14) Refer to Standard Sewer Specifications (August 1, 2009), Page IV-31:
Add the following new **Section 4.14:**

SECTION 4.14
OUTFALL AND TIDAL WETLANDS PERMITS

4.14.1 DESCRIPTION

Under this contract, at location(s) where outfall(s) are being constructed, and where work is being performed within area(s) of tidal wetlands, the Contractor shall be required to comply with the following permits while performing outfall work within navigable waters and/or work within tidal wetland areas.

- (A) A Protection Of Waters Permit from the New York State Department of Environmental Conservation (NYSDEC), under the Environmental Conservation Law (ECL), Title 5 of Article 15, implemented by 6NYCRR Part 608 - Protection Of Waters: (i) For The Excavation And Fill In Navigable Waters; and, (ii) Part 401 - Water Quality Certification; and,
- (B) A Tidal Wetlands Permit from the New York State Department of Environmental Conservation (NYSDEC), under the Environmental Conservation Law (ECL), Article 25, implemented by 6NYCRR Part 661 - Tidal Wetlands; and,
- (C) A Coastal Erosion Management Permit from the New York State Department of Environmental Conservation (NYSDEC), under the Environmental Conservation Law (ECL), Article 34, implemented by 6NYCRR Part 505 - Coastal Erosion Management; and,
- (D) A Department Of The Army Permit from the U.S. Army Corps of Engineers, under Code of Federal Regulations, Title 7 - Outfall Structures And Associated Intake Structures, implemented by: (i) Section 10 Of The Rivers And Harbors Act; (ii) Section 404 Of The Clean Water Act; and,
- (E) A Coastal Consistency Concurrence Certification from the New York State Department of State (NYSDOS).

To expedite the Permit process, the Department of Design and Construction has filed a joint application for (A), (B), (C), (D) and (E) above. As the application is being processed it shall be the Contractor's responsibility to comply with the requirements of the said permits. The Application ID number will be provided to the Contractor at the Preconstruction meeting.

The Contractor is advised that the provisions and requirements of the aforementioned permits shall govern all work, and the said provisions and requirements are hereby made a part of the sewer contract and the Contractor shall be responsible for strict adherence thereto.

No work shall commence until the above-mentioned Permits have been obtained for this project, and a copy of each permit transmitted to the Engineer.

The Contractor is advised that in order to comply with all the permits requirements, the Contractor will be required to submit maps, test data, etc. prior to the start of work. In order to expedite the processing of the permit and its requirements, the Contractor shall be required to obtain the services of an independent Wetland Specialist and, if required, an Environmental Scientist as herein described below in **Subsection 4.14.2** to perform this work and act as liaison with NYSDEC and NYCDEP.

4.14.2 QUALIFICATIONS

The Wetland Specialist and/or Environmental Scientist utilized to perform the work required under this section must have a minimum of three (3) years experience in work of this nature (obtaining Protection Of Waters, Tidal Wetlands and Department Of The Army Permits) and must have previous experience in working with the NYSDEC and the NYCDEP and have successfully obtained the type of permits required

under this contract. Prior to the start of work, the Contractor will be required to submit the name and resume of the Wetland Specialist and/or Environmental Scientist for approval.

4.14.3 NYSDEC PERMITS

The Wetland Specialist and/or Environmental Scientist shall prepare and submit all appropriate data and perform tasks as specified and required by the NYSDEC and/or Army Corps of Engineers.

The data to be prepared and submitted and the tasks to be performed shall include, but not be limited to the following:

- (1) The Wetland Specialist shall flag/stake the limits of the wetlands. These boundary locations are to be surveyed and plotted on a site plan whereon the adjacent areas shall then be drawn using the regulated wetland limit as a baseline. This site plan shall depict all existing conditions including descriptions of all vegetation.
- (2) An overlay of the site plan described above depicting the Contractor's proposed construction operations, including areas of equipment and material storage, and access roads.
- (3) Development of a sedimentation and erosion control plan including the location and specification for installing hay bales and siltation fencing between the construction right-of-way, staging areas, stockpiled materials and wetland adjacent areas.
- (4) Plans and specifications for the restoration/revegetation of all disturbed wetlands and regulated adjacent areas impacted by the Contractor's operations.
- (5) Upon completion of sewer, outfall and other related work on this project, the Contractor shall commence with the restoration/revegetation plan. All planting and revegetation shall be done under the supervision of the Wetland Specialist.
- (6) Should dewatering be required within the project area information regarding all dewatering activities must be submitted to and approved by NYSDEC in accordance with **Subsection 4.02.15**.
- (7) Wherever dewatering is extensive or of long duration and the cone of depression will extend to wetland areas the Wetlands Specialist shall develop and implement a program to monitor groundwater levels in the wetlands (e.g. install hand driven well points) and surface water levels in water bodies. Prior to construction, the Wetlands Specialist shall gather information on any rare, endangered or threatened species and base-line data on existing vegetation and wildlife. Monitoring of these parameters shall continue throughout the construction to assure no adverse impacts to habitat within wetlands and water bodies from dewatering.
- (8) The Wetland Specialist shall also submit a plan for mitigation should the monitoring of wetlands reveal any adverse effects to vegetation, etc.

4.14.4 SUBMISSION OF REPORT

The Wetland Specialist and/or Environmental Scientist will be required to submit two (2) copies of a Report (together with all appropriate data, maps, site plans and surveys, mitigation plan, reports, materials, designs and drawings) to the Infrastructure Engineering Support Unit for review and approval. Once approved the Wetland Specialist and/or Environmental Scientist shall submit in triplicate this report to both the NYSDEC and the NYCDEP. The Report should be bound and bear the name of the Contractor, NYSDEC Application Number and the Signature of the preparer. All drawings and maps shall be on sheets 27-inches by 40-inches and to scale not less than 1"=30'.

4.14.5 DAMAGES

The Contractor shall be responsible for and shall repair at no cost to the City any damage caused to the outfall location(s) and tidal wetland areas by inadequate or improper designs and construction operations by the Contractor.

4.14.6 AREAS TO BE LEFT CLEAN

The Contractor shall remove all material and equipment from the outfall location(s) and area(s) of tidal wetlands after completion of work at the site(s). The locations and areas shall be left in a clean and neat condition in accordance with the requirements and directions of the Engineer, the NYSDEC and the Army Corps of Engineers.

4.14.7 PAYMENTS

No additional or separate payment will be made for any work described herein. The costs for all labor, materials, equipment, permit fees, samples, tests, reports, services and insurance required or necessary to perform all the work described herein shall be deemed included in the price bid for all items of work.

(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 5.11.1**, 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 5.11 - Outfall Structures, Subsection 5.11.4 - Price To Cover, Page V-95:**

Add the following to **Subsection 5.11.1**:

Also, included in the bid price for the outfall structure shall be the cost of all labor, materials and equipment necessary and required to furnish, deliver and place Permanent Steel Sheet Piling Bulkheads; Stone Ballast; Riprap; Slope Pavements; Grouted Stone Pavements; decking; flap gate; signs; hand railing; cap for piles; etc. within outfall limits, as shown, specified or ordered. No separate or addition payment will be made for this work.

(19) **Refer** to **Section 5.11 - Outfall Structures, Subsection 5.11.5 - Separate Payment**, Page V-95:

Delete from **Subsection 5.11.1**, the first paragraph in its entirety:

Substitute the following:

The Contractor is notified that payment for the cost of furnishing, delivering and installing of Timber Piles; Structural Steel H-Piles; and Concrete Filled Steel Pipe Piles within outfall limits shall be made under the unit price bid for the respective bid items.

(20) **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.

(21) **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.

(22) **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)**.

(23) **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) In Sinclair Avenue between Ellsworth Avenue Huguenot Avenue; Vineland Avenue between Huguenot Avenue and Nippon Avenue; Powell Street between Sinclair Avenue and Woodrow Road; Walker Place between Sinclair Avenue and Woodrow Road; Dahlia Street between Woodrow Road and Shift Place; Sheldon Avenue between Nippon Avenue and Dead End; Sinclair Avenue between Nippon Avenue and Delmar Avenue; Stafford Avenue between Nippon Avenue and Heenan Avenue; Nippon Avenue between Sheldon Avenue and Woodrow Road; Delmar Avenue between Rensselaer Avenue and Woodrow Road; Castor Place between Huguenot Avenue and Anaconda Street; Boulder Street between Castor Place and Rosedale Avenue; Ballard Avenue between Woodrow Road and Sperry Place; Everton Avenue between Woodrow

Road and Sperry Place; and, Sperry Place between Anaconda Street and Delmar Avenue, the restoration shall be as follows:

- (a) The entire width of existing roadway and six (6) inches of existing roadway subgrade shall be removed from **curb to curb** or **edge to edge** and the permanent restoration over the **entire width of roadway** shall consist of six (6) inches of Asphaltic Macadam Pavement on a sub-base course of six (6) inches of Select Granular Material (Material D only) on Plastic Filter Fabric. The above areas are approximate the actual final areas of restoration shall be determined by the Engineer.
- (2) In Heenan Avenue between Stafford Avenue and Vineland Avenue requiring water main work only, the restoration shall be as follows:
 - (a) The permanent restoration over the **trench width and cutbacks only** shall consist of a top course of one and one-half (1-1/2) inches of asphaltic concrete wearing course on a base course of a minimum of four and one-half (4-1/2) inches of binder mixture, or a top course of one and one-half (1-1/2) inches of asphaltic concrete wearing course on a minimum of one and one-half (1-1/2) inches of binder mixture on a base course of a minimum of six (6) inches of concrete, to match the existing pavement as directed by the Engineer.
 - (3) In all other areas, the restoration shall be as follows:
 - (a) The permanent restoration over the **trench width and cutbacks only** shall consist of a top course of one and one-half (1-1/2) inches of binder mixture on a base course of a minimum of four and one-half (4-1/2) inches of binder mixture, or a top course of a minimum of three (3) inches of binder mixture on a base course of a minimum of six (6) inches of high-early strength concrete, to match the existing pavement as directed by the Engineer.
 - (b) Finally an overlay of two (2) inches of asphaltic concrete wearing course shall be installed over the entire width of the roadway from **curb to curb** or **edge to edge** of existing roadway.
 - (4) The following requirements shall apply:
 - (a) Before the top course is installed, an additional width of asphalt beyond the edge of new base course shall be saw-cut and removed from all edges of trenches to a depth to accommodate the specified top course and the entire area restored. This additional removal shall be in accordance with paragraph (b) below.
 - (b) Pavement excavation along with saw cutting of pavements for sewer and water main trenches shall be in accordance with **Section 5.30 - Pavement Excavation** of both the Standard Sewer Specifications and the Standard Water Main Specification.
 - (c) At locations requiring the installation of a concrete base course, a reflective cracking membrane shall be installed over joints prior to restoration, the cost of which shall be deemed included in the prices bid for all pavement restoration items. Additionally, appropriate pavement keys as described below shall be used.
 - (d) Pavement keys **Type B-1** shall be used to insure a desired four (4) inch curb reveal (two and one-half (2-1/2) inch absolute minimum). Pavement key **Type A** shall be used in all intersections. Both keys are to be per Bureau of Highways Operations Specifications and Standard Details of Construction.

- (e) Unless otherwise specified, the cost for tack coating, eradication of temporary roadway markings and adjustment of city-owned castings shall be deemed included in the prices bid for all pavement restoration items.
- (f) Payment for placement of temporary pavement marking shall be made under Item No. 6.49 - TEMPORARY PAVEMENT MARKINGS (4" WIDE).
- (g) Payment for removal of existing pavement markings shall be made under Item No. 6.53 - REMOVE EXISTING LANE MARKINGS (4"WIDE).
- (h) Payment for removal and permanent placement of pavement marking with thermoplastic reflectorized pavement markings (crosswalk and lane dividers) shall be made under Item No. 6.44 - THERMOPLASTIC REFLECTORIZED PAVEMENT MARKINGS (4" WIDE).
- (i) Payment for stripping or milling of the pavement shall be made under Item No. 6.75 - GRINDING EXISTING ASPHALTIC CONCRETE WEARING COURSE.
- (j) Payment for pavement restoration shall be made under the following items:

<u>Item No.</u>	<u>Item</u>	<u>Payment Description</u>
4.01 RAG	Asphaltic Macadam Pavement, 6" Thick	(For entire width of roadway restoration.)
4.02 AB-R	Asphaltic Concrete Wearing Course, 1-1/2" Thick	(For asphaltic concrete wearing course top course when <u>no</u> overlay is required.)
4.02 AF-R	Asphaltic Concrete Wearing Course, 2" Thick	(For 2" asphaltic concrete wearing course overlay from curb to curb or edge to edge.)
4.02 CA	Binder Mixture	(For binder mixture base course over trenches and cutbacks; binder mixture top filler course under asphaltic concrete wearing course when <u>no</u> overlay is required; binder mixture top course when overlay is required; binder mixture in Type A and B Keys; and binder mixture to fill in roadway depressions and to provide a leveling course prior to overlay where ordered.)
4.04 H	Concrete Base For Pavement, Variable Thickness For Trench Restoration, (High-Early Strength)	(For concrete base course over trenches and cutbacks.)
6.67	Subbase Course, Select Granular Material	(For 6" sub-base course under entire width of roadway restoration.)
6.68	Plastic Filter Fabric	(For placement under subbase course.)

(24) 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 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'.

E. SPECIAL PROVISIONS

The following shall become a part of and apply to the contract:

- (A) VEHICLES. The Contractor shall be required to furnish one (1) vehicle to be used by New York City 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 vehicle(s), or associated costs. All costs shall be deemed to be included in all scheduled items.

The Contracted vehicle(s) 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 vehicle(s) 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 five (5) business days with a comparable vehicle.

The vehicle(s) shall be provided for the entire duration of this Contract, and shall be returned to the Contractor within thirty (30) days after final acceptance of work or twelve (12) months after substantial completion, whichever comes first. Contractor owned/leased vehicle(s) provided pursuant to this contract shall remain the property of the Contractor/Leaser throughout the contract period, and 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(s) to be registered as an official City of New York vehicle(s). The Contractor shall provide insurance for vehicle(s) as set forth in Schedule "A".

Within five (5) business days of receipt of notice to provide specified vehicle(s), the Contractor shall make the vehicle(s) available for inspection by Fleet Administration. Upon determination by Fleet Administration that the vehicle(s) 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.

- (B) 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.

END OF ADDENDUM NO. 2

This Addendum consists of twenty-six (26) pages plus three (3) pages of attachments.



Department of Transportation

JANETTE SADIK-KHAN, Commissioner

OCMC TRAFFIC STIPULATIONS

12.04.12

OCMC FILE NO: REC-12-307
CONTRACT NO: SE-818
PROJECT: CONSTRUCTION OF STORM, SANITARY SEWERS, WATER MAINS AND APPURTENANCES
LOCATION(S): VARIOS LACATIONS IN STATEN ISLAND

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:

AMENDMENT # 1

A. SPECIAL STIPULATIONS

- EMBARGOES - A SCHOOL CONSTRUCTION EMBARGO WILL APPLY TO THE LOCATIONS: Castor Place between Huguenot Avenue and Boulder Street, Boulder Street between Woodrow Road and Castor Place, Woodrow Road between Huguenot avenue and Boulder Street, Huguenot avenue between Castor Place and Woodrow Road. Work may occur only when school is not in a session from July 1 to September 1 of each year of the contract.
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).
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.
METERS - THE CONTRACTOR MAY NOT REMOVE OR RELOCATE PARKING METERS WITHOUT FIRST OBTAINING APPROVAL FROM NYCDOT PARKING METER DIVISION AT 718-894-8651.
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.
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.
ENHANCED MITIGATIONS
- "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. THE CONTRACTOR OR AGENCY PROVIDING PUBLIC OUTREACH SHALL POST AND MAINTAIN ADVISORY SIGNS A MINIMUM OF 48-HOURS PRIOR TO CHANGING EXISTING PARKING REGULATION SIGNS TO APPROVED TEMPORARY CONSTRUCTION PARKING REGULATION SIGNS. THE ADVISORY SIGNS SHOULD BE POSTED ON ALL POLES AND DRIVE RAILS ON THE SEGMENT AFFECTED INDICATING THE DATE OF THE CHANGE, THE NEW REGULATIONS AND A TELEPHONE NUMBER TO OBTAIN INFORMATION.
- COMMUNITY OUTREACH SHALL BE PROVIDED FOR THE DURATION OF THE PROJECT.

B. MAINTENANCE AND PROTECTION OF TRAFFIC

STORM AND SANITARY SEWERS WORKS

- SHELDON AVENUE BETWEEN ELLSWORTH AVENUE AND DELMAR AVENUE, AND 400 FT. EAST OF DELMAR AVENUE
SINCLAIR AVENUE BETWEEN ELLSWORTH AVENUE AND DEAD END, EAST OF DELMAR AVENUE
STAFFORD AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE
VINELAND AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE
CROWN AVENUE BETWEEN NIPPON AVENUE AND BELFIELD AVENUE
CASTOR PLACE BETWEEN BOULDER AVENUE AND ANACONDA STREET
ANACONDA STREET BETWEEN DELMAR AVENUE AND SPERRY PLACE
SPERRY PLACE BETWEEN ANACONDA STREET AND BALLARD AVENUE
POWELL STREET BETWEEN SINCLAIR AVENUE AND WOODROW ROAD

1 of 3

OCMC FILE NO: REC-12-307
CONTRACT NO: SE-818
PROJECT: CONSTRUCTION OF STORM, SANITARY SEWERS, WATER MAINS AND APPURTENANCES

WALKER PLACE BETWEEN SINCLAIR AVENUE AND WOODROW ROAD
NIPPON AVENUE BETWEEN RENSSELAIR AVENUE AND WOODROW ROAD
DELMAR AVENUE BETWEEN RENSSELAIR AVENUE AND WOODROW ROAD
DELMAR AVENUE BETWEEN WOODROW ROAD AND ANACONDA STREET
EVERTON AVENUE BETWEEN ROSEDALE AVENUE AND WOODROW ROAD
CROWN PLACE BETWEEN CROWN AVENUE AND DEAD END
HEENAN AVENUE BETWEEN STAFFORD AVENUE AND DEAD END
CASTOR PLACE BETWEEN HUGUENOT AVENUE AND BOULDER STREET
BOULDER STREET BETWEEN WOODROW ROAD AND CASTOR PLACE

- Work hours shall be as follows: 7:00 AM to 6:00 PM, Monday through Friday,
- The contractor shall maintain 1- 12' lane for local and emergency traffic all times.
- In areas where the roadway does not allow for an emergency lane, the contractor's work shall not exceed 100 linear feet so that the N.Y. Fire Department/EMS and the N.Y. Police Department can have access to the local residents barricaded by the work area. The work area shall include the excavated trench, equipment and stored materials necessary for the work.
- It will be the contractor's responsibility to inform N.Y. Fire Department/EMS, the N.Y. Police Department and the local Community Board daily in writing the location of the work area and the layout of the emergency access from either side of the work area. This notification shall be specific by the house number where possible. Representatives of the local N.Y. Fire Battalion, the N.Y. Police Department and the local Community Board shall sign such notice daily.
- The contractor shall provide and maintain either a 5 foot clear sidewalk or a 5 foot protected walkway in the roadway for pedestrian access at all times.

Note:

- A school Construction Embargo will apply to the location: **Castor Place between Huguenot Avenue and Boulder Street, Boulder Street between Woodrow Road and Castor Place.** Work may occur only when school is not in a session from July 1 to September 1 of each year of the contract.

WOODROW ROAD BETWEEN POWELL STREET AND BOULDER STREET
HUGUENOT AVENUE BETWEEN SINCLAIR AVENUE AND SHIFT PLACE

- Work hours shall be as follows: 7:00 AM to 6:00 PM, Monday through Friday,
- The contractor shall maintain 2-11' lanes for traffic, 1 lane in each direction (at all times).
- The contractor shall provide and maintain either a 5 foot clear sidewalk or a 5 foot protected walkway in the roadway for the pedestrian access at all time.
- A School Construction Embargo will apply to **Woodrow Road between Huguenot Avenue and Boulder Street, Huguenot Avenue between Woodrow Road and Shift Place.** Work may occur only when school is not in a session from July 1 to September 1 of each year of the contract.

HUGUENOT AVENUE BETWEEN RENSSELAIRE AVENUE AND SINCLAIR AVENUE
WOODROW ROAD BETWEEN BOULDER STREET AND BELFIELD AVENUE

- Work hours shall be as follows: 7:00 AM to 6:00 PM, Monday through Friday,
- The contractor shall maintain one 12-foot lane for 2 ways thru traffic with flaggers at each end of work zone during working hours and maintain 2 lanes for traffic, 1 lane in each direction after working hours.
- The contractor shall provide and maintain either a 5 foot clear sidewalk or a 5 foot protected walkway in the roadway for the pedestrian access at all time.

INTERSECTION OF HUGUENOT AVENUE AND WOODROW ROAD

- Work hours shall be as follows: 7:00 AM to 6:00 PM, Monday through Friday,
- The contractor shall maintain 2-11' lanes for traffic, 1 lane in each direction on Huguenot Avenue and on Woodrow Road.
- A School Construction Embargo will apply to the intersection mentioned above. Work may occur only when school is not in a session from July 1 to September 1 of each year of the contract.

Note: at all other intersections should they be fully opened at the end of the day.

OCMC FILE NO: REC-12-307
CONTRACT NO: SE-818
PROJECT: CONSTRUCTION OF STORM, SANITARY SEWERS, WATER MAINS AND APPURTENANCES

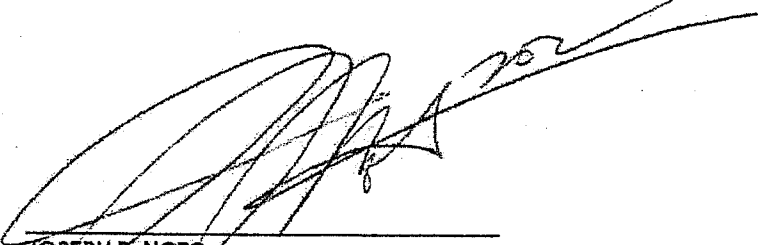
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Page 3 of 3

WATER MAINS WORK

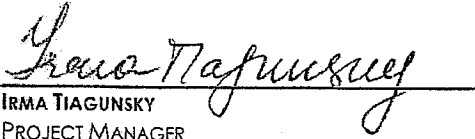
- Work hours and stipulations at the above locations, school embargo regulations shall be the same as those listed for sewers work with the exceptions- full width of roadway shall be opened to traffic when site is unattended.

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 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.
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. THE PERMITEE IS NOT AUTHORIZED TO ENTER, OCCUPY OR USE ANY PUBLICLY-OWNED OR PRIVATELY OWNED, NON-PAVED, LANDSCAPE OR NON-LANDSCAPED LOCATION WITHOUT SPECIFIC WRITTEN PERMISSION. WHEN THE LOCATION IS WITHIN THE RIGHT-OF-WAY OF A LIMITED-ACCESS ARTERIAL HIGHWAY, WRITTEN APPROVAL FROM THE NYCDOT OCMC-HIGHWAYS IS REQUIRED. WHEN THE LOCATION IS WITHIN THE RIGHT-OF-WAY OF A PUBLIC STREET OR PUBLIC PARK, WRITTEN APPROVAL FROM THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION OR NEW YORK CITY DEPARTMENT OF PARKS AND RECREATION IS REQUIRED. WHEN THE LOCATION IS WITHIN THE RIGHT-OF-WAY OF ANY OTHER JURISDICTION SUCH AS PRIVATE PROPERTY, STATE, FEDERAL ETC., IT IS THE PERMITEE'S RESPONSIBILITY TO DETERMINE THE PROPERTY OWNER AND OBTAIN THE WRITTEN APPROVAL.
5. THE PERMITEE SHALL ADHERE TO THE NYCDOT BUREAU OF BRIDGES' SPECIAL PROVISIONS FOR LANDSCAPE PROTECTION, MAINTENANCE AND RESTORATION, ITEMS 1.18.15 THROUGH 1.18.19, WHENEVER AND WHEREVER ANY OF THE PERMITEE'S ACTIVITIES OCCUR WITHIN A LIMITED ACCESS ARTERIAL HIGHWAY RIGHT - OF - WAY.
6. 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.
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 THE ENGINEER-IN-CHARGE AND THE OCMC-STREETS.
8. 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.
9. 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.
10. THE CONTRACTOR MUST COMPLY WITH ALL CONSTRUCTION EMBARGOS ISSUED BY THE NYCDOT INCLUDING THE HOLIDAY EMBARGO.



JOSEPH F. NOTO
EXECUTIVE DIRECTOR
OCMC-STREETS



IRMA TIAGUNSKY
PROJECT MANAGER
OCMC-STREETS

ATTACH TO CONTRACT DOCUMENTS

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

PROJECT ID: SE818

FOR THE CONSTRUCTION OF SANITARY AND STORM SEWERS IN: SHELDON AVENUE BETWEEN ELLSWORTH AVENUE AND BMP-SB1 A POINT APPROXIMATELY 1,000-FEET EAST OF DELMAR AVENUE; SINCLAIR AVENUE BETWEEN ELLSWORTH AVENUE AND DEAD END; STAFFORD AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; VINELAND AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; CROWN AVENUE BETWEEN NIPPON AVENUE AND BELFIELD AVENUE; WOODROW ROAD BETWEEN POWELL STREET AND BELFIELD AVENUE; CASTOR PLACE BETWEEN HUGUENOT AVENUE AND ANACONDA STREET; SPERRY PLACE BETWEEN ANACONDA STREET AND EVERTON AVENUE; POWELL STREET BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; WALKER PLACE BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; DAHLIA STREET BETWEEN WOODROW ROAD AND SHIFT PLACE; HUGUENOT AVENUE BETWEEN RENSSELAER AVENUE AND SHIFT PLACE; CARDIFF STREET BETWEEN CASTOR PLACE AND ROSEDALE AVENUE; BOULDER STREET BETWEEN WOODROW ROAD AND ROSEDALE AVENUE; NIPPON AVENUE BETWEEN RENSSELAER AVENUE AND WOODROW ROAD; ANACONDA STREET BETWEEN SPERRY PLACE AND DELMAR AVENUE; BALLARD AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; DELMAR AVENUE BETWEEN RENSSELAER AVENUE AND ANACONDA STREET; CROWN PLACE BETWEEN CROWN AVENUE AND DEAD END; EVERTON AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; AND, HEENAN AVENUE BETWEEN VINELAND AVENUE AND DEAD END

INCLUDING WATER MAIN WORK

**Together With All Work Incidental Thereto
BOROUGH OF STATEN ISLAND**

ADDENDUM NO. 3

DATED: March 13, 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.

GAS COST SHARING (EP-7) STANDARD SPECIFICATIONS

**EP-7 GAS COST SHARING
STANDARD SPECIFICATIONS**

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I - NOTICE TO ALL BIDDERS; GAS COST SHARING WORK

All prospective bidders are hereby advised that, pursuant to the "Gas Facility Cost Allocation Act", ("the Act"), the City of New York has entered into an agreement ("the Agreement") with the gas companies (Con Edison or National Grid (formerly KeySpan Energy Delivery)) operating in their respective areas of the City to "share" the cost of facility relocation and/or support and protection of facilities disturbed by proposed water and/or sewer and related City work specified in this contract. Therefore, bid items, specifications and estimated quantities for the incremental costs of support and protection of certain gas facilities have been included in this contract. The low bid for this contract shall be determined by examining each bid for all work to be performed under this contract including any work of support and protection of gas facilities to be performed. The Contractor shall not seek additional compensation from gas companies except as specifically set forth in its contract.

II - GENERAL PROVISIONS; GAS COST SHARING WORK

1. General:

The Contractor shall perform City work with interferences from existing live and abandoned gas facilities. This shall be defined as utility work. Therefore, this contract includes bid items, specifications and estimated quantities designed to fully compensate him/her for the incremental costs of supporting, protecting, providing accommodations and, avoiding disturbing gas facilities located in the streets shown on the contract drawings. In the event that any other provisions of this contract related to gas facilities (or private utilities) conflict with these provisions, these provisions shall supersede and govern all work related to gas facilities owned by the companies operating in the project area. All utility work, as defined in these specifications, including changes and additions thereto shall be paid solely by the City except when specified otherwise in this contract. Contractor hereby agrees that the facility operator shall not be liable to pay him/her for any work performed including extra utility work. Contractor agrees that its bid prices include all compensation for loss of productivity and efficiency, idle time, delays (including any delays occasioned by negotiation of a contract change), change in operations, mobilization, demobilization, remobilization, added cost or expense, lost of profit, other damages or impact costs that may be suffered by or because of utility work, or the presence of gas facilities in the proximity of City work and that it will not seek additional compensation for these items. All disputes shall be resolved as specified in the contract.

Pursuant to the Act, Agreement, and the New York City Administrative Code, the gas company(ies) has been directed by the Commissioner and is required to perform all maintenance, repairs, replacement, shifting, alteration, relocation, and/or removal work that are not part of this contract. By having bid on this contract, the Contractor understands and agrees that the Commissioner has preasserted any right the City has to require, including the issuance of any directives or so called "order outs" under the New York City Administrative Code, any or all gas companies to maintain, repair, replace, protect, support, shift, alter, relocate, and/or remove all gas facilities that are about to be disturbed by the City contract work. The issuance of additional such directives during the performance of the contract work, where necessary in the sole judgment of the Commissioner, shall be initiated by such Commissioner as set forth in the relevant sections of the Act and Agreement. Contractor further agrees to insert such requirements as set forth herein above into any contracts with its approved subcontractors so that its subcontractors also understand and agree to such contract requirements.

2. Gas Interferences And Accommodations:

During the performance of sewer and water main work funded by the New York City Department of Environmental Protection (NYCDEP), as instructed by the Engineer, the use of any applicable contract bid item is allowed in order to resolve and accommodate all gas facilities interferences with such City work, including the removal of contaminated soil in associated trench excavation. This is in addition to the specified EP-7 bid items in the contract. Payment for such accommodation shall be funded by EP-7 bid item "UTL-GCS-2WS - GAS INTERFERENCES AND ACCOMMODATIONS" (F.S. Fixed Sum). The value of such accommodation shall be computed by multiplying the appropriate unit prices bid to the quantity of work performed, as determined by the Engineer, and applying the total amount thus to be paid

to EP-7 bid item "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:

These items shall not be paid for: gas services crossing unsheeted water main trench excavation; abandoned gas main/services identified by facility operator; gas mains/services crossing trench excavations for fire hydrant branch connections pipes, catch basins and/or chutes (sewer drain pipe), house sewer and/or water services; gas facilities encroaching any face of excavation for sewer and/or water construction, all of which are covered under other contract sections. Also this item shall not be paid for new gas mains and services crossing water trenches when trenching for such new facilities has been performed by the Contractor in common with trench excavation for City work (overlapping trench limits). The cost of supporting and protecting such gas facilities crossings shall be deemed included in the cost of trench excavation for the new gas facilities. This payment restriction shall apply even if such common trench gas excavation is not part of the contract. The prices bid for items covered by this section represent full compensation to Contractor to completely perform the work described. No other bid items shall be combined with these items in order to pay for gas main and/or services crossing excavations specified herein.

5. Method Of Payment:

Each (Ea.) gas facility crossing trench excavation as described in these specifications shall be counted for payment.

6. Price To Cover:

The cost of timber/steel supports installed for gas facilities shall be included in the bid price. The bid price for each crossing shall also cover all additional supervision, labor, material (except those provided by the facility operator), equipment and insurance necessary to completely maintain the gas facilities without disruption of service to the customers and in accordance with contract plans, specifications and facility operator standards. The price shall also include: changes of method of operations; sheeting modifications where necessary to accommodate the gas facilities crossings; installation and removal of water pipe under gas facilities (so called "snaking"); extra care during excavation (including hand excavation under existing single and multiple gas facilities); extra backfilling and compaction around, over and under gas facilities; installation and removal of sheeting around gas facilities; associated maintenance and protection of traffic; barricades; and traffic plates that may be required to temporarily close and/or complete the work.

SECTION 6.02 - Extra Excavation For The Installation Of Catch Basin Sewer Drain Pipes With Gas Interferences.

1. Description:

Under this item, the Contractor shall provide all labor, materials, equipment, insurance, and incidentals for the extra excavation associated with the installation of catch basin sewer drain pipes (chute) under gas facilities of various sizes crossing the trench excavation at various angles and depth at the locations shown in the contract documents and also, for the support and protection of these facilities during associated excavation and backfill operations. The gas company operating in the area, (facility operator), owns these facilities.

2. Method Of Measurement:

The bid price shall be per location (Each) where extra excavation is required when catch basin sewer drain pipes are installed at an upstream invert depth lower than four (4) feet (up to a maximum of six (6) feet) from the proposed pavement grade because the bottom faces of interfering gas mains and appurtenances are located at a depth greater than three (3) foot eight (8) inches from proposed pavement surface (See "Gas Cost Sharing Work Standard Sketch No. 4").

3. Method Of Construction:

Incremental cost responsibility for chute excavation is determined by the first private facility encountered starting from catch basin structure proper and that prevents the installation of the chute connection at an upstream cover less than or equal to three (3) feet or any other minimum cover required to avoid City facilities (e.g. water, sewer, etc.) as directed by the Resident Engineer.

4. Payment Restrictions:

This item shall not apply and related bid item shall not be paid in cases where:

- A. Upstream invert chute is more than six (6) feet deep because of gas facilities.
- B. Chute cannot be installed above existing gas facilities because of interferences with other private facilities that are not otherwise covered under this contract, regardless of upstream invert depth.

The above cases shall be at no cost to the City, but shall be a matter of adjustment between the Contractor and the facility operator(s).

5. Price To Cover:

The bid price shall cover the additional cost of all additional supervision, labor, materials, equipment and insurance, to complete the installation of catch basins and associated sewer connections in accordance with the contract plans and specifications. The price shall include: excavation by hand around and under single and multiple gas facilities; locating, supporting and protecting gas facilities; backfilling and all other items necessary to perform all work incidental thereto including: installation and removal of drain pipe under gas facilities ("snaking"); widening of trenches to facilitate the above work; subsequent additional

backfill and pavement restoration; modifying precast catch basin window to accommodate connection; changing sheeting method and configuration to accommodate gas facility crossings; maintenance and protection of traffic; barricades; and installation of traffic plates that may be required to temporarily close and/or complete the work. The price shall not include removal of ledge rock and/or excavation of boulders in open cut.

SECTION 6.02.1 - Extra Excavation For The Installation Of Catch Basin Sewer Drain Pipes With Upstream Inverts Greater Than Six (6) Feet.

1. Description:

Under this item, the Contractor shall provide all labor, materials, equipment, insurance and incidentals for the extra excavation of catch basin chutes where the upstream invert is greater than six (6) feet under gas facilities of various sizes crossing the trench excavation at various angles and depth at the locations shown in the contract documents or as determined by field conditions and also, for the support and protection of these facilities during the associated excavation, sheeting and backfilling operations.

2. Method Of Measurement:

The bid price shall be per location (Each) where extra excavation and sheeting is required when the catch basin chute installed at an upstream invert depth lower than six (6) feet from the proposed pavement grade because the bottom faces of the interfering gas mains and appurtenances are located at a greater depth than three foot eight inches from the proposed pavement surface only.

3. Method Of Construction:

Incremental cost responsibility for chute excavation is determined by the first private facility encountered during such excavation when initiated from catch basin structure and that prevents the installation of the chute at an upstream cover less than or equal to three (3) feet or any other cover required to avoid City facilities as directed by the Resident Engineer.

4. Payment Restriction:

This item shall not apply and related bid item shall not be paid in cases where:

Upstream invert chute is less than or equal to six (6) feet deep because of gas facilities. Section 6.02 shall be paid.

5. Price To Cover:

The bid price shall cover the additional cost of all supervision, labor, materials, equipment and insurance to complete the installation of catch basin and associated sewer connections in accordance with the contract plans and specifications. The price shall include: excavation by hand around and under single and multiple gas facilities; locating, supporting and protecting gas facilities incidental thereto; widening of trenches to facilitate the above work; subsequent additional backfilling and pavement restoration; modifying pre-cast basin window to accommodate connection; the installation of catch basin with deeper sumps as specified; additional sheeting and changes in sheeting method and configuration to accommodate gas facility crossings; maintenance and protection of traffic; barricades; and installation of traffic plates that may be required to temporarily close and/or complete the work.

SECTION 6.03 - Removal Of Abandoned Gas Facilities. All Sizes.

1. Description:

Under this section the Contractor shall provide all labor, materials, equipment, insurance and, incidentals required for the removal of abandoned gas mains, services, or appurtenances thereof, located within the street shown on the contract plans, owned by gas company operating in the project area (facility operator), used or to be used for or in connection with or to facilitate the conveying, transportation, distribution or

furnishing of gas (natural or manufactured or mixture of both) for light, heat, or power, but does not include property used solely for or in connection with business of selling, distributing or furnishing of gas in enclosed containers. Such removal shall include only abandoned gas facilities that interfere with (i.e. cause additional work) City work.

2. Determination Of Operating Status Of Gas Facilities:

The Contractor shall notify facility operator, as required by New York State Industrial Code 753. Gas facilities shall not be removed without the approval of the facility operator whose authorized representative shall certify in writing (specific facility or area wide facilities certification) and in a timely manner acceptable to the Resident Engineer that abandoned facilities are free of combustible gas and any other environmental contaminants prior to removal. The Resident Engineer shall rely on facility operator's certification. The facility operator may request the excavation of test pits (See Section 6.07) for this determination ahead of City work and, Contractor shall provide safe access, facilitate and permit facility operator to enter test pit excavations for the purpose of testing gas facilities to be removed by the Contractor. However, facility operator may prefer to make this test during performance of City work, in order to issue the above certification. This shall be permitted provided that it is agreed that additional costs, if any resulting from this choice shall be a matter of adjustment between the Contractor and facility operator only, and at no cost to the City.

3. Restrictions:

The facility operator shall be solely responsible for its contaminated gas facilities, surrounding contaminated soil and their disposal and abatement procedures, unless contract bid items are applicable and provided for such work. In such cases, the quantity removed shall be charged to EP-7 bid item "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 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. Shheeting shall be used when depth of excavation exceeds five (5) feet. The sheeting required shall be furnished and installed in full compliance with the State of New York and Federal Safety Codes requirements and as specified in contract, whichever is more stringent. Care shall be taken that no existing gas facilities or other structures are broken or damaged. All broken or damaged facilities shall be reported immediately to facility operator who shall decide whether such facilities shall be repaired or replaced by company forces or by City contractor and in conformance with "General Provisions; Gas Cost Sharing Work Paragraph No. 9". Contractor shall excavate all material encountered, including large masses of concrete, cemented masonry and boulders, as directed by the Resident Engineer. Any type of excavation protection used, shall satisfy the following:

- (a) Industrial Code Rule 753.
- (b) Prevent injury to workers and the public, and avoid damage to existing water, sewer, and gas pipes or other structures, and to pavements and their foundations, through caving or sliding of the banks of the excavation.

Should it become necessary, as determined by the Resident Engineer, to enlarge any test pit in any dimension after sheeting has been placed, the Contractor shall remove portions of the sheeting, as necessary, enlarge the test pits as directed, and replace the sheeting without additional compensation for this work other than for the additional volume of material excavated.

B. Maintenance Of Test Pits: Excavated test pits shall be maintained free of debris and kept dry by the Contractor in order to permit the inspection and measurements and to determine the locations of facilities. In order to accomplish this, Contractor shall, upon completion of excavation and placement of sheeting (if depth greater than five (5) feet), furnish and install adequate steel plates and posting

over the excavated pits and shall temporarily remove all equipment debris and workers, and relocate barricades in order to open the full width of street to traffic during nonworking hours. The Contractor shall then, at no additional cost, relocate such barricades, barrels, cones and other warning devices and remove steel plates, as and when directed by the Resident Engineer to facilitate the inspection of exposed facilities. When work is being performed and the pits are not covered with steel plates, the Contractor shall provide complete and safe access to the test pits as may be required, and he shall provide construction barricades and maintain traffic at all times as shown or as directed by the Resident Engineer. Upon completion of test pit inspection by the Resident Engineer, the pit shall be backfilled by the Contractor as specified in contract, except that backfill material shall conform to contract specifications for such purpose.

- C. Pavement And Sidewalk Restoration: After backfilling is completed, the Contractor shall construct a temporary pavement consisting of a minimum of four (4) inches thick asphaltic concrete mixture in roadway areas or a two (2) inches thick asphaltic concrete mixture in sidewalk areas in order to maintain existing pedestrian and vehicular traffic. This temporary pavement shall be maintained until permanent pavement and sidewalk replacement is constructed as specified in contract.

3. Measurements:

The quantity to be measured for payment shall be the number of cubic yards of material removed from within the limits of the pit dimensions as directed by the Resident Engineer. The volume occupied by existing pipes or other structures remaining within the maximum payment lines will not be deducted from the total volume measured except, where the cross sectional area of these facilities exceeds four (4) square feet. As determined by the Resident Engineer, the quantity measured for payment may be proportionate to a fair and reasonable estimate of gas responsibility in the total volume excavated.

4. Price To Cover:

The contract price bid per cubic yard for test pits shall cover all additional costs of labor, material, insurance, equipment, appliances and incidentals required to excavate test pits, including removal and disposal of excavated materials, sheeting, steel plating, backfill, compaction and temporary pavement and sidewalk restoration all in accordance with the specifications and as directed by the Resident Engineer. The price shall also include the cost of providing safe access to the excavation by facility operator for the performance of certain test to determine operating status of gas facilities prior to City work. The price shall also include support and protection of all gas facilities crossing excavation, paralleling and/or encroaching any face of excavation.

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

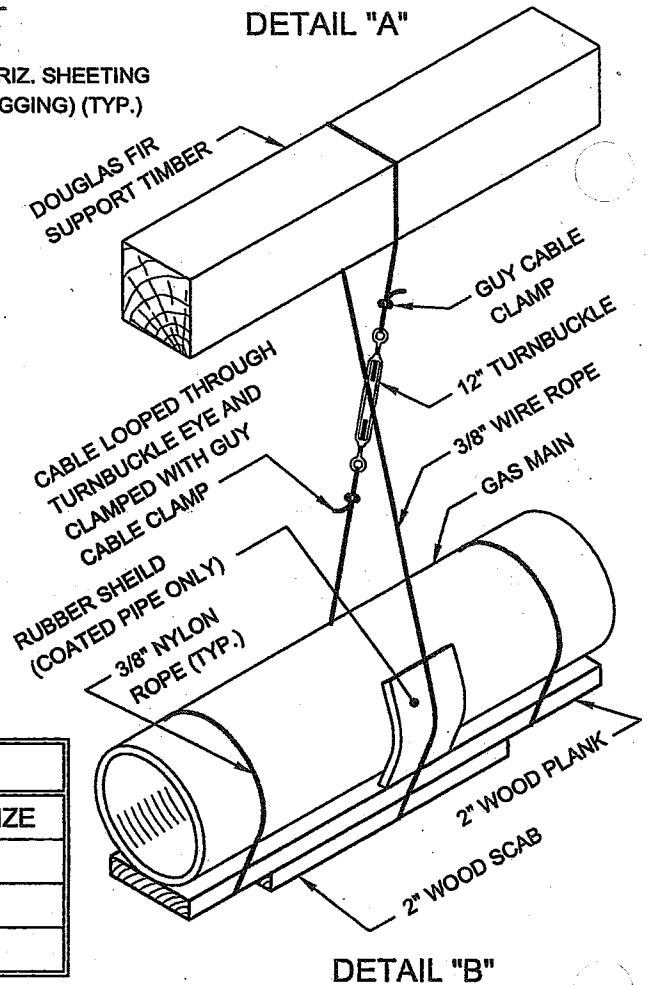
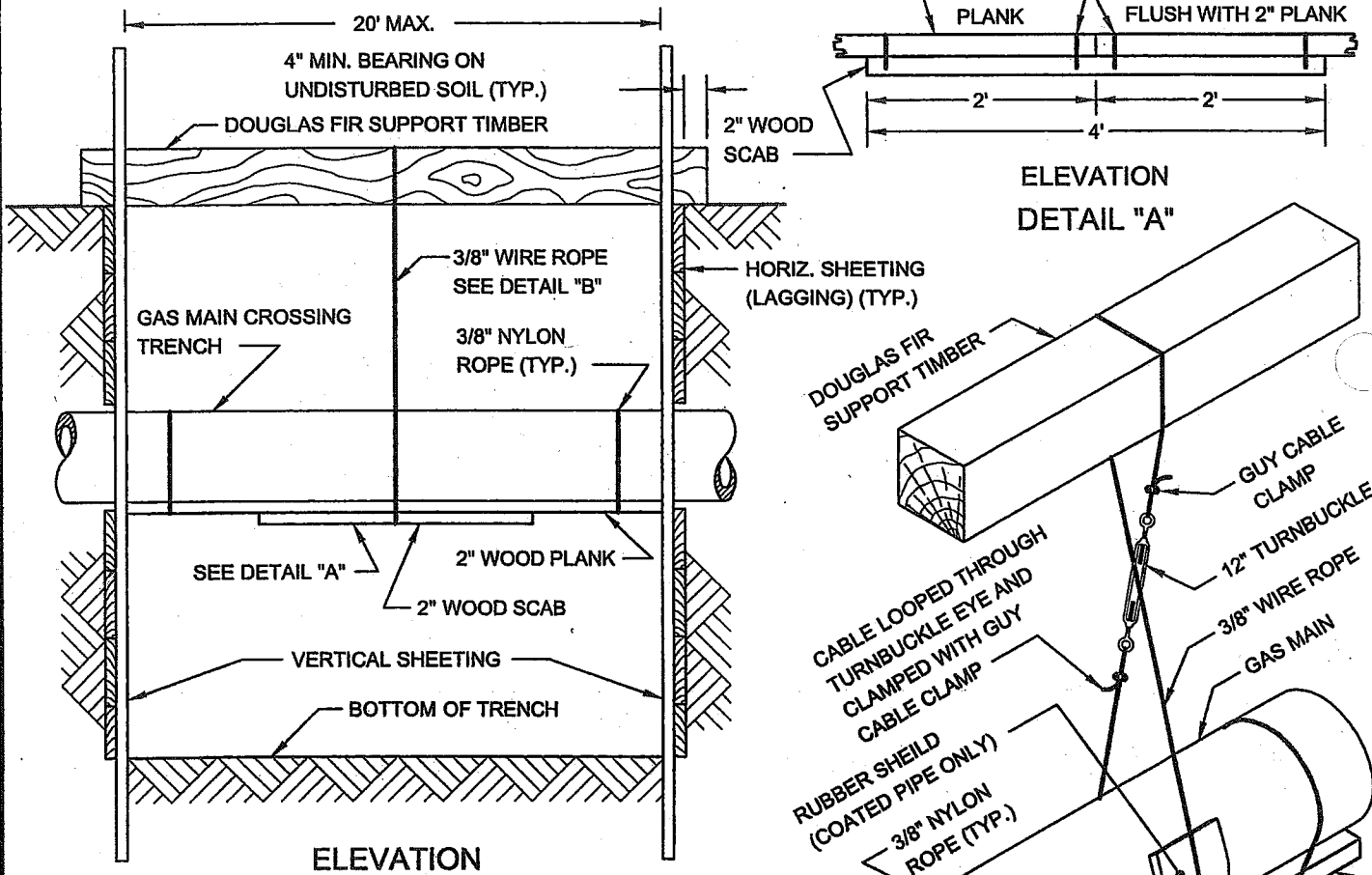
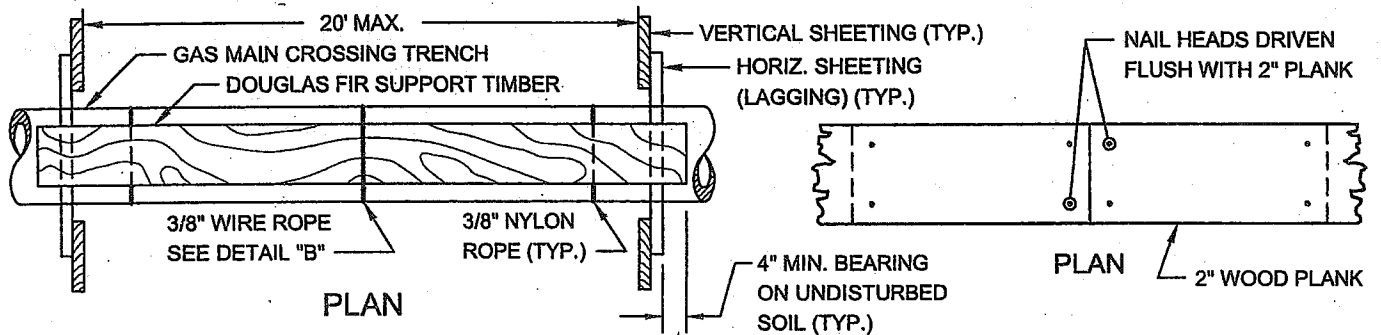
IV - STANDARD SKETCHES; GAS COST SHARING WORK

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

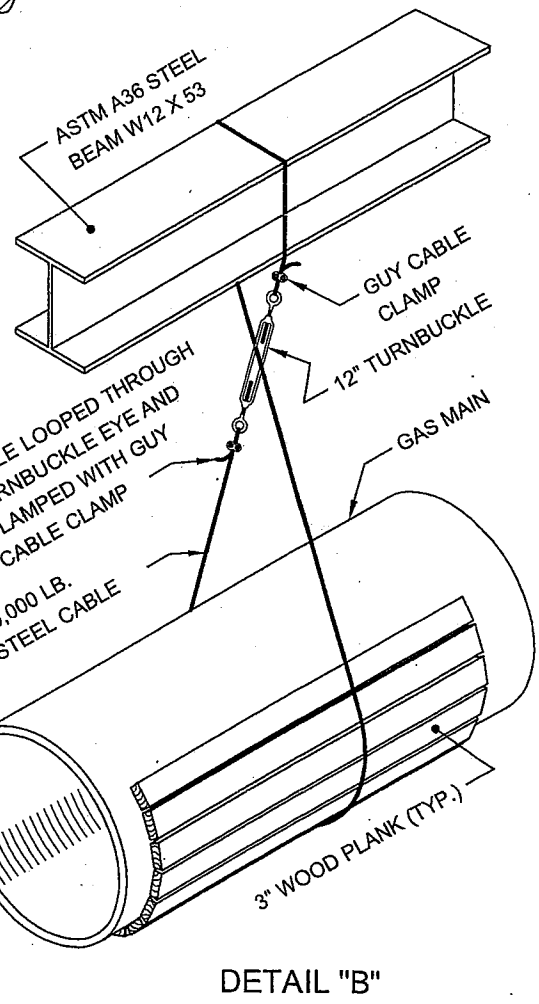
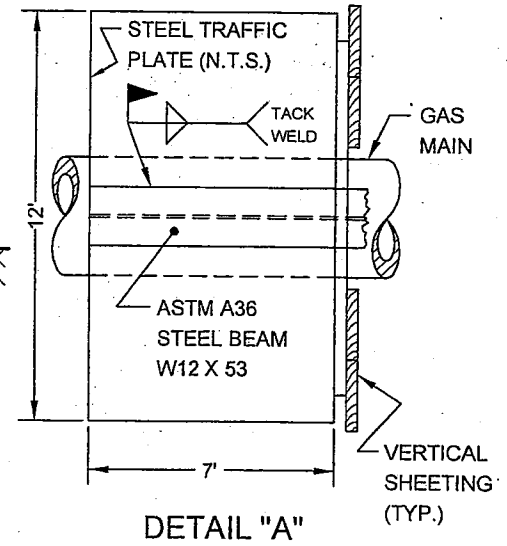
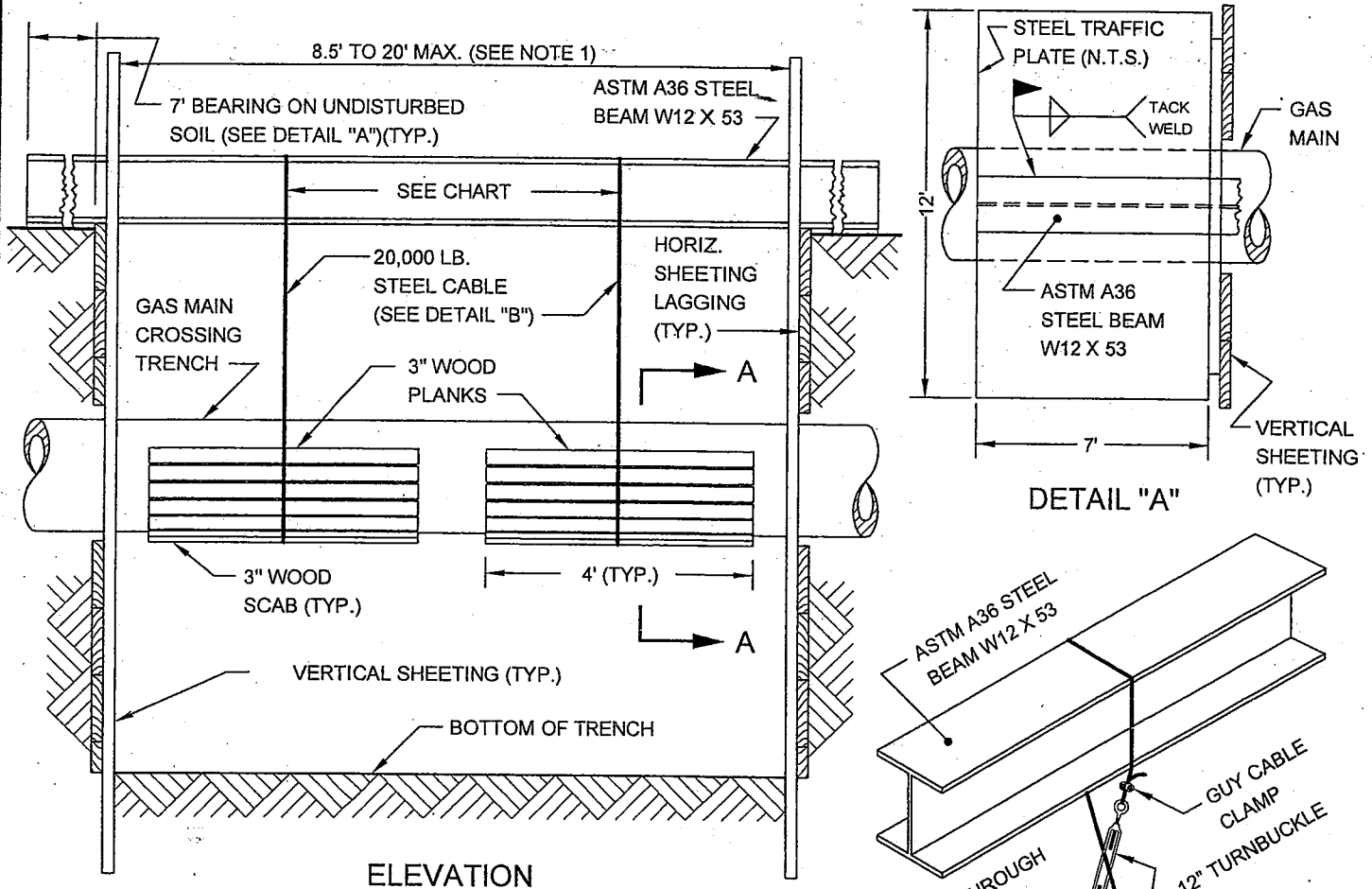


CABLE SUPPORT		TIMBER SUPPORT	
MAIN TYPE	SPACING	MAIN SIZE	TIMBER SIZE
CAST IRON	4' O.C. MAX.	UP TO 6"	6" X 6"
STEEL	10' O.C. MAX.	8" TO 10"	8" X 8"
PLASTIC	10' O.C. MAX.	12" TO 16"	10" X 10"

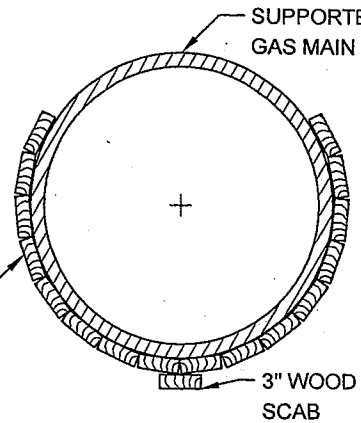
REVISED OCT. 2004 - L. ADRIEN
REVISED JUNE 1986 - J. WONG/TW. PATAKONIP. MOY

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.

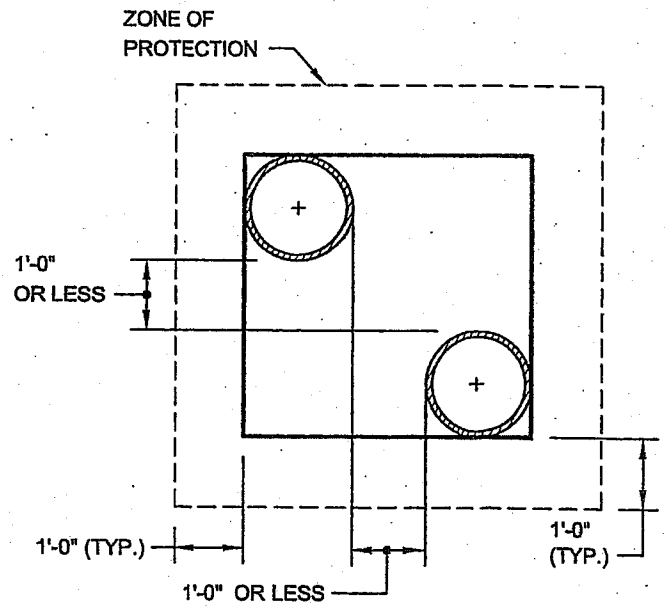
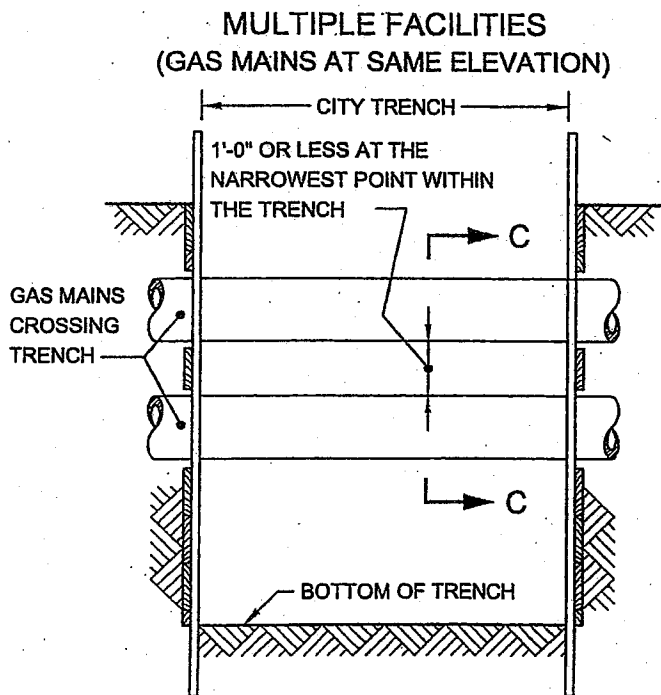
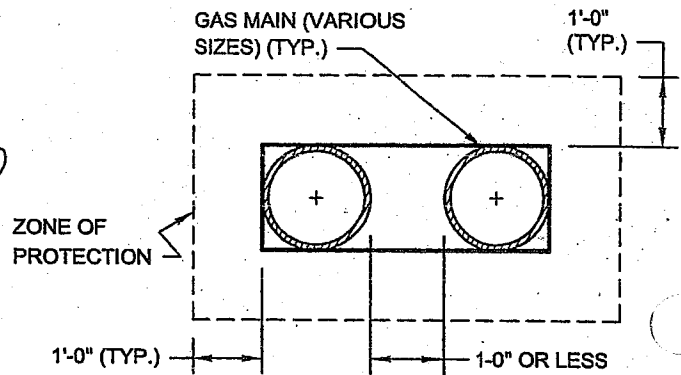
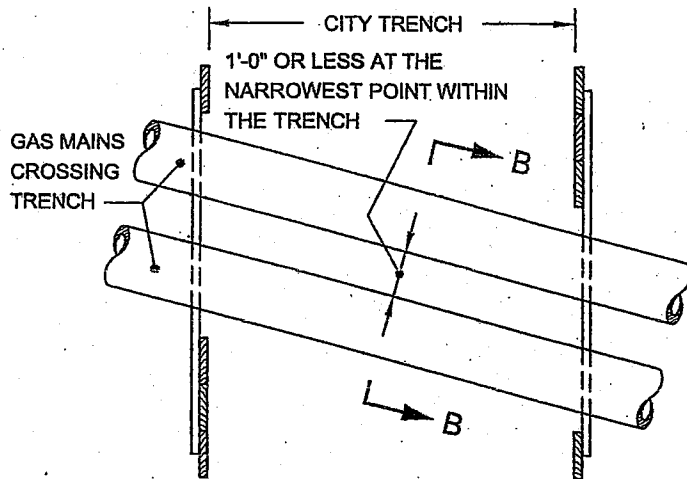
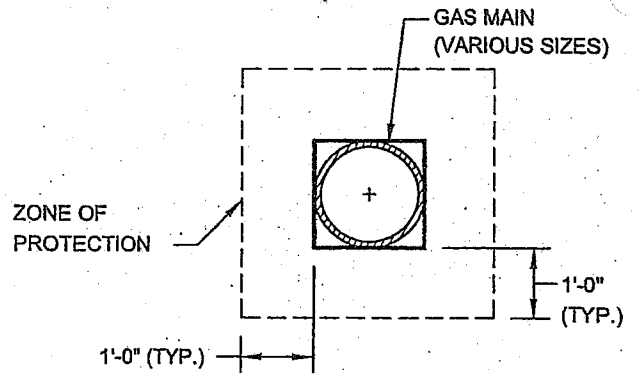
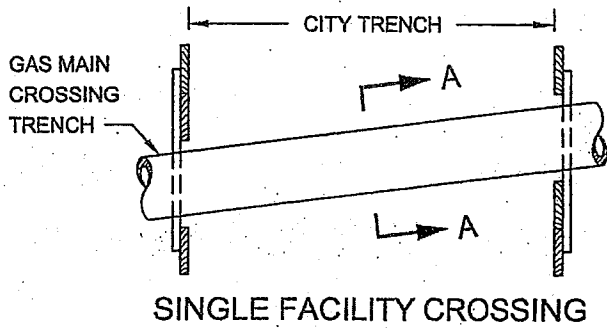


- NOTES:**
- NO SUPPORT IS REQUIRED FOR GAS MAINS OVER 16" DIA. UP TO AND INCLUDING 48" DIA. CROSSING TRENCHES LESS THAN 8.5' WIDE.
 - UNDERMINE A MAXIMUM OF 8.5 L.F. OF CAST IRON GAS MAIN AT A TIME.
 - SET STEEL CABLE OVER 3" WOOD PROTECTIVE PLANKS AND PLACE AN ADDITIONAL 3" SCAB ON THE BOTTOM OF THE GAS MAIN.
 - ADJUST STEEL CABLE UNTIL DEAD WEIGHT OF THE UNDERMINED GAS MAIN HAS BEEN TAKEN UP BY THE OVERHEAD STEEL BEAM SUPPORT.
 - 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.

REVISIONS: OCT. 2004 - J. WONG / W. PATALANOP, MOY
 REVISIONS: JUNE 1998 - J. WONG / W. PATALANOP, MOY

GAS COST SHARING WORK (SKETCH NO. 2)

TYPICAL METHODS OF MEASUREMENT FOR GAS CROSSINGS

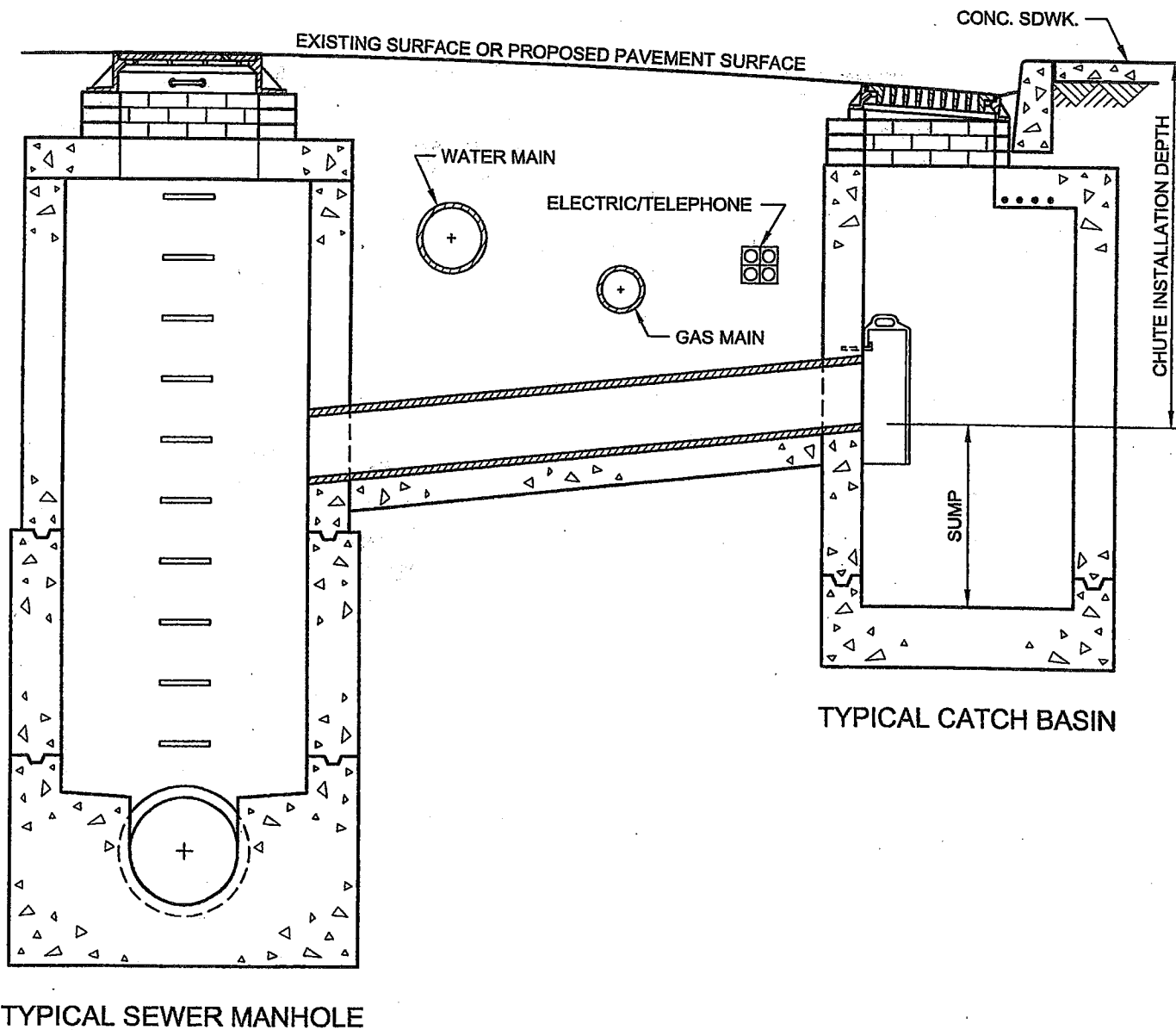


NOTE:

GAS MAINS MAY OR MAY NOT BE PARALLEL TO EACH OTHER.

GAS COST SHARING WORK (SKETCH NO. 3)

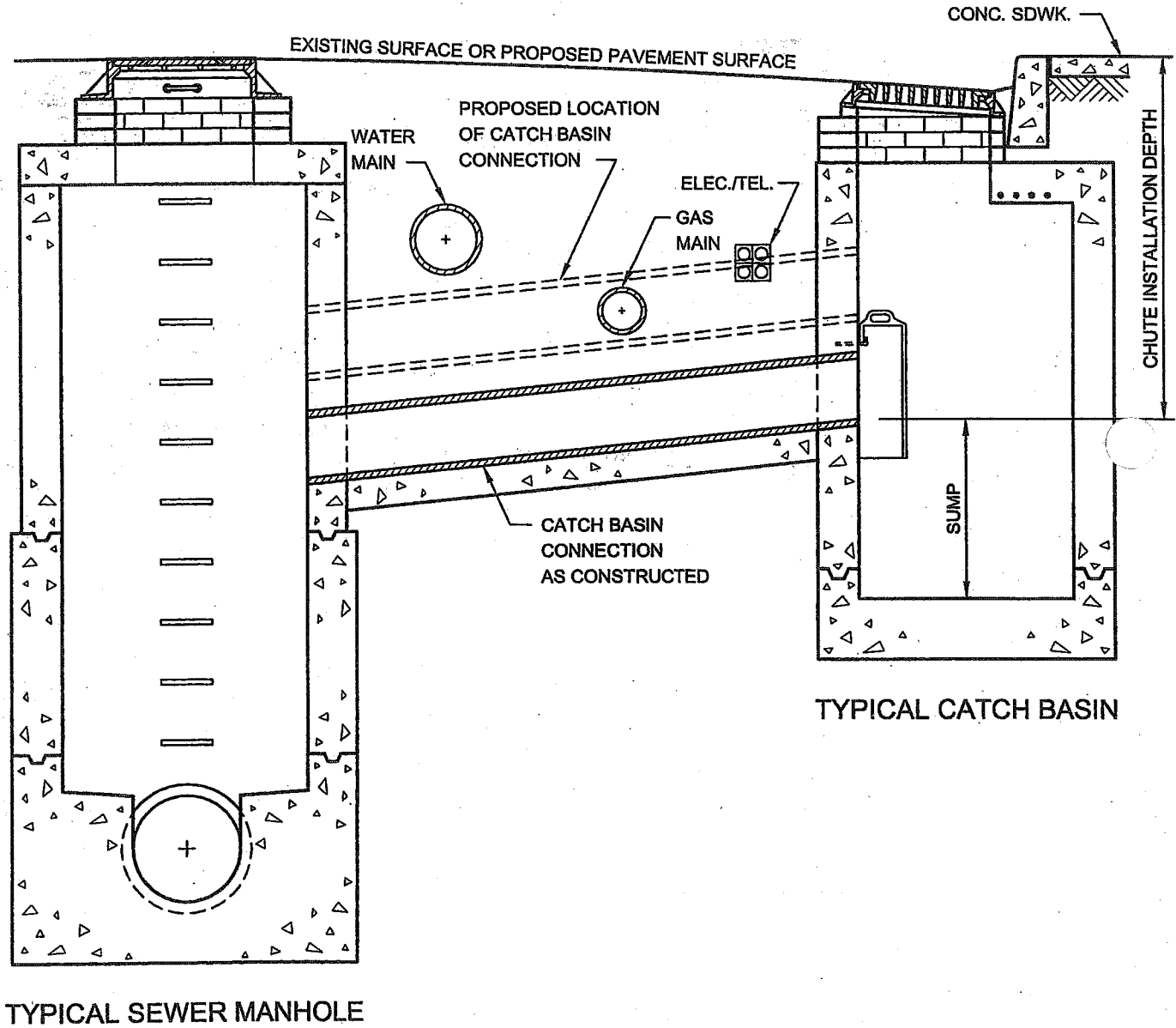
UTILITY CROSSINGS DURING CATCH BASIN CHUTE CONNECTION PIPE INSTALLATION



REVISED OCT. 2004 - J. ABRUEN
REVISED OCT. 1998 - J. WONGIW, PATALANO/P. MOY

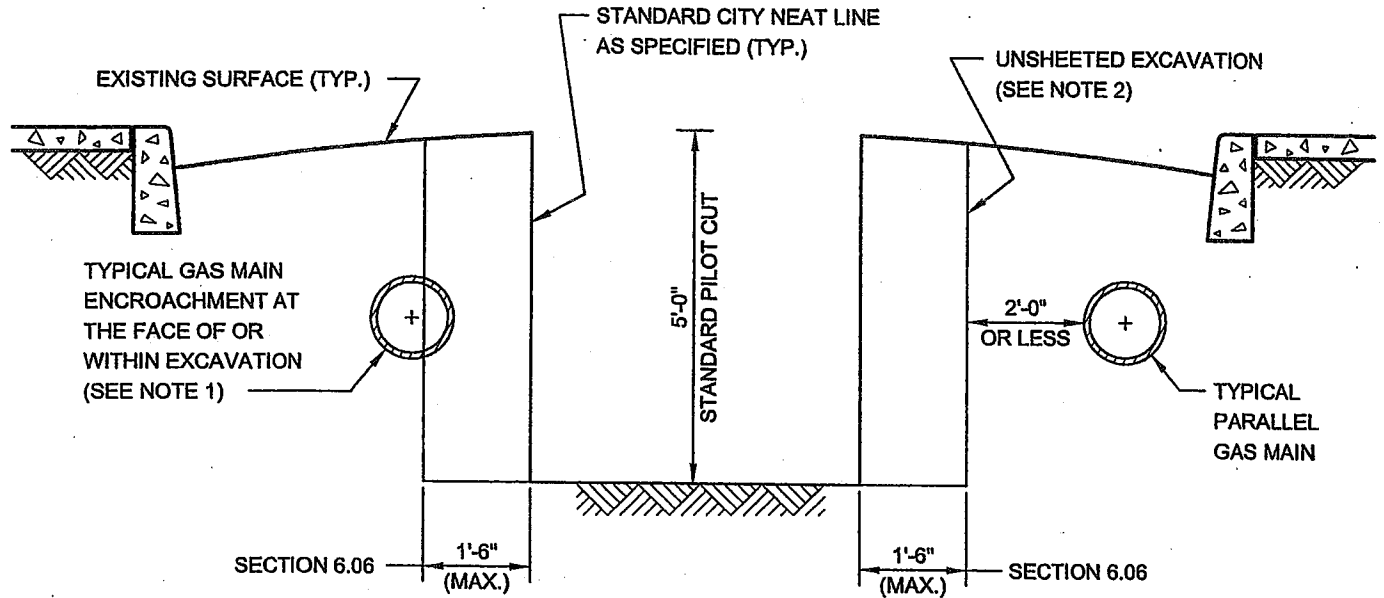
GAS COST SHARING WORK (SKETCH NO. 4)

UTILITY CROSSINGS DURING CATCH BASIN CHUTE CONNECTION PIPE INSTALLATION (EXTRA DEPTH)



REVISED OCT. 2004 - J. ADRIEN
 REVISED OCT. 1988 - 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.

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**V - PRELIMINARY GAS WORK TO BE PERFORMED BY
FACILITY OPERATOR.**

APPLICABLE TO ALL GAS DRAWINGS:

- ALL RELOCATION WORK 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:

National Grid
287 Maspeth Ave
Brooklyn, New York 11211
Mr. Gerard P. Lundquist
(718) 963-5506

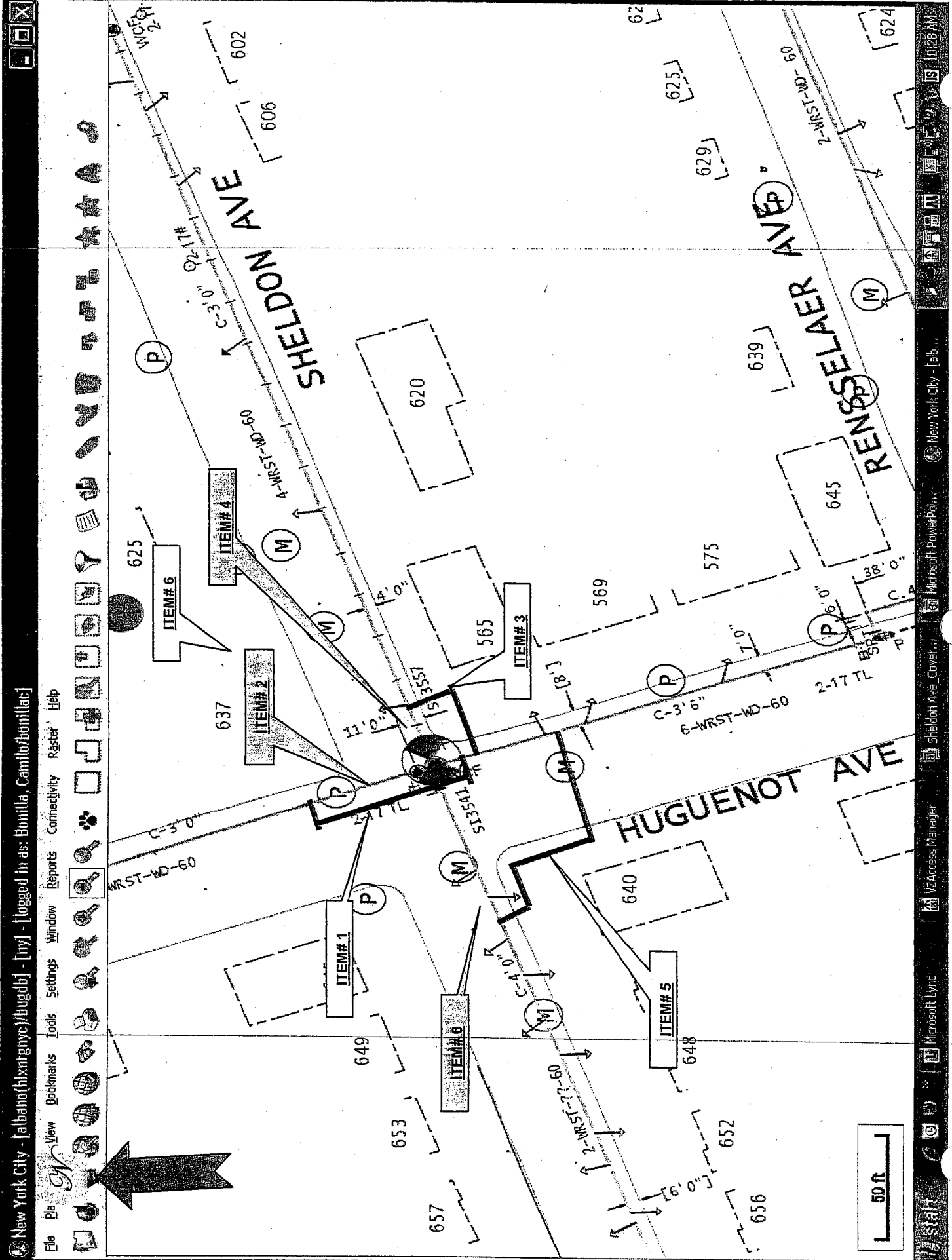
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SE 818 GAS MAIN INSTALLATION

ITEM#	ON STREET	1ST X-STREET	2ND X-STREET	SIZE/MAT'L	FOOTAGE	PRESSURE	REMB
1	HUGUENOT AVE	SINCLAIR AVE	INTERSECTION	6" PL	60'	HP-60#	Y
3	SINCLAIR AVE	HUGUENOT AVE	INTERSECTION	4" PL	50'	HP-60#	Y
5	SINCLAIR AVE	HUGUENOT AVE	INTERSECTION	2" PL	130'	HP-60#	Y
7	WOODROW RD	DAHLIA ST	BELFIELD AVE	6" PL	3,075'	HP-60#	Y
9	NIPPON AVE	SINCLAIR AVE	VINELAND AVE	2" PL	1,495'	HP-60#	Y
11	SHELDON AVE	NIPPON AVE	INTERSECTION	2" PL	20	HP-60#	Y
15	ANACONDA ST	SPERRY PL	INTERSECTION	2" PL	170'	HP-60#	Y
17	SPERRY PL	BALLARD AVE	INTERSECTION	2" PL	20'	HP-60#	Y
21	BALLARD AVE	WOODROW RD	INTERSECTION	2" PL	65'	HP-60#	Y
23	DELMAR AVE	WOODROW RD	INTERSECTION	2" PL	110'	HP-60#	Y
25	DELMAR AVE	STAFFORD AVE	SHELDON AVE	2" PL	2,375'	HP-60#	Y
27	DELMAR AVE	WOODROW RD	VINELAND AVE	2" PL	1,080'	HP-60#	Y
31	EVERTON AVE	WOODROW RD	SPERRY PL	2" PL	800'	HP-60#	Y
33	CROWN AVE	BELFIELD AVE	INTERSECTION	2" PL	220'	HP-60#	Y
35	WALKER PL	WOODROW RD	INTERSECTION	2" PL	40'	HP-60#	Y
37	DAHLIA ST	WOODROW RD	SHIFT PL	2" PL	635'	HP-60#	Y
39	NIPPON AVE	CROWN AVE	VINELAND AVE	2" PL	200'	HP-60#	Y
41	CARDIFF ST	CASTOR PL	INTERSECTION	2" PL	20'	HP-60#	Y

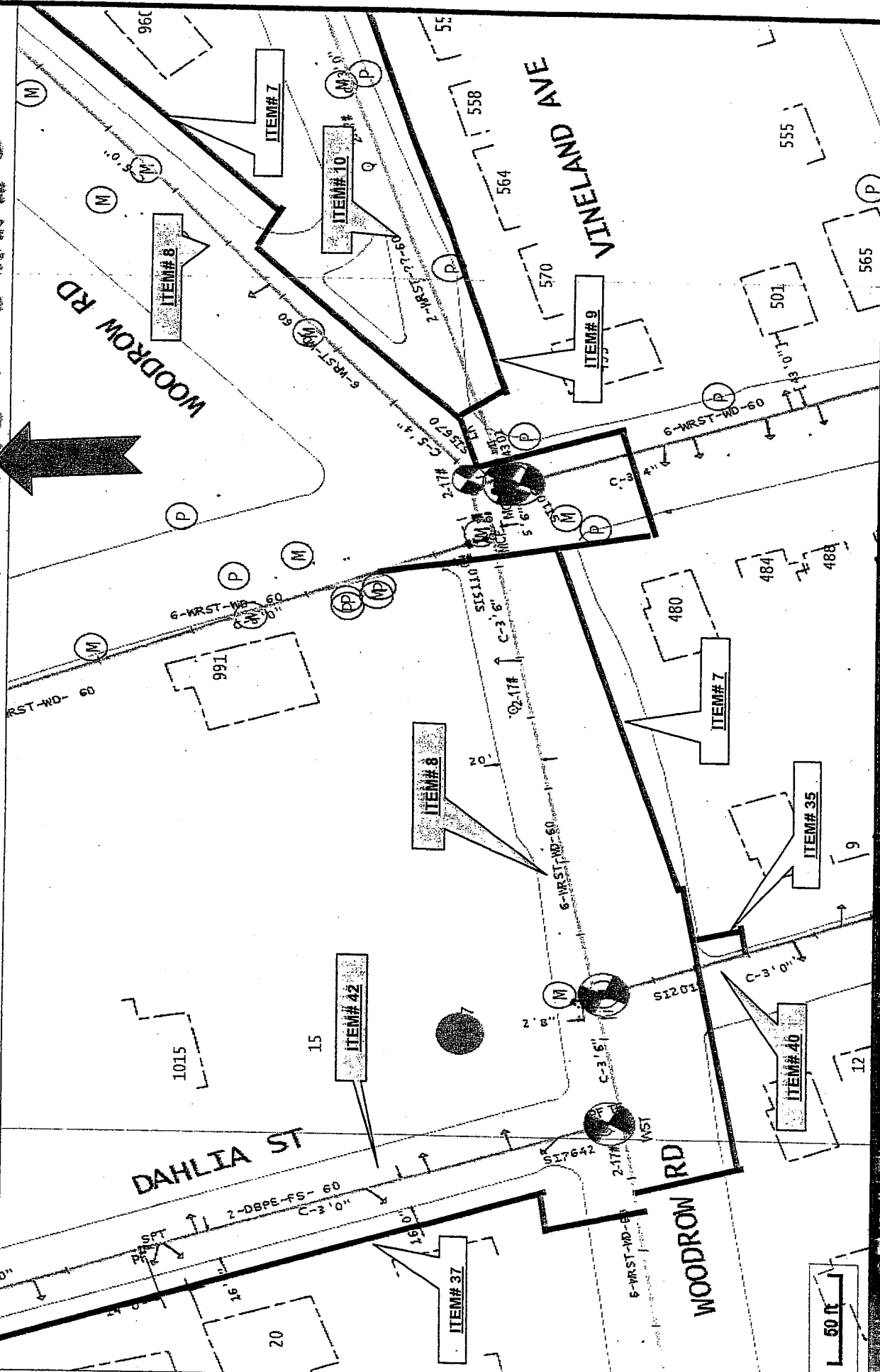
SE 818 GAS MAIN RETIREMENT

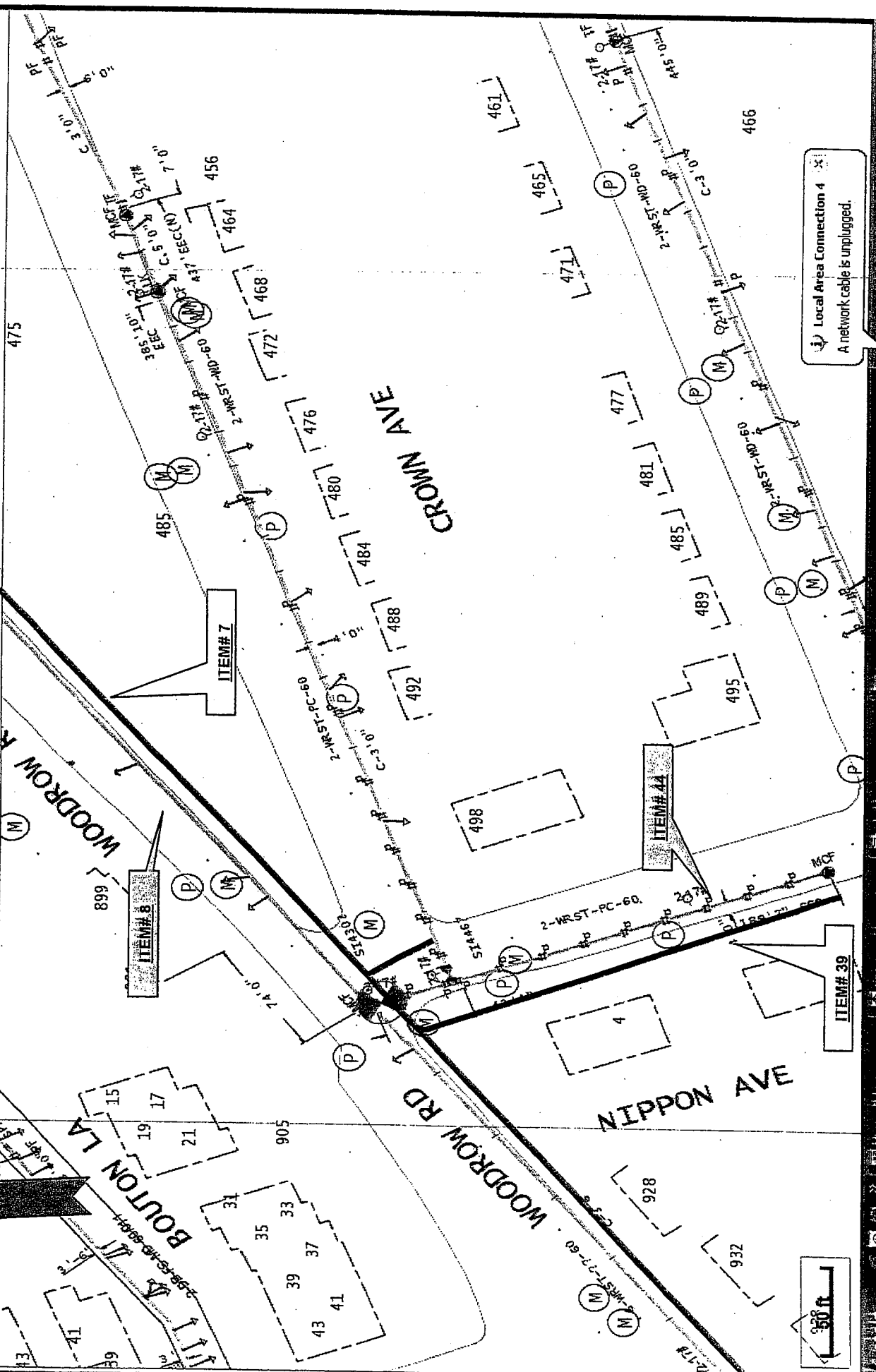
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2	HUGUENOT AVE	SINCLAIR AVE	INTERSECTION	6" WS	60'	HP-60#	Y
4	SINCLAIR AVE	HUGUENOT AVE	INTERSECTION	4" WS	40'	HP-60#	Y
6	SINCLAIR AVE	HUGUENOT AVE	INTERSECTION	2" WS	80'	HP-60#	Y
8	WOODROW RD	DAHLIA ST	BELFIELD AVE	6" WS	2,905'	HP-60#	Y
10	NIPPON AVE	SINCLAIR AVE	VINELAND AVE	2" WS	1,515'	HP-60#	Y
12	SHELDON AVE	NIPPON AVE	INTERSECTION	2" PL	20'	HP-60#	Y
16	ANACONDA ST	SPERRY PL	INTERSECTION	2" PL	170'	HP-60#	Y
18	SPERRY PL	BALLARD AVE	INTERSECTION	2" PL	20'	HP-60#	Y
22	BALLARD AVE	WOODROW RD	INTERSECTION	2" WS	110'	HP-60#	Y
24	DELMAR AVE	WOODROW RD	INTERSECTION	2" PL	80'	HP-60#	Y
26	SHELDON AVE	DELMAR AVE	INTERSECTION	4" WS	130'	HP-60#	Y
28	SINCLAIR AVE	DELMAR AVE	DEADEND	4" WS	380'	HP-60#	Y
30	DELMAR AVE	STAFFORD AVE	SHELDON AVE	2" WS	1,865'	HP-60#	Y
32	DELMAR AVE	WOODROW RD	VINELAND AVE	2" PL	1,080'	HP-60#	Y
36	EVERTON AVE	WOODROW RD	SPERRY PL	2" WS	720'	HP-60#	Y
38	CROWN AVE	BELFIELD AVE	INTERSECTION	2" PL	220'	HP-60#	Y
40	WALKER PL	WOODROW RD	INTERSECTION	2" WS	80'	HP-60#	Y
42	DAHLIA ST	WOODROW RD	SHIFT PL	2" PL	595'	HP-60#	Y
44	NIPPON AVE	CROWN AVE	VINELAND AVE	2" WS	200'	HP-60#	Y
46	CARDIFF ST	CASTOR PL	INTERSECTION	2" PL	20'	HP-60#	Y

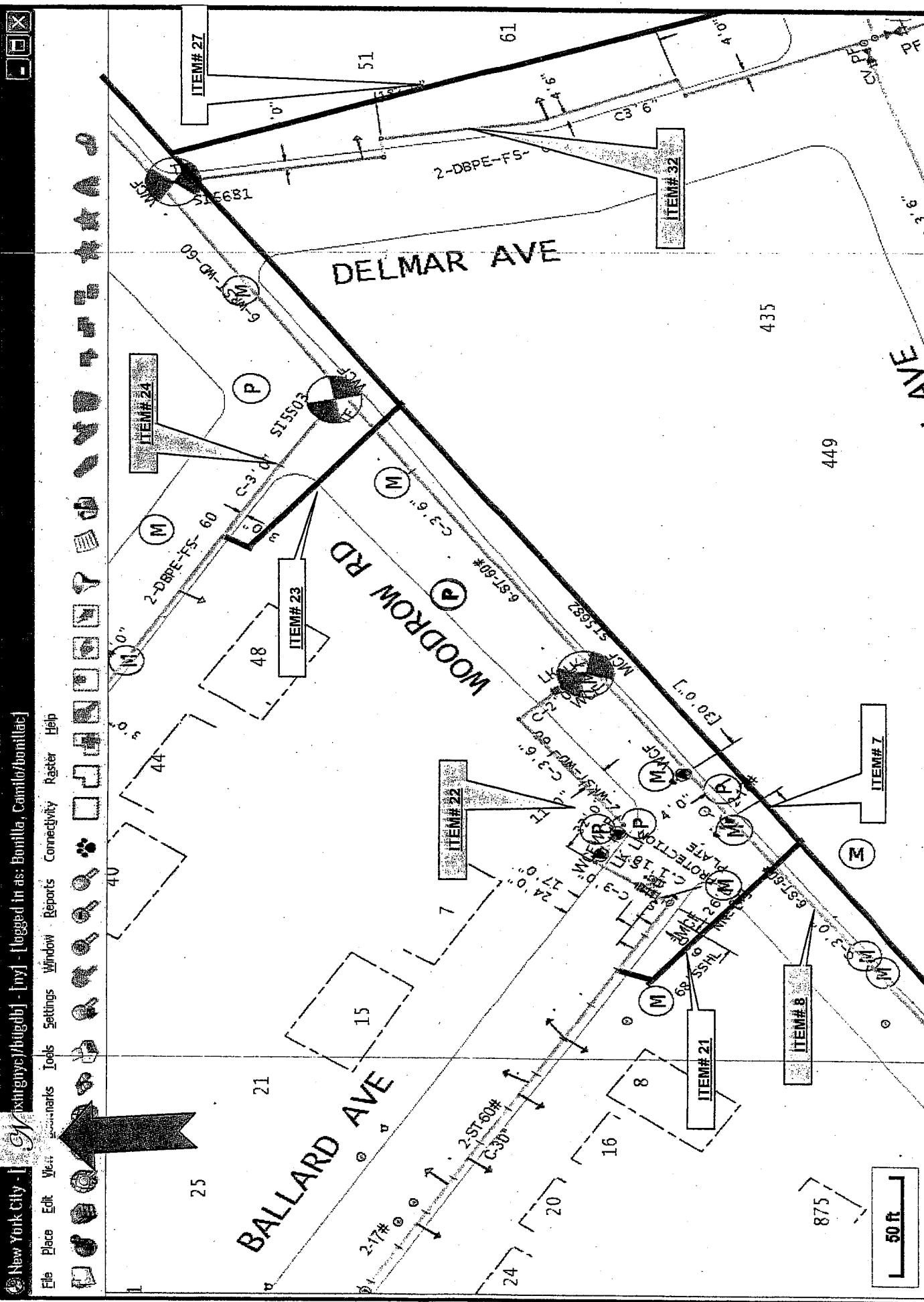


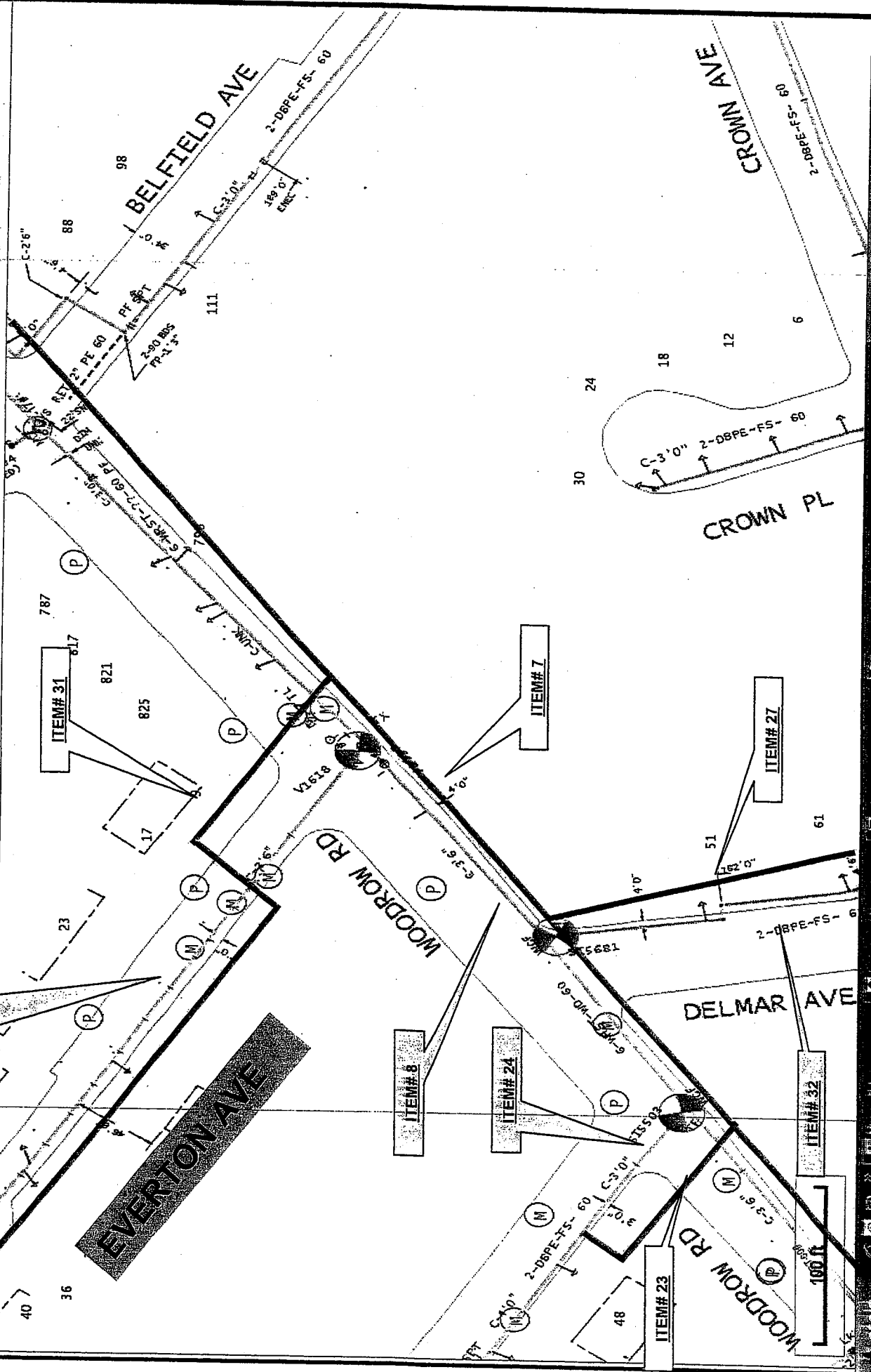
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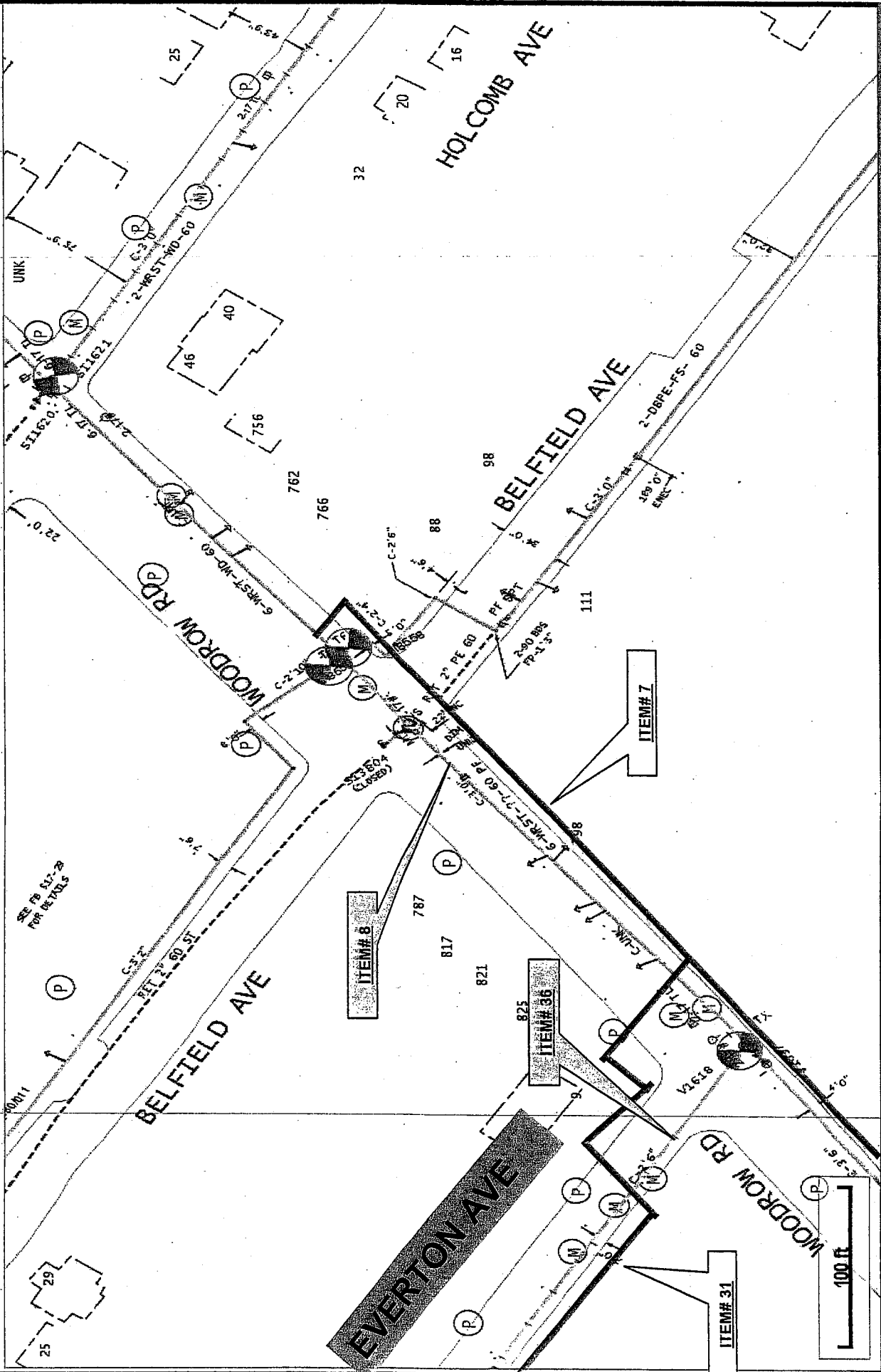
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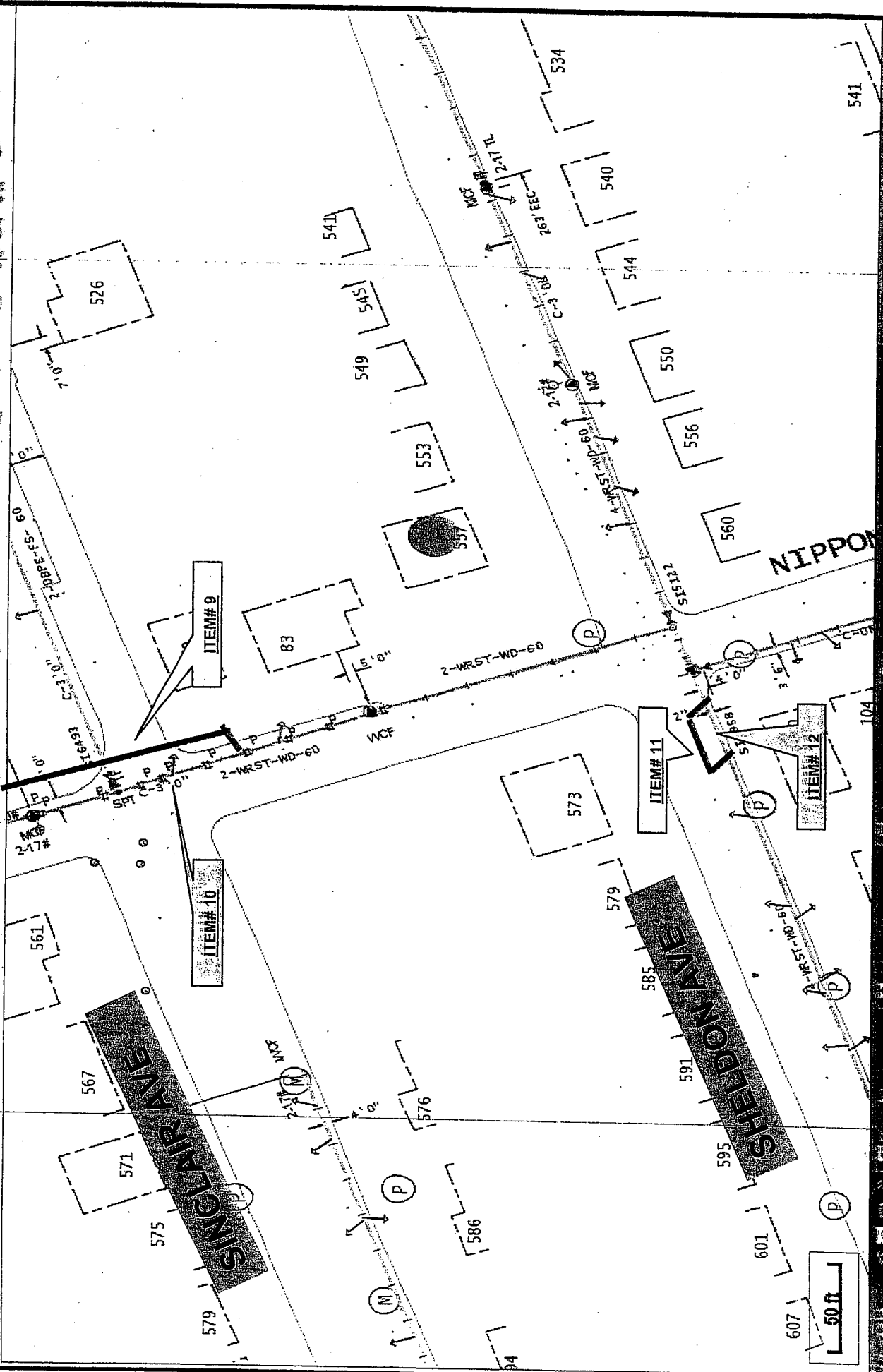


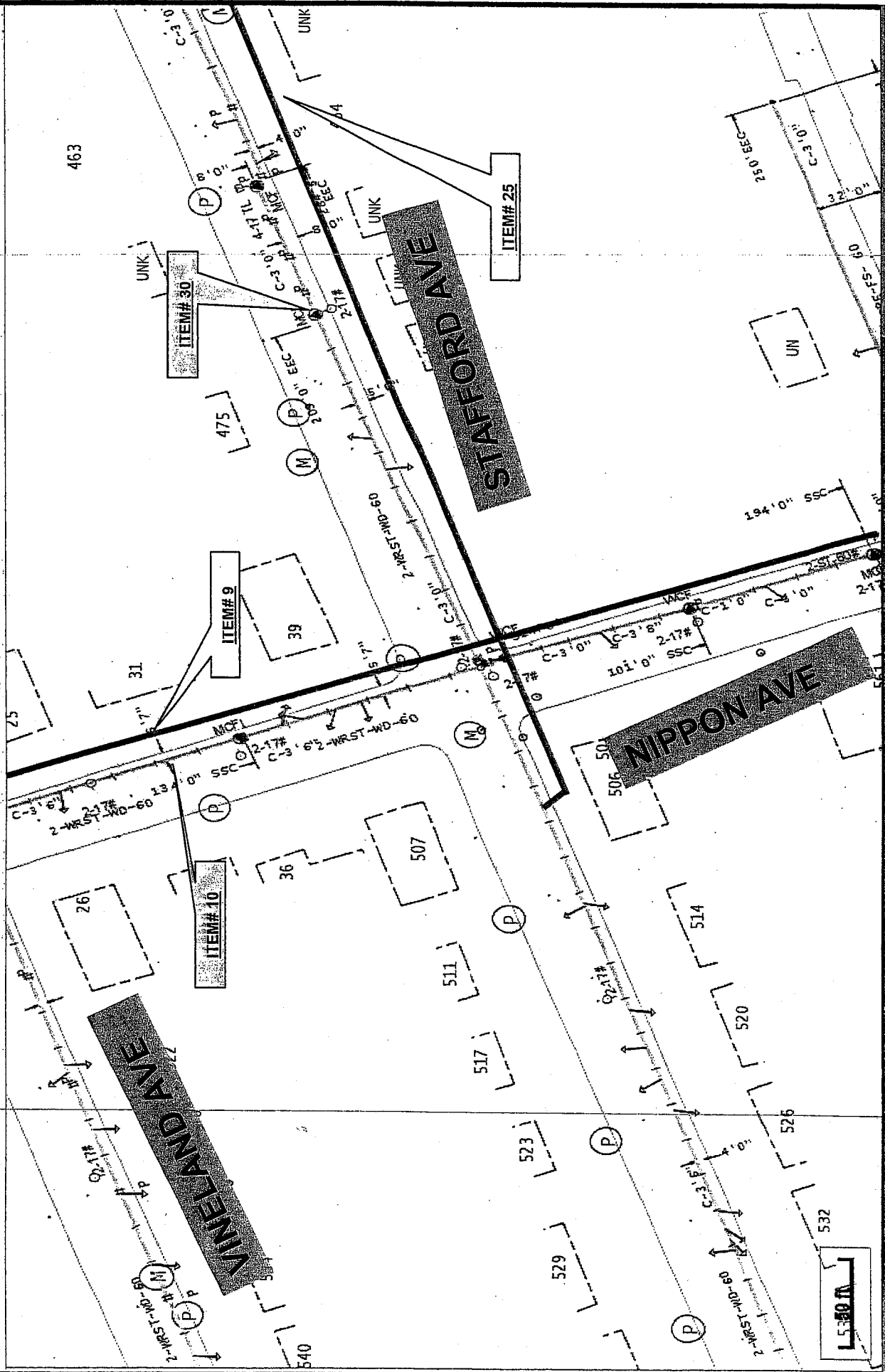


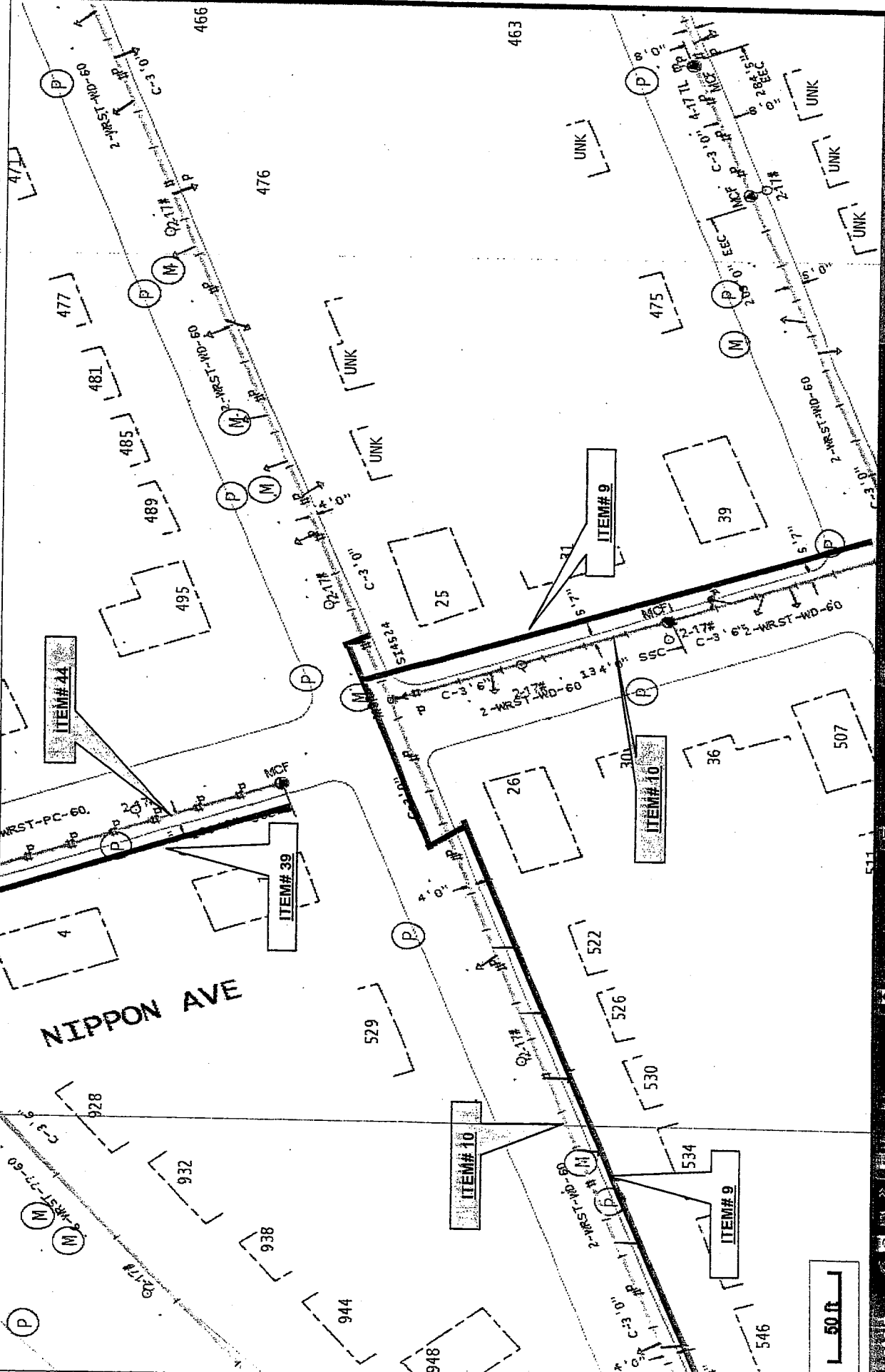
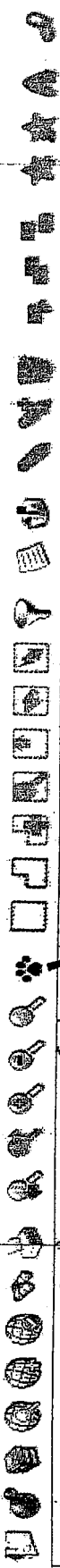


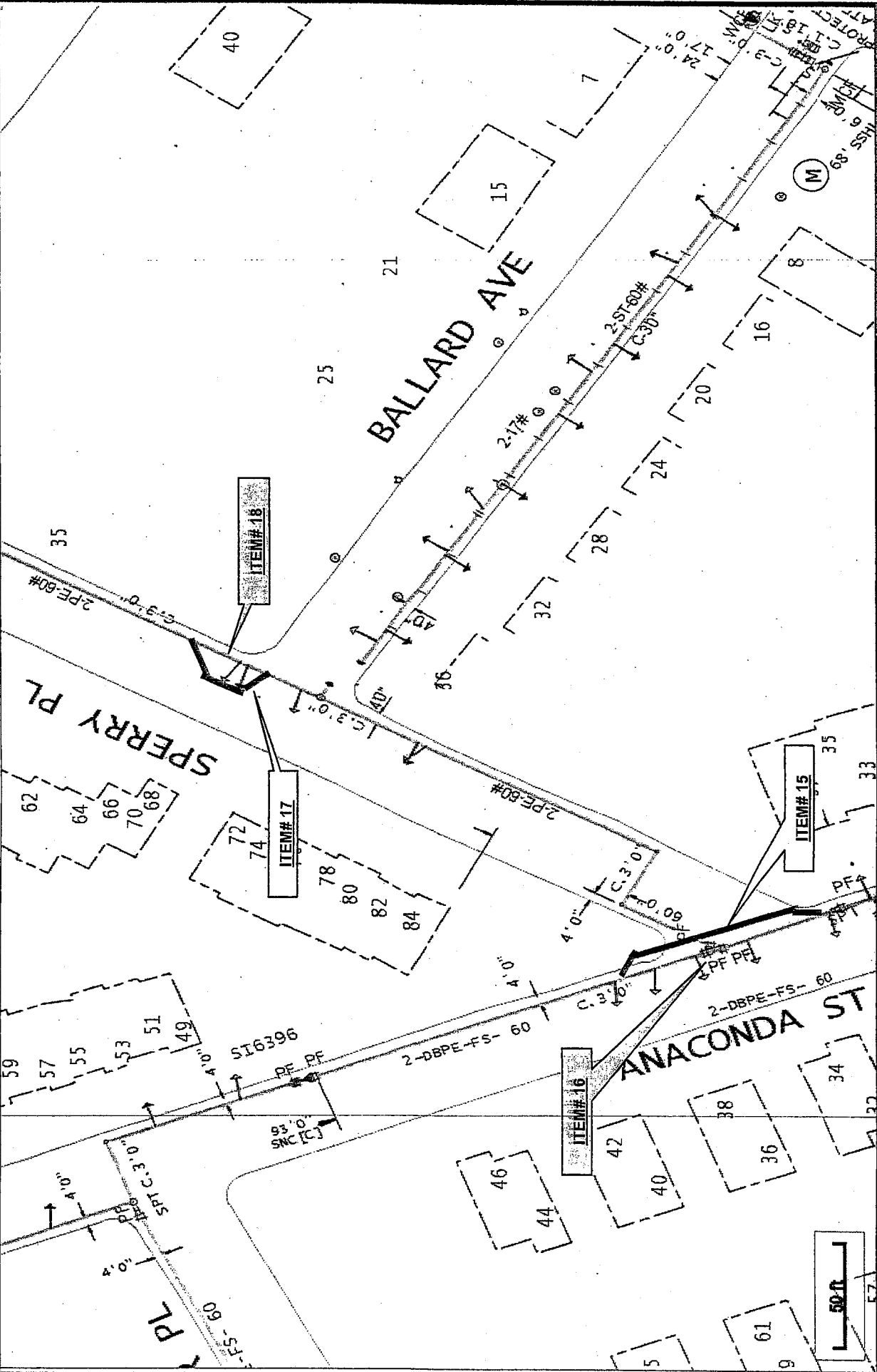


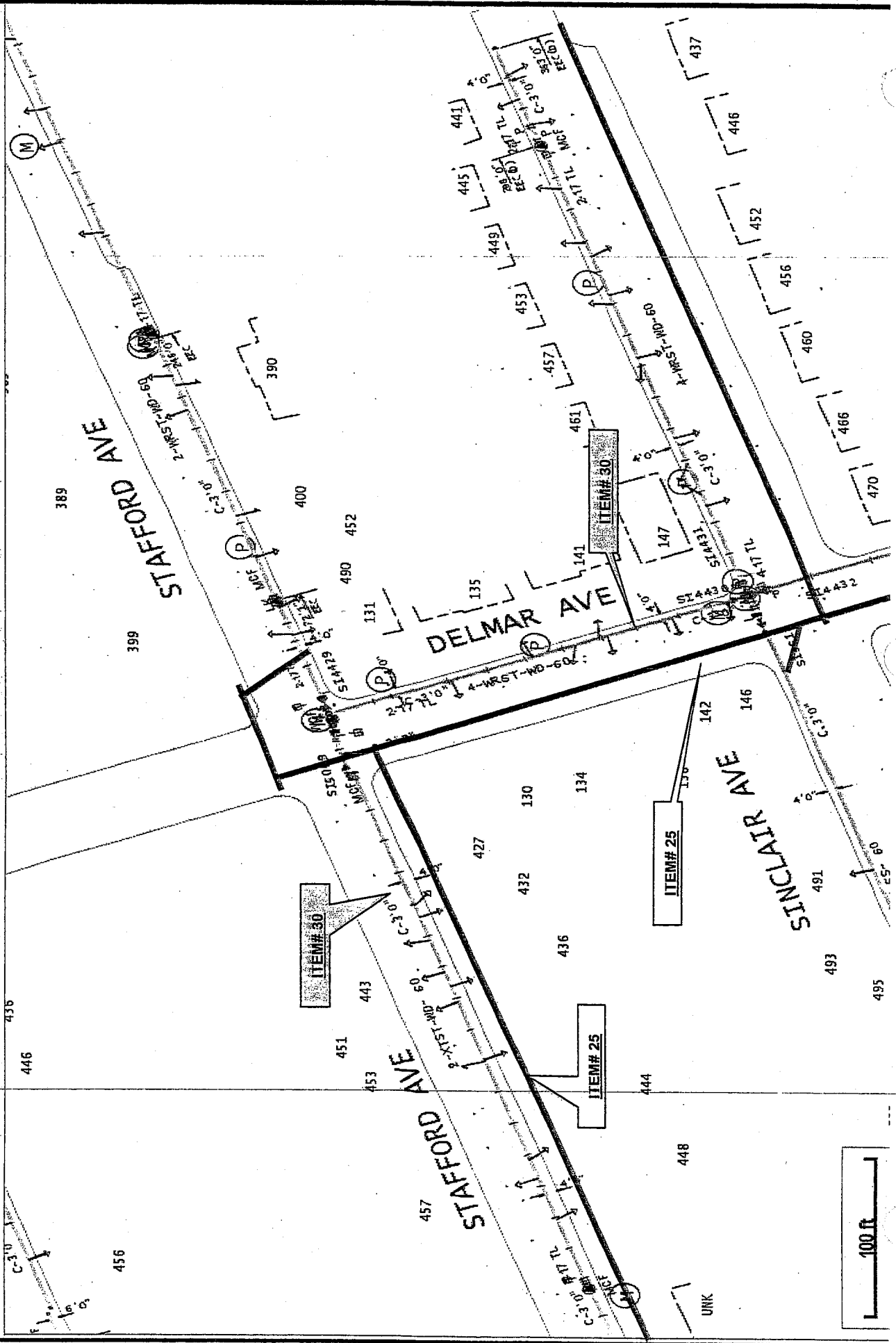
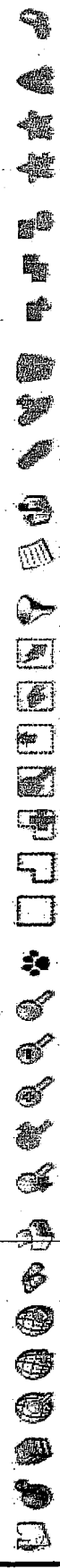


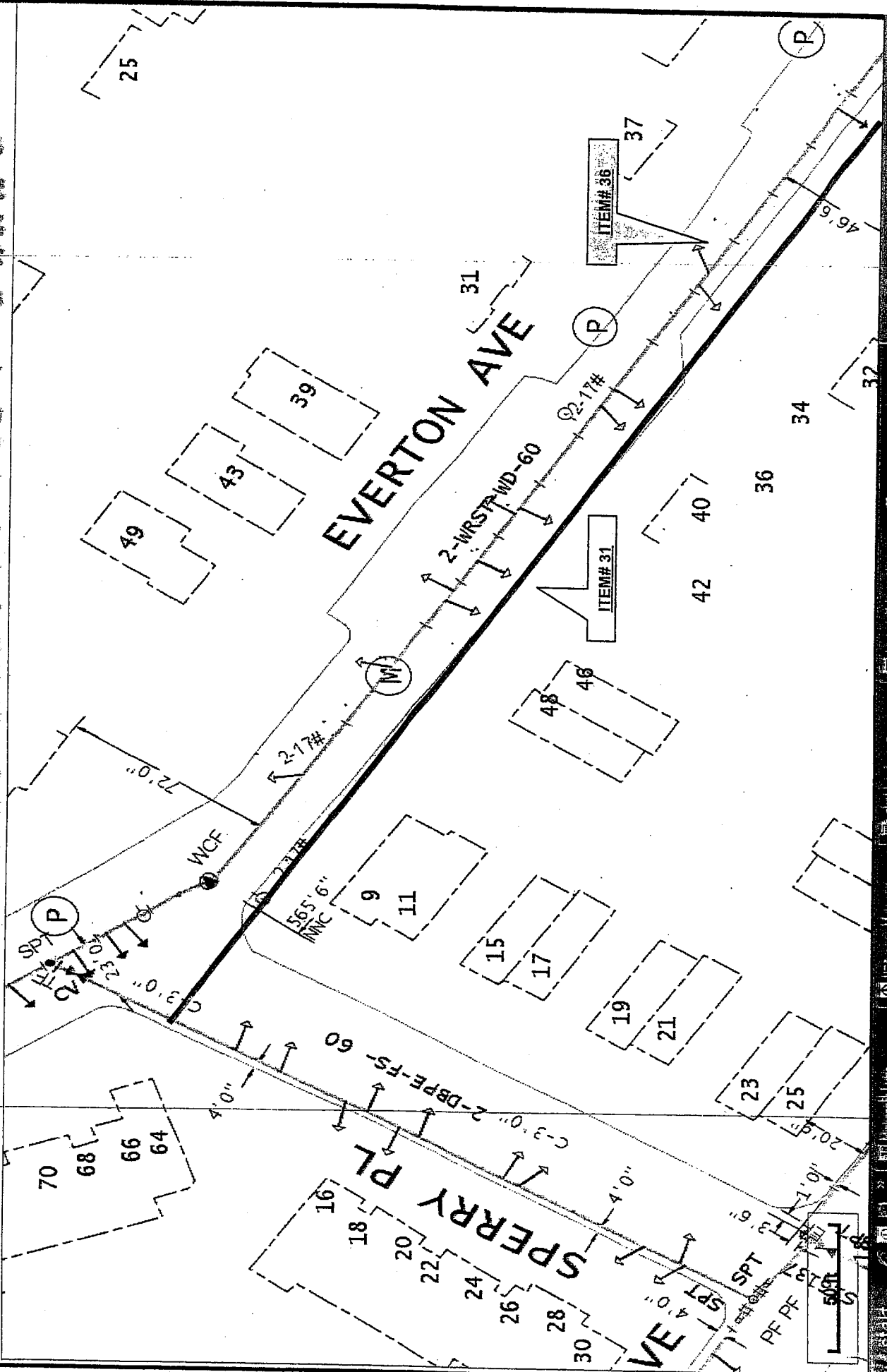
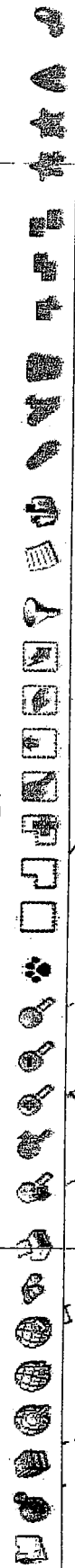


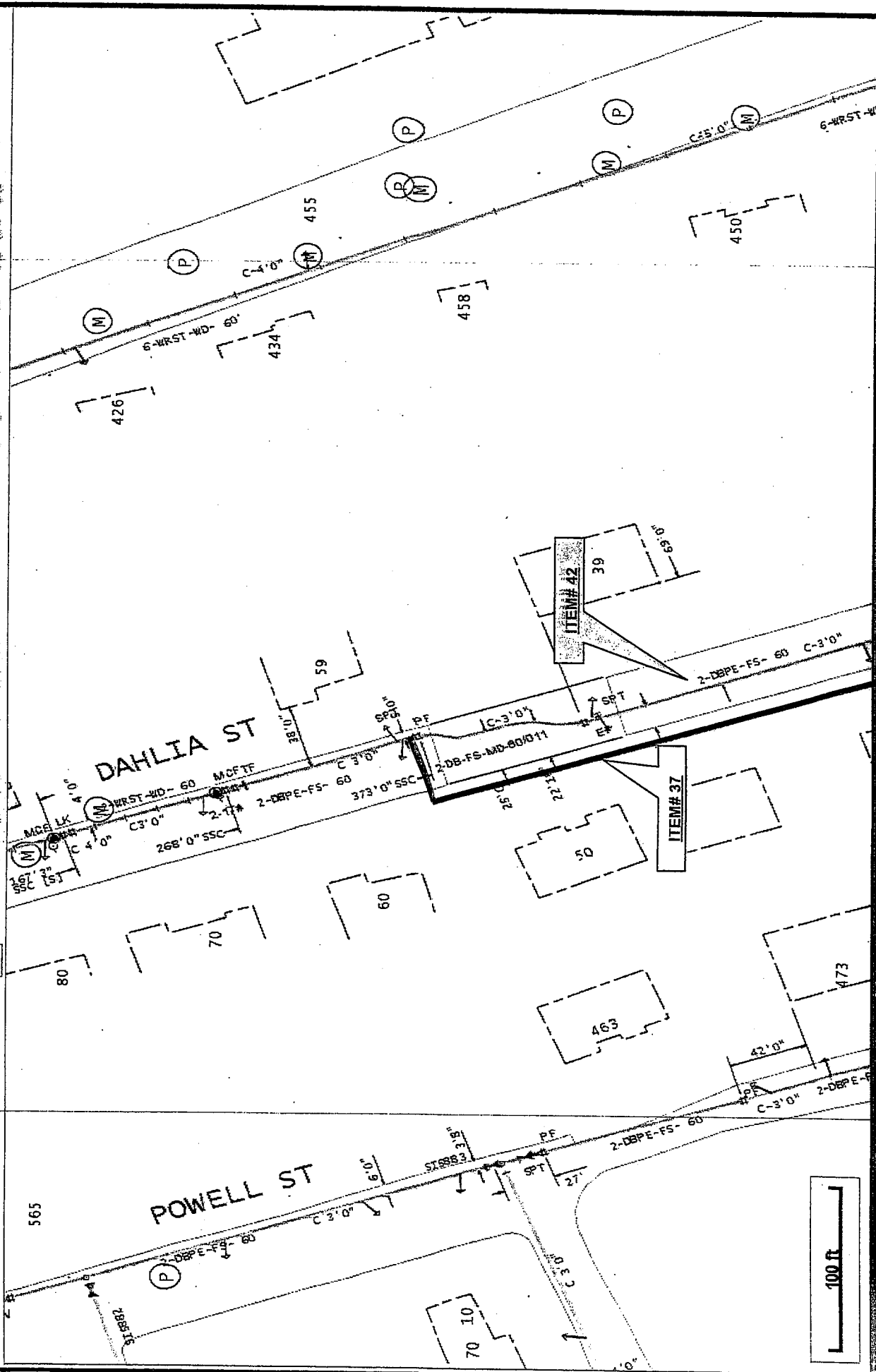


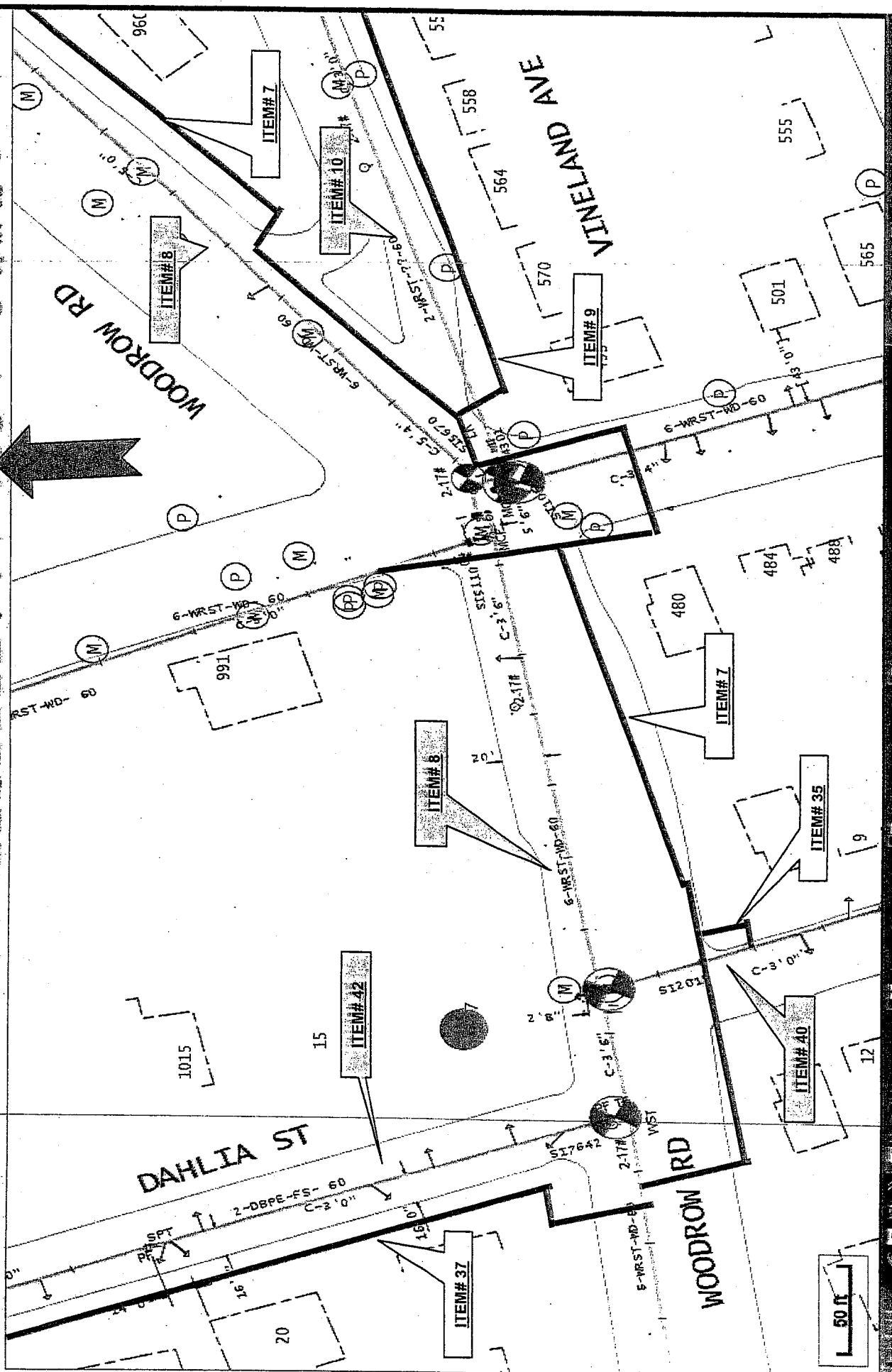












**VI - LISTING OF APPROXIMATE LOCATIONS OF EP-7 BID
ITEMS QUANTITIES.**

(NO TEXT IN THIS AREA, TURN PAGE)

Scope of Work Estimate
GAS COST SHARING SCOPE OF WORK
SUPPORT & PROTECTION
FOR CONTRACT NUMBER SE-818
CITY OF NEW YORK

The New York City Department Of Design and Construction, Division Of Infrastructure, is proposing to install sanitary sewer(s) and / or water main(s) in the locations indicated below along with all work incidental thereto.

Item 6.01.1 Support and Protect Gas Main Crossing Sewer Up To 24" Diameter (Ea.)

- 1 in Ballard Avenue @ Woodrow Road
- 2 in Nippon Avenue @ Stafford Avenue
- 1 in Woodrow Road @ Delmar Avenue
- 2 in Everton Avenue between Woodrow Road & Sperry Place
- 1 in Heenan Avenue @ Stafford Avenue
- 1 in Crown Place @ Crown Avenue
- 1 in Crown Avenue @ Belfield Avenue
- 3 in Huguenot Avenue @ Sinclair Avenue
- 2 in Huguenot Avenue @ Castor Place
- 4 in Delmar Avenue @ Sinclair Avenue
- 2 in Delmar Avenue @ Crown Avenue
- 1 in Woodrow Road between Everton Avenue & Belfield Avenue
- 2 in Nippon Avenue @ Sheldon Avenue
- 1 in Powell Street @ Sinclair Avenue
- 1 in Walker Place @ Sinclair Avenue
- 2 in Huguenot Avenue @ Sheldon Avenue
- 1 in Huguenot Avenue between Rensselaer Avenue & Sheldon Avenue
- 1 in Nippon Avenue @ Vineland Avenue
- 2 in Nippon Avenue between Rensselaer & Sheldon Avenue
- 2 in Nippon Avenue @ Woodrow Road
- 2 in Cardiff Street @ Castor Place
- 2 in Boluder Street @ Castor Place
- 2 in Anoconda Street @ Castor Place
- 1 in Demar Avenue between Woodrow Road & Sperry Place
- 2 in Nippon Avenue @ Sinclair Avenue
- 2 in Stafford Avenue between Heenan Avenue & Delmar Avenue
- 2 in Huguenot Avenue @ Woodrow Road
- 2 in Delmar Avenue @ Stafford Avenue
- 1 in Huguenot Avenue between Woodrow Road & Stafford Avenue
- 2 in Anoconda Street @ Sperry Place
- 1 in Ballard Avenue @ Sperry Place
- 1 in Delmar Avenue @ Woodrow Road
- 2 in Delmar Avenue between Rensselaer Avenue & Sheldon Avenue
- 3 in Delmar Avenue @ Sheldon Avenue
- 1 in Crown Avenue @ Nippon Avenue
- 5 in Delmar Avenue @ Vineland Avenue

Item 6.01.2 Support and Protect Gas Main Crossing Sewer 30" Diameter (Ea.)

1 in Powell Street @ Sinclair Avenue
1 in Delmar Avenue @ Crown Avenue
1 in Crown Avenue @ Belfield Avenue
1 in Huguenot Avenue @ Sinclair Avenue
1 in Crown Place @ Crown Avenue
1 in Walker Place @ Sinclair Avenue
1 on Sperry Place

Item 6.01.3 Support and Protect Gas Main Crossing Sewer 36" Thru 42" Diameter (Ea.)

1 in Delmar Avenue @ Woodrow Road
1 in Delmar Avenue @ Vineland Avenue
1 in Ballard Avenue @ Sperry Place
1 in Nippon Avenue @ Stafford Avenue
1 in Delmar Avenue @ Stafford Avenue
1 in Delmard Avenue @ Crown Avenue
1 in Ballard Avenue @ Woodrow Road

Item 6.01.4 Support and Protect Gas Main Crossing Sewer 48" Thru 54" Diameter (Ea.)

1 in Delmar Avenue @ Sinclair Avenue
1 in Delmar Avenue @ Stafford Avenue
1 in Nippon Avenue @ Stafford Avenue

Item 6.01.4G Support & Protect Gas Main Crossing 4'-0"W X 4'-0"H FTTC

1 @ the intersection of Sinclair Avenue & Delmar Avenue
1 @ the intersection of Stafford Avenue & Delmar Avenue

Item 6.01.4I Support & Protect Gas Main Crossing Sewer 4'-0"W X 3'-0"H FTTC

1 @ the intersection of Sheldon Avenue & Delmar Avenue

Item 6.01.8 Support and Protect Gas Service Crossing Trench and /or Excavation. (Ea.)

8 in Woodrow Road between Huguenot Avenue & Nippon Avenue
16 in Vineland Avenue between Delmar Avenue & Nippon Avenue
4 in Woodrow Road between Delmar Avenue & Belfield Avenue
1 in Boulder Street between Woodrow Avenue & Cator Place
10 in Dahlia Street between Woodrow Road & Shift place
10 in Castor Place betwee Anaconda Street & Huguenot Avenue
7 in Sheldon Avenue between Delmar Avenue & Nippon Avenue

Scope of Work Estimate
GAS COST SHARING SCOPE OF WORK
SUPPORT & PROTECTION
FOR CONTRACT NUMBER SE-818
CITY OF NEW YORK

The New York City Department Of Design and Construction, Division Of Infrastructure, is proposing to install sanitary sewer(s) and / or water main(s) in the locations indicated below along with all work incidental thereto.

Item 6.01.8 Support and Protect Gas Service Crossing Trench and /or Excavation. (Ea.)
(Continued)

19 in Sinclair Avenue between Huguenot Avenue & Powell Street
4 in Delmar Avenue between Woodrow Road & Sperry Place
6 in Crown Avenue between Crown Place & Belfield Avenue
8 in Delmar Avenue between Anaconda Street & Sperry Place
10 in Woodrow Road between Basllsrd Avenue & Nippon Avene
14 in Crown Avenue between Delmar Avenue & Nippon Avenue
15 in Huguenot Avenue between Woodrow Road & Sinclair Avenue
8 in Boulder Street betwenn Rensselaer Avenue & Stafford Avenue
13 in Everton Avenue between Woodrow Road & Sperry Place
2 in Crown Place between Crown Avenue & Deadend
3 in Woodrow Road between Dahlia Street & Huguenot Avenue
13 in Sinclair Avenue between Delmar Avene & Deadend (East)
17 in Sheldon Avnue between Huguenot Avenue & Nippon Aenu
20 in Powell Street between Sinclair Avenue & Woodrow Road
14 in Vineland Avenue between Delmar Avenue & Heenan Avenue
16 in Stafford Avenue between Huguenot Avenue & Nippon Avenue
20 in Sinclair Avenue between Huguenot Avenue & Nippon Avenue
18 in Stafford Avenue between Delmar Avenue & Nippon Avenue
8 in Delmar Avenue between Woodrod Road & Vineland Avenue
4 in Cardiff Street Street between Castor Place & Rosedale Avenue
12 in Anaconda Street between Castor Place & Rosedale Avenue
17 in Sperry Place between Anaconda Street & Ballard Avenue
3 in Huguenot Avenue between Woodrow Road & Castor Place
19 in Stafford Avenue between Delmar Avenue & Nippon Avenue
10 in Vineland Avenue between Woodrow Road & Nippon Avenue
3 in Sinclair Avenue between Nippon Avenue Deadend
12 in Ballard Avenue between Woodrow Road & Sperry Place
14 in Nippon Avenue between Stafford Avenue & Woodrow Road

Scope of Work Estimate
GAS COST SHARING SCOPE OF WORK
SUPPORT & PROTECTION
FOR CONTRACT NUMBER SE-818
CITY OF NEW YORK

The New York City Department Of Design and Construction, Division Of Infrastructure, is proposing to install sanitary sewer(s) and / or water main(s) in the locations indicated below along with all work incidental thereto.

Item 6.01.9 Support & Protect Gas Main Crossing Water Main Up To 20" in Diameter. (Ea.)

- 1 in Walker Place @ Sinclair Avenue
- 1 in Huguenot Avenue between Woodrow Road Stafford Avenue
- 1 in Anaconda Street @ Sperry Place
- 1 in Cardiff Street @ Castor Place
- 2 in Boulder Street @ Castor Place
- 1 in Everton Avenue between Woodrow Road & Sperry Place
- 3 in Delmar Avenue @ Stafford Avenue
- 3 in Huguenot Avenue @ Woodrow Road
- 1 in Heenan Avenue @ Stafford Avenue
- 1 in Stafford Avenue between Heenan Avenue & Delmar Avenue
- 2 in Delmar Avenue @ Vineland Avenue
- 2 in Huguenot Avenue @ Woodrow Avenue
- 2 in Nippon Avenue @ Sheldon Avenue
- 1 in Delmar Avenue @ Woodrow Road
- 2 in Powell Street @ Sinclair Avenue
- 2 in Delmar Avenue @ Woodrow Road
- 1 in Nippon Avenue @ Vineland Avenue
- 3 in Nippon Avenue @ Stafford Avenue
- 1 in Huguenot Avenue between Rensselaer Avenue & Sheldon Avenue
- 1 in Woodrow Road @ Walker Place
- 1 in Crown Place @ Crown Avenue
- 2 in Woodrow Road between Everton Avenue & Belfield Avenue
- 1 in Woodrow Road between Dahlia Street & Powell Street
- 1 in Delmar Avenue @ Crown Avenue
- 1 in Ballard Avenue @ Sperry Place
- 1 in Heenan Avenue @ Vineland Avenue
- 1 in Nippon Avenue @ Woodrow Road
- 1 in Huguenot Avenue @ Sheldon Avenue
- 2 in Nippon Avenue @ Crown Avenue
- 1 in Huguenot Avenue @ Stafford Avenue

Scope of Work Estimate
GAS COST SHARING SCOPE OF WORK
SUPPORT & PROTECTION
FOR CONTRACT NUMBER SE-818
CITY OF NEW YORK

The New York City Department Of Design and Construction, Division Of Infrastructure, is proposing to install sanitary sewer(s) and / or water main(s) in the locations indicated below along with all work incidental thereto.

Item 6.02 Extra Excavation for the Installation of Catch Basin Sewer Drain Pipe With Gas Interference. (Ea.)

- 2 in Stafford Avenue between Delmar Avenue & Heenan Avenue
- 1 in Delmar Avenue between Anaconda Street & Sperry Place
- 1 in Delmar Avenue @ Stafford Avenue
- 3 in Delmar Avenue @ Sheldon Avenue
- 2 in Sinclair Avenue between Huguenot Avenue & Nippon Avenue
- 1 in Anaconda Street between Sperry Place & Castor Place
- 1 in Huguenot Avenue @ Woodrow Road
- 1 in Ballard Avenue between Woodrow Road & Sperry Place
- 1 in Sperry Place between Anaconda Street & Ballard Avenue
- 1 in Anaconda Street @ Sperry Street
- 2 in Crown Place @ Crown Avenue
- 3 in Sinclair Avenue between Huguenot Avenue & Powell Street
- 2 in Walker Place between Sinclair Avenue & woodrow Road
- 2 in Cardiff Street @ Castor Place
- 1 in Nippon Avenue @ Sheldon Avenue
- 2 in Anaconda Street @ Castor Place
- 1 in Delmar Avenue between Woodrow Road & Sperry place
- 1 in Sinclair Avenue between Delmard Avenue & Deadend (East)
- 1 in Huguenot Avenue between Woodrow Road & Stafford Avenue
- 1 in Crown Avenue between Crown Place & Belfield Avenue
- 1 in Huguenot Avenue between Sinclair Avenue & Stafford Avenue
- 1 in Huguenot Avenue @ Sinclair Avenue
- 2 in Crown Avenue between Delmar Avenue & Nippon Avenue
- 2 in Boulder Street @ Castor Place
- 2 in Stafford Avenue between Huguenot Avenue & Nippon Avenue
- 2 in Sheldon Avenue between Delmar Avenue & Nippon Avenue
- 2 in Huguenot Avenue @ Sheldon Avenue
- 1 in Sheldon Avenue between Huguenot Avenue & Nippon Avenue
- 2 in Vineland Avenue between Delmar Avenue & Heenan Avenue
- 1 in Ballard Avenue @ Sperry Place
- 1 in Sinclair Avenue between Delmard Avenue & Deadend (East)

Scope of Work Estimate
GAS COST SHARING SCOPE OF WORK
SUPPORT & PROTECTION
FOR CONTRACT NUMBER SE-818
CITY OF NEW YORK

The New York City Department Of Design and Construction, Division Of Infrastructure, is proposing to install sanitary sewer(s) and / or water main(s) in the locations indicated below along with all work incidental thereto.

1 in Delmar Avenue @ Sperry Place
2 in Powell Street between Sinclair Avenue & Woodrow Road
3 in Delmar Avenue @ Sinclair Avenue
1 in Huguenot Avenue @ Castor Place
2 in Nippon Avenue Vineland Avenue
1 in Woodrow Road & Everton Avenue
2 @ the intersection of Vineland Avenue & Nippon Avenue
3 @ the intersection of Nippon Avenue & Stafford Avenue
1 in Woodrow Road & Ballard Avenue
1 in Woodrow Road between Boulders Street & Vineland Street
2 along Sheldon Avenue
1 on Boulder Street
1 on Crown Avenue @ Belfield Street
3 @ the intersection of Delmar Avenue & Vineland Avenue

Item 6.03 Removal of all Abandoned Gas Facilities. all Sizes (LF.)

9000 in Various Locations As Required

**Item 6.03.1 Removal of Abandoned Gas Facilities with possible coal tar wrap. All Sizes (L.F.)
(For National Grid Work Only)**

3000 in Various Locations As Required

Item 6.04 Adjust Gas Hardware to grade using Spacer Rings / Adaptors (Street repaving) (Ea.)

420 in Various Locations As Required

Item 6.05 Adjust Hardware To Grade By Resetting. (Roadway Reconstruction) Ea.

150 in Various Locations As Required

Item 6.06 Special Care Excavation & Backfilling (C.Y.)

5250 in Various Locations As Required

Scope of Work Estimate
GAS COST SHARING SCOPE OF WORK
SUPPORT & PROTECTION
FOR CONTRACT NUMBER SE-818
CITY OF NEW YORK

The New York City Department Of Design and Construction, Division Of Infrastructure, is proposing to install sanitary sewer(s) and / or water main(s) in the locations indicated below along with all work incidental thereto.

Item 6.07 Test Pits For Gas Facilities (C.Y.)

1000 in Various Locations As Required

*END OF ADDENDUM NO. 3
This Addendum consists of fifty-seven (57) pages*

ATTACH TO CONTRACT DOCUMENTS

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

PROJECT ID: SE818

FOR THE CONSTRUCTION OF SANITARY AND STORM SEWERS IN: SHELDON AVENUE BETWEEN ELLSWORTH AVENUE AND BMP-SB1 A POINT APPROXIMATELY 1,000-FEET EAST OF DELMAR AVENUE; SINCLAIR AVENUE BETWEEN ELLSWORTH AVENUE AND DEAD END; STAFFORD AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; VINELAND AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; CROWN AVENUE BETWEEN NIPPON AVENUE AND BELFIELD AVENUE; WOODROW ROAD BETWEEN POWELL STREET AND BELFIELD AVENUE; CASTOR PLACE BETWEEN HUGUENOT AVENUE AND ANACONDA STREET; SPERRY PLACE BETWEEN ANACONDA STREET AND EVERTON AVENUE; POWELL STREET BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; WALKER PLACE BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; DAHLIA STREET BETWEEN WOODROW ROAD AND SHIFT PLACE; HUGUENOT AVENUE BETWEEN RENSSELAER AVENUE AND SHIFT PLACE; CARDIFF STREET BETWEEN CASTOR PLACE AND ROSEDALE AVENUE; BOULDER STREET BETWEEN WOODROW ROAD AND ROSEDALE AVENUE; NIPPON AVENUE BETWEEN RENSSELAER AVENUE AND WOODROW ROAD; ANACONDA STREET BETWEEN SPERRY PLACE AND DELMAR AVENUE; BALLARD AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; DELMAR AVENUE BETWEEN RENSSELAER AVENUE AND ANACONDA STREET; CROWN PLACE BETWEEN CROWN AVENUE AND DEAD END; EVERTON AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; AND, HEENAN AVENUE BETWEEN VINELAND AVENUE AND DEAD END

INCLUDING WATER MAIN WORK

**Together With All Work Incidental Thereto
BOROUGH OF STATEN ISLAND**

ADDENDUM NO. 4

DATED: March 11, 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.

**BEST MANAGEMENT PRACTICE (BMP)
CONSTRUCTION OF BLUEBELT IMPROVEMENTS SWEET BROOK BLUEBELT
BOROUGH OF STATEN ISLAND, NY**

CONSTRUCTION OF BLUEBELT IMPROVEMENTS
SWEET BROOK BLUEBELT
STATEN ISLAND, NY

SPECIFICATIONS FOR

CONTRACT SE818

Construction of Best Management Practice, (BMP)
BMP SB-1 Annadale Wedge;
Installation of Weir Plates at Conference House Park Bluebelt (CH-2); and
Installation of Weir Plates at Detroit Avenue

February 2013

Prepared for the NYC Department of Environmental Protection

By Hazen and Sawyer, P.C.

A4-1b

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CONTRACT SE818 CONSTRUCTION OF BEST MANAGEMENT PRACTICES

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CONTRACT SE818

BMP CONSTRUCTION AND RELATED WORK
IN THE SWEET BROOK BLUEBELT;
INSTALLATION OF WEIR PLATES AT
THE CONFERENCE HOUSE PARK BLUEBELT (CH-2); AND
INSTALLATION OF WEIR PLATE AT DETROIT AVENUE;

CONTRACT SE818

CONSTRUCTION OF BEST MANAGEMENT PRACTICES

DIVISION VII

SPECIFIC PROVISIONS

7.01 LOCATION OF WORK

Work under this Contract is to be performed in the Sweet Brook Bluebelt (SB-1), Conference House Park Bluebelt (CH-2), and Detroit Avenue. The properties are owned and regulated by the New York City Department of Environmental Protection (NYCDEP) and is located in Community Board 2 and 3 of Staten Island. The BMP SB-1 site in Sweet Brook Bluebelt is located between Sinclair Avenue and Rensselaer, adjacent to Heenan Avenue. The BMP CH-2 site in the Conference House Park Bluebelt is located within Conference House Park, Billop Avenue. The Detroit Avenue site is located in the existing flow splitter below Detroit Avenue, between North Railroad Avenue and Jefferson Boulevard.

7.02 WORK INCLUDED

The work under this Contract includes the construction of Best Management Practice (BMP) SB-1; installation of weir plates at Best Management Practice (BMP) CH-2; and installation of weir plates for Detroit Avenue. 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. Best Management Practices (BMP) Construction within the Sweet Brook Bluebelt Area

DIVISION VII - DETAILED SPECIFICATIONS –
CONTRACT SE818

This will entail the construction of hydraulic features necessary to treat and convey stormwater runoff at the points where the storm sewer system discharges into the enhanced extended detention wetland system which eventually drains in the adjacent stream channel. Specifications and plans for this work are included in this Addendum.

The following BMPs will be constructed:

BMP SB-1 - Annadale Wedge - Culvert, Forebay, Micropool and Stream Restoration

3. Construction Activities within the Conference House Park Bluebelt (CH-2) area

This will entail the installation of weir plates at the weir within the Conference House Park's Bluebelt (BMP CH-2) located within Conference House Park, Billop Avenue.

BMP CH-2 - Billop Avenue – Installation of Weir Plates

As shown on the Contract Drawings, the installation shall include the fabrication and installation of the weir plates.

4. Construction Activities within Detroit Avenue

This will entail the installation of weir plates at the weir within the existing flow splitter under Detroit Avenue between North Railroad Avenue and Jefferson Boulevard, under the direction of a DEP Representative.

Detroit Avenue - Installation of Weir Plates

5. Site Restoration

The entire Project site will be restored upon project completion. The site restoration will include proper grading for permanent access and development of the BMP stormwater management facilities. Cleared areas will all be replanted with emphasis on the use of native plantings with the site layout designed to minimize the disturbance on the existing trees and plants. Boundaries will be established with the use of buffer areas where appropriate.

DIVISION VII - DETAILED SPECIFICATIONS -
CONTRACT SE818

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 owns and will maintain the properties where BMP SB-1, BMP CH-2 and related work will be constructed under this project. They will also be responsible for the construction and maintenance of BMP SB-1 and CH-2 under this Contract. Work completed under this Contract includes the construction of BMP SB-1 and the storm sewer within the Sweet Brook Bluebelt area.

2. New York State Department of Environmental Conservation (NYSDEC)

This State Agency has issued a freshwater wetland permit authorizing work in regulated areas to be performed under this Contract. This Agency has the regulatory authority to inspect the work site in order to ensure that permit requirements are not violated.

3. New York City Department of Design and Construction (NYCDDC)

The NYCDDC completed the designs for the storm sewer and sanitary 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.

This engineering firm is the design consultant for all the work contained in these specifications. They are engaged by DEP.

5. Army Corp of Engineers

This Federal Agency issues permits for all work within Federal jurisdiction wetlands. This agency has the regulatory authority to inspect the work site in order to ensure that permit requirements are not violated.

DIVISION VII - DETAILED SPECIFICATIONS -
CONTRACT SE818

6. Restoration Specialist (Construction Monitor)

The Restoration Specialist will be retained by the NYCDDC. The Restoration Specialist shall also serve as the Construction Monitor for the construction of the BMPs. The individual or firm filling this position will be responsible for overall oversight of the complete BMP installation. This individual or firm will also focus on erosion control for the entire project, and for overseeing all work in wetland areas and ensuring that the work adheres to permit requirements. The Restoration Specialist is responsible for compliance with the permit as it relates to BMP construction. The exact powers of the Restoration Specialist (Construction Monitor) are stipulated in the wetland permit. The Restoration Specialist (Construction Monitor) shall meet the requirements of Specification 7.404.

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 restoration and/or creation of freshwater wetland systems.

To support the Contractor's contention that the Contractor or its proposed subcontractor is qualified to perform work involving the creation or restoration of freshwater wetlands 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, plant species, time of planting, etc.). Provide client contact person's name and telephone number. 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. How were the violations resolved? Enclose copies of applicable wetland permits. 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) contracts that involved the installation and maintenance of soil erosion and sediment control devices during construction of a project.

To support the Contractor's contention that he/she is qualified, the Contractor shall be able to provide the following information in a Statement of Qualifications, as detailed in the paragraph below.

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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 DDC the Statement of Qualifications described in this Section within three (3) calendar days after requested to do so by DDC.

7.03

INSPECTION BEFORE BIDDING AND MANDATORY PRE-BID CONFERENCE

Before bidding the Contractor shall visit the site of the work. The Contractor shall obtain all necessary information, and make his own determinations of any and all conditions which may affect in any way the performance of his work and his bid prices under these Contracts. All pertinent data and dimensions with regard to existing construction shall be verified by the Contractor.

Access to the site for inspection purposes prior to bidding is on a continual basis, since the site is a public property.

All bidders are required to attend a mandatory pre-bid conference, if one should be scheduled. Exact time and place meeting place is to be announced later.

7.04

STANDARD SEWER SPECIFICATIONS

Unless otherwise specified, all work, materials, and equipment shall conform to the applicable sections of the New York City Department of Design and Construction Standard Sewer Specifications.

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7.05 INSPECTION BY THE CITY, STATE AND FEDERAL GOVERNMENT

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 DEP

The Contractor shall become familiar with the following permits and approvals which will be obtained by DEP:

- U.S. Army Corps of Engineers Wetland Permit.
- DEC Freshwater Wetlands Permit pursuant to 6NYCRR Parts 622 and 633, and water quality certification (Protection of Waters, Public Law 95-200) pursuant to the procedures of Section 401 certification for Federal Wetland Permit;
- New York City Planning Commission authorization for alterations within the Special South Richmond Development District as designated by the City Zoning Resolution. These include modification of topography, removal of trees larger than 6 inches in caliper, and alteration of Designated Open Space; and
- New York City Planning Commission Waterfront Revitalization (Coastal Zone) Consistency Determination;

7.08 LAND FOR CONTRACTOR'S USE

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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, BMP as-builts, soundings, cross sections or other measurements as may be required by the Engineer for BMP 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 BMP site and activities not related to BMP 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 plus travel time, not including holidays. The per diem rate shall include the services of a three man surveying crew. The Engineer shall be present during the progress of Work and the Engineer shall deem as to whether a full eight hour period had been employed in completing the Work, and as to whether the Contractor has utilized his crew at the productivity output required to complete the Work as anticipated. The surveyor will submit invoices to the Engineer, which will be forwarded to the Contractor for prompt payment. Payments shall be made for invoiced costs only, with no payment for overhead and profit.

7.10 CONSTRUCTION - SPECIAL REQUIREMENTS

A. Field Measurements

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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

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, 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:

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- 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
- 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. Protection of Archeological Resources

In order to protect specific archaeological resources where there is a significant potential impact, the Contractor shall be required to conduct a Phase 1B study (Archaeological Testing) for areas of medium and high sensitivity prior to commencement of any construction activities in these areas, as directed by the Engineer.

To perform this work, the Contractor shall obtain cost proposals from a minimum of three (3) qualified firms experienced in archeological testing. Prior to the Contractor entering into an agreement with any Consultant(s) in order to satisfy these requirements, the Contractor shall first ascertain from the DEP the related accumulated research and information already assembled on the subject. The Contractor shall forward this information to the prospective and selected consultant(s).

The Phase 1B Study shall be conducted according to the requirements of the New York City Landmarks Preservation Commission.

No separate payment shall be made for this work for performing 1B study; the cost thereof shall be included in the bid price for other items.

H. Sequence of Construction

All work shall be completed in accordance with the Contract Drawings, and upon approval of the Project Engineer and the Restoration Specialist. Stake out and

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receive approval from the Restoration Specialist for the limits of work before beginning any clearing.

Landscaping is not included in construction sequencing; the contractor must receive approval for all of the landscaping work from the Restoration Specialist prior to construction.

All work shall be completed in accordance with the Contract Drawings, and upon approval of the Project Engineer and the Restoration Specialist. Stake out and receive approval from the Restoration Specialist for the limits of work, dewatering procedures, SWPPP, all sediment and erosion control procedures, and necessary tree guards before beginning any clearing.

Work for proposed project is to be completed in four phases:

- Area 'A': Sheldon Avenue (East) Wetland Creation
- Area 'B': Pond Extension and Cascade, Riffle and Pool Sequence
- Area 'C': Retrofit of Existing Pond
- Area 'D': Downstream Stream Rehabilitation

Landscaping is not included in construction sequencing; the contractor must receive approval for all of the landscaping work from the Restoration Specialist prior to construction.

- a) Install all stabilized construction entrances: Stabilized Construction Entrance 'A', from Sheldon Avenue (East), Stabilized Construction Entrance 'B' from Heenan Avenue, Stabilized Construction Entrance 'C' from Sheldon Avenue, and Stabilized Construction Entrance 'D' from the intersection of Rensselaer Avenue and Heenan Avenue.
- b) Install perimeter erosion control measures, including reinforced silt fences, tree guards and construction limit fence.

AREA 'A'

- a) Install perimeter erosion control measures, including reinforced silt fences and tree guards around Area 'A'.
- b) Perform general site clearing and grubbing.
- c) Install storm sewer from stub end of Sheldon Avenue to the outlet and construct headwall #2.
- d) Perform grading of the outlet stilling basin and the wetland area to the top of bank of the existing pond.
- e) Once complete, install erosion control measures such as jute mesh or equivalent and seed all graded areas.

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AREA 'B'

- c) Inspect perimeter erosion control measures, including reinforced silt fences, construction limit fence and tree guards around Area 'B'.
- d) Perform general site clearing and grubbing.
- e) Install new storm sewer from stub end of Heenan Avenue to the outlet and construct headwall #3 and outlet stilling basin.
- f) Perform grading and install the cascade, riffle and pool sequence, starting from the outlet stilling basin and working downstream.
- g) Perform site excavation to expose, demolish and remove approximately 220 LF of the existing 58" x 91" storm sewer at the downstream end, as well as the existing headwall into the pond.
- h) Install approved dewatering measures to divert existing flow downstream around work area, discharging into the existing pond (Area 'C1').
- i) Perform general site grading in Area 'B'.
- j) Install weir wall structure #1 and headwall #1 in Sheldon Avenue (West) right-of-way.
- k) Install parallel 4' x 3' box storm sewer along Sheldon Avenue (West) right-of-way.
- l) Once complete, install erosion control measures such as jute mesh or equivalent and seed all graded areas.

AREAS 'C1' AND 'C2'

- a) Inspect perimeter erosion control measures, including reinforced silt fences, construction limit fence and tree guards around Areas 'C1' and 'C2', the existing pond, and Area 'D', the downstream area.
- b) Perform general site clearing and grubbing.
- c) Install approved dewatering measures to divert existing flow downstream around Area 'C1', discharging to the downstream Area 'C2'.
- d) Perform grading in Area 'C1'.
- e) Install erosion control measures such as jute mesh or equivalent and seed all graded areas, excluding the channel bottom.
- f) Remove dewatering procedures and stabilize the dewatering area with jute mesh or equivalent and seeding.
- g) Install approved dewatering measures to divert existing flow downstream around Area 'C2', discharging to downstream Area 'D'.

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- h) Perform site grading and install cascade, riffle and pool sequence to connect the new constructed wetlands in Area 'A'.
- i) Install erosion control measures such as jute mesh or equivalent and seed all graded areas, excluding the channel bottom.
- j) Remove dewatering procedures and stabilize the dewatering area with jute mesh or equivalent and seeding.

AREA 'D'

- a) Set up approved dewatering and sediment control procedure to divert existing flow around Area 'D', discharging to the downstream channel at the limits of work.
- b) Perform general site clearing, removal of in-stream concrete and debris, and removal of existing outlet structure.
- c) Perform site grading and install outlet structure, including weir chamber, 10' x 3' box culvert and headwall #4.
- d) Install outlet stilling basin and grade stream and floodplain.
- e) Install erosion control measures such as jute mesh or equivalent and seed all graded areas, excluding the stream bottom.
- f) Remove dewatering procedures and stabilize the dewatering area with jute mesh or equivalent and seeding

7.11 TRANSPORTATION AND HANDLING OF MATERIALS AND EQUIPMENT

A. General

- 1. Contractor shall make all arrangements for transportation, delivery, handling and rigging of equipment and materials required for prosecution and completion of the work.
- 2. Working space on the site is limited. Equipment shall not be delivered to the site until it can be moved directly to the area where it will be utilized.
- 3. If necessary to move stored materials and equipment during construction, the Contractor shall move or cause to be moved materials and equipment without any additional compensation.
- 4. The Contractor shall take all necessary provisions to prevent inadvertent deposition and spillage of excavated soils or other materials that are being transported from the project site. The Contractor must employ the use of

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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:
 - a. Product complies with requirements of Contract Documents and approved submittals.
 - b. Quantities are correct.
 - c. Containers and packages are intact, labels are legible.

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- 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.
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.

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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 until the structures are enclosed.

All mechanical equipment shall be coated, wrapped and otherwise protected from snow, rain, drippings of any sort, dust, mud, condensed water vapor, etc. during shipment, storage, and installation and until placed in service.

Should storage of mechanical equipment become necessary before it can be stored at the Site, the Contractor shall provide storage in a weatherproof warehouse.

Materials may be stored out of doors if supported above ground surface on wood runners and protected with approved, effective and durable covers.

All storage and protection of materials and equipment at the Site shall be subjected to the approval of the Engineer.

All costs for equipment protection including warehousing or other work to meet the scheduled completion date shall be deemed to be included under the Contract and no additional payment will be made.

7.13

FINAL CLEANING

A.

Final Cleaning Under This Contract

1. At the completion of the work, the Contractor for this Contract shall remove all rubbish from and about the site of the work, and all temporary structures, construction signs, tools, scaffolding, materials, supplies and equipment which he or any of his subcontractors may have used in the performance of the work. The Contractor shall broom clean paved surfaces and rake clean other surfaces of grounds.
2. The Contractor shall thoroughly clean all materials, equipment and structures installed under this Contract; all marred surfaces shall be touched up to match adjacent surfaces.
3. The Contractor shall clean all landscaped areas of all debris and any objectionable material, as determined by the Engineer, and shall remove all such debris off-site.

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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

No separate payment shall be made for the work specified in the Specific Provisions. All costs shall be included in the various Contract items unless otherwise specified.

7.16 BID BREAKDOWN

The Contractor shall submit a breakdown of the bid prices of this Contract within 15 days after the commencement date specified in the Notice to Proceed. The bid breakdown shall be by reference to every detailed specification section listed for the Contract Item, including physical quantities, material costs, unit costs, and installation costs, where applicable. In addition, separate amounts for the following shall be included in the bid breakdown:

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Bond, Insurance and Mobilization
Final Working Drawings, Record Drawings

7.17 DETAILED WORK DESCRIPTION

A. SB-1: Annadale Wedge

BMP SB-1 is located on NYCDEP Bluebelt property situated between Sinclair Avenue and Rensselaer, adjacent to Heenan Avenue. The BMP consists of a step pool system and enhanced extended detention wetland system with a forebay and micropool. The BMP also includes three headwalls at the inlets to the forebay and step pool systems, a weir with low-flow orifice dividing the extended detention wetland system, and an outlet weir structure that will regulate the discharge from the BMP to downstream reaches. Maintenance accessways are provided from Sheldon Avenue (east), Rensselaer Avenue, Sheldon Avenue (west) and Heenan Avenue to the BMP site. In addition, a limited extent of stream restoration will be carried out downstream of the enhanced wetland; however, its alignment will remain unchanged.

This BMP is designed to attenuate storm water flow and velocity to minimize downstream flooding and provide water quality improvements. An extensive wetland and upland planting scheme will be implemented to improve the ecological and aesthetic features of the area while reducing erosion and sedimentation downstream.

The items that are included in the specifications and are also shown in the Contract Drawings include, but are not limited to, the following:

Specification Section

Specific Provisions

7.09	Licensed Surveyor
7.18	BMP Progress Frames

Structures and Misc. Equipment

7.101	Work Included
7.102	Dewatering
7.103	Concrete
7.104	Steel Reinforcement
7.105	Welding
7.107B	Rip Rap Stone/Angular Natural Field Stone
7.109	Geotextile Fabric

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7.110	Sheeting and Bracing
7.111	Valves
7.113	Miscellaneous Piping
7.114B	FRP Weir Plates
7.117	Graffiti Resistant Coating
7.120	Trash Rack
7.125A	Access Hatches
7.129	Concrete Structures

Mortared Stone Wall

7.201	Work Included
7.202	Masonry Mortar
7.203	Masonry Accessories
7.204	PA Colonial Field Stones

Earthwork and Grading

7.300	Work Included
7.301	Debris Removal and Disposal
7.302	Clearing, Grubbing, and Removals
7.303	Temporary Wooden Tree Guards
7.304	Excavation
7.305	Crushed Stone
7.306	Tree Removal and Disposal
7.307A	Grading
7.308	Fill On-Site
7.310	Plant and Sod Salvage
7.312	Demolition and Site Clearing

Landscaping and Restoration

7.400	Work Included
7.401	Landscaping for Terrestrial Zone and Wetland Zone
7.403	Top Soil for Restored Area
7.405	Vector, Pest and Wildlife Control
7.406	Wood Chips
7.407	Jute Mesh
7.408B	Herbicide Application
7.413	Temporary Goose Exclusion Fence
7.414	BMP As-Built Plans
7.415	Vine and Invasive Plant Removal
7.418	Sand
7.419	Tree and Root Pruning

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Erosion and Sedimentation Control Measures

7.500	Soil Erosion and Sedimentation Control Measures
7.501	Maintenance of Erosion Control Measures
7.502	Construction Limit Fence
7.504	Reinforced Silt Fence
7.505	Sand Bags
7.506	Sediment Trap with Filter
7.507	Sediment Filter
7.509A	Stabilized Construction Entrance
7.510	Portable Sediment Tanks
7.511	Storm Drain – Inlet Protection
7.512	Dirtbag

Perimeter Site Security/Access Control Measures

7.600	Work Included
7.601B	Galvanized Steel “W” Beam Guide Rail and Guide Rail Gate
7.602	Boulder Provision and Placement
7.604	Black Chain Link Fence
7.605	Sign Installation on Steel Rail Posts
7.606	Permanent Access Way with Concrete Pavers or Gravel
7.608	Survey Bollards and Survey Monument
7.612	Bronze Plaque
7.622	Forebay/Micropool Sediment Clean-out Indicator

Stream Bank Stabilization

7.700	Work Included
7.701	Live Stakes
7.703	Natural Field Stones
7.705	Erosion Control Mat
7.706	Filter Fabric
7.707	Coir Logs
7.710	Reno Mattress

B. CH-2: Conference House Park

Unless otherwise noted, all construction activities shall conform with the Contract Drawings and be field directed by the Engineer or NYCDEP Representative.

The items that are included in the specifications and are shown in the Contract Drawings include, but are not limited to, the following.

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Specification Section

Structures and Misc. Equipment

7.101	Work Included
7.105	Welding
7.114B	FRP Weir Plates

C. Detroit Avenue

Unless otherwise noted, all construction activities shall conform with the Contract Drawings and be field directed by the Engineer or NYCDEP Representative.

The items that are included in the specifications and are shown in the Contract Drawings include, but are not limited to, the following.

Specification Section

Structures and Misc. Equipment

7.101	Work Included
7.105	Welding
7.114B	FRP Weir Plates

7.18 BMP PROGRESS FRAMES

A. Work Included

Under this Item, the Contractor shall record all job progress of the project through photography. Job progress photographs shall be taken, developed and packaged for submittal by a Professional Photographer, in accordance with the plans and specifications and as directed by the Engineer. The Professional Photographer shall record site conditions before, during and after project completion.

The Contractor shall submit for approval a Professional Photographer who has had previous experience recording site conditions and job progress of similar construction projects. Prior to approval, examples of the Professional Photographer's work shall be supplied to the Engineer.

The services of the Professional Photographer shall be provided on an as-needed basis, as directed by the Engineer. It is estimated that the Professional

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Photographer shall be called to the work site approximately two times per month while the project is actually in progress.

The Professional Photographer shall supplement inadequate natural light with a flash to insure sufficient clarity and detail. Over-exposed as well as under-exposed frames shall be rejected.

Each site visit shall require no less than fifteen (15) job progress frames, or as directed by the Engineer. One (1) frame, i.e. one photographic recording, shall include two (2) 8-inch by 10-inch color prints, one (1) negative and one (1) digital photograph. For color prints, a 2-1/4 inch square negative format shall be used with either 120mm, 220mm or 70mm film. Each digital photo shall be taken in and saved as a jpg (jpeg) format.

Within three weeks of said visit, the Contractor shall submit the completed job progress frames suitably mounted and labeled in acetate jackets in a three-ring binder. Improperly packaged frames shall be returned to the Contractor. The Engineer reserves the right to reject any frames that are deemed unacceptable.

Once accepted, all frames shall be the exclusive property of the City of New York. The Professional Photographer shall be under the direct supervision of the Engineer.

B. Measurement and Payment

The quantity to be measured for payment under this section shall be the total number of accepted job progress frames photographed, developed, packaged, and submitted in accordance with the plans and specifications and the direction of the Engineer.

For supplying all labor, materials and equipment necessary for the job progress frames, the Contractor shall receive a unit price bid.

The Contract price per unit of Job Progress Frames shall be as indicated on the BID SCHEDULE OF PRICES, Item No. BMP-7.18. The bid price 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 Engineer.

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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>
7.102	Dewatering
7.103	Concrete
7.104	Steel Reinforcement
7.105	Welding
7.107B	Rip Rap Stone/Angular Natural Field Stone
7.109	Geotextile Fabric
7.110	Sheeting and Bracing
7.111	Valves
7.113	Miscellaneous Piping
7.114B	FRP Weir Plates
7.115	Hoods
7.116	Aluminum Slide Grate
7.117	Graffiti Resistant Coating
7.120	Trash Rack
7.125A	Access Hatches
7.128	Asphalt Paving
7.129	Concrete Structures

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7.102 DEWATERINGA. Description of Work

The Contractor shall furnish, install, operate and maintain dewatering equipment as required, for BMP and Bluebelt work as specified herein. The dewatering equipment shall include, but not be limited to, the following equipment items:

1. Pumps
2. Piping
3. Accessories
4. Wells.

B. General Requirements

1. General Specifications - Work performed under this Section shall be in conformance with the Standard Sewer Specifications.
2. Examination of the Sites - The Contractor shall take all steps that he considers necessary to familiarize himself with the surface and subsurface conditions at the site, and shall obtain the data that is required to analyze the water and soil conditions at the site.
3. Shop Drawings - The Contractor shall submit to the Engineer for approval shop drawings and any other material required to substantiate conformance with the requirements set forth in the specifications. Shop drawings shall include a detailed plan of operations.

C. Dewatering

1. General Information - The Contractor shall perform dewatering activities to insure that all construction is performed under dry conditions. If a well point system is proposed, the Contractor shall utilize a licensed well driller. The Contractor shall always drill down to sand or gravel layer when available and when it is below the lowest excavated invert.

The Contractor shall operate the dewatering pumps continuously, a day before and during construction until all associated work within the influence zone of the well point have been completed.

2. Care and Disposal of Water - Care of water shall be in accordance

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with Section 15 - 15.25 of the Environmental Conservation Law.

Water from open cut and/or sheeted excavations, manholes, structures, trenches, or from whatever source, shall be disposed of strictly in accordance with methods approved by the Engineer.

The Contractor shall submit proposed dewatering methods to the New York State Department of Environmental Conservation for the required permits. If a well point dewatering system is proposed, the Contractor shall utilize a licensed well driller. Contractor shall contact NYSDEC a minimum of two (2) weeks in advance of dewatering system startup.

When required by the Engineer, such water shall be passed through a settling basin and tank of acceptable size and shape and equipped with an overflow. Each settling basin shall be cleaned as required and as ordered by the Engineer.

Sufficient water to flush all sewers and drains shall be provided by the Contractor when necessary. If any sewer, drain, catch basin, inlet or gutter, that receives dirty water attributable to the Site, should become filled or partially filled with sediment or debris, the Contractor shall promptly and satisfactorily remove such deposits.

D. Design Criteria

1. Provide dewatering system which will effectively reduce hydrostatic pressure and lower groundwater levels below excavation levels as necessary for safe and proper prosecution of the work and which will result in obtaining stable, substantially dry subgrade for prosecution of subsequent operations.
2. Design dewatering methods so that the effluent discharge from the sediment control measures (sump pit, sediment tank) does not impact surface water using the following protocol which was developed to monitor dewatering effluent discharge:

a. Monitoring of Dewatering Operations

Prior to the start of dewatering operations, a visual inspection of the installation of the sediment control measure(s) such as a dewatering sump pit and/or a portable sediment tank shall be made by the Engineer. Upon commencement of dewatering effluent

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discharge from the sediment control measures, at least three turbidity measurements of the effluent shall be conducted over a 15 minute-period using the following methodology. If the arithmetic mean of these three turbidity measurements is greater than three (3) times the ambient turbidity level or 50 NTUs, whichever is less, all dewatering operations shall be discontinued until the Engineer is consulted regarding additional control measures. If the ambient turbidity level is greater than 50 NTUs, the dewatering effluent discharge shall not exceed the ambient turbidity level unless otherwise directed by the Engineer.

b. Determination of Ambient Turbidity

Ambient turbidity levels of surface waters shall be determined using a Hanna Instruments HI 93703 Portable Microprocessor Turbidity Meter available from Hanna Instruments, Inc., Woonsocket, RI or Orbeco Hellige Portable Turbidity or LaMotte Portable Turbidimeter or equivalent approved by the Engineer. Ambient turbidity measurements shall be collected under dry weather conditions. Dry weather conditions are defined as no precipitation in the preceding 48 hours. A minimum of three turbidity measurements shall be collected using as follows:

- Water samples shall be collected a minimum of 20 feet upstream of the work area prior to commencement of any construction activity.
- Water samples shall be collected without disturbing stream bank or stream bed sediments.
- The turbidity measurements shall be conducted according to the instructions provided in the unit's Operational Guide which are summarized below.
- After the meter has been turned on, fill a clean cuvet up to one quarter inch from its rim with thoroughly agitated sample.
- Allow sufficient time for bubbles to escape before securing the cap.
- Wipe the outside of the cuvet thoroughly with a lint-free tissue.

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- Place the cuvet into the cell of the meter.
- Press the Read key and the LCD will display a blinking "SIP" (Sampling in Process). The turbidity value will appear after approximately 25 second.

The arithmetic means of the three dry weather upstream turbidity measurements shall be the ambient turbidity level. Turbidity shall be measured in Nephelometric Turbidity Units (NTUs).

E. Submittals

Submit the following for approval:

1. Working Drawings
 - a. Type of dewatering system proposed, showing arrangement, location and depths of proposed system, complete description of equipment and materials to be used, procedure to be followed, standby equipment, standby power supply and proposed location(s) of points of discharge of water.
 - b. Obtain approval from the Engineer and appropriate regulatory agencies prior to installation of system.

F. Job Conditions

1. Subsurface Conditions
 - a. Subsurface investigations and groundwater level determinations shall be conducted by the Contractor prior to implementation as specified herein.
2. Responsibilities
 - a. Select and install dewatering system to accomplish groundwater control as specified.
 - b. Monitor quality of discharge from dewatering system to determine if soil particles are being removed by system.
 - c. Measure to ascertain if movement is caused in adjacent areas by dewatering operations; take approved measures to minimize such movement.

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- d. Take measures to prevent damage to property.
- e. Repair as approved damage, disruption or interference resulting directly or indirectly from dewatering operations.
- f. Remove sediments from all intercepted groundwater or surface water as specified herein and approved by the Engineer and the jurisdictional agency concerned. Under no circumstances shall the Contractor directly discharge, without treatment, into the drainage channel or creek.

G. Sump Pit

The Contractor, at the direction of the Engineer shall provide a stone filled pit with perforated standpipe/nozzle wrapped with filter fabric in which intercepted groundwater is pumped to an approved location.

The size and shape of the sump pit will vary due to site conditions. The size of pump should be determined from manufacturer's specifications.

- 1. The standpipe shall be a perforated 12"-24" diameter corrugated or PVC pipe.
- 2. A base of 2" aggregate shall be placed in the pit to a depth of 12". After installing the standpipe, the pit surrounding the standpipe shall then be backfilled with 2" aggregate.
- 3. The standpipe shall extend 12"-18" above the lip of the pit.
- 4. The standpipe shall be wrapped with filter cloth before installation. If desired, 1/2" x 1/2" hardware cloth may be placed around the standpipe, prior to attaching the filter cloth. This will increase the rate of water seepage into the pipe.

H. Surface Drainage

- 1. Intercept and divert surface drainage away from BMP or other excavations, wells by use of dikes, ditches, swales, open stone lined channel, temporary diversion pipes which could be either on the surface or buried, sumps or other means. To properly install buried diversion pipe the contractor may be required to excavate.

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2. Design surface drainage systems to prevent erosion on or off the site or unwanted water flow.
3. Remove surface drainage system when no longer required.
4. Remove debris and restore site(s) to original conditions.

I. Drainage Of Excavated Areas

1. Provide and maintain ditches of adequate size to collect surface and subsurface water and seepage which may enter excavations and divert water into sump so that it can be drained or pumped into drainage channels as approved by the Engineer and the jurisdictional agency concerned.
2. Install settling basins or other approved apparatus as necessary to reduce amount of fine particles carried by water diverted away from excavation.
3. When no longer necessary, backfill and seal drainage ditches, sumps and settling basins with approved material.

J. Execution

1. Install dewatering system as specified and with the approval of the Engineer.
2. Demonstrate by approved methods that no soil particles are present in water after 12 hours of initial pumping or draining and additionally as directed.
3. Dispose of precipitation and subsurface water away and clear of the work area. Keep excavation dry.
4. Maintain continuous and complete effectiveness of the installation.
5. Maintain water level at such elevation that no damage to structure or plant material can occur because of excessive hydrostatic pressure. In any event, maintain water level two feet minimum below bottom of subgrade until sufficient concentrate work or backfilling or both has been completed to adequately offset uplift pressures.

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K. Dewatering System Removal

1. Remove and dispose of all stone, filter fabric and piping that comprise curtain drains and/or sump pits used in dewatering in accordance with Federal, State and local regulations at a permitted site.
2. Backfill remaining space as necessary to restore surface and subsurface to its original or proposed condition in accordance with the Engineer's approval.

L. No Separate Payment

Dewatering work shall be performed by the Contractor only as directed by the Engineer. The cost for all labor, materials and equipment required for the Dewatering shall be deemed included in the bid price for other Contract Items. No separate payment shall be made for Dewatering.

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7.103 CONCRETEA. Work Included

Description - The Contractor shall furnish, and place all structural and nonstructural concrete as indicated on the Contract Drawings and as specified herein. Nonstructural concrete does not include steel reinforcement and is used for stone embedment, sidewalks, pedestrian ramps, curbs, concrete cores, mud mats, cradles and fill concrete or as noted on the Contract Drawings.

B. General Requirements

1. General Specifications - The General Specification: 11-Concrete (Dated November 1991) of the Department of Environmental Protection (DEP) and Standard Sewer Specifications of the Department of Design and Construction (DDC) is declared to be part of this specification, the same as it is fully set forth elsewhere herein. Copies of this specification may be obtained from the Department. Concrete work shall conform to all requirements of that specification except as modified by this Detailed Specification.

2. Submittals

The Contractor shall submit to the Engineer for approval shop drawings and other materials required in accordance with the requirements set forth on the Contract Drawings and the Specifications in accordance with the Standard Sewer Specifications. Submittals shall also include all material required under the "Submittals" section of the chapters of General Specification 11, Concrete, and any additional submittals hereinafter specified.

C. Detailed Requirements

The reference numbers in this Detailed Specification are keyed to the chapters and section numbers of General Specification 11; the first number(s) to the left of the first decimal designates the chapter and the subsequent numbers to the right of the first decimal designate the sections within the chapter.

The Detailed Specifications herein shall take precedence over the Sewer Specifications, December 1996.

1.4.1.6 The Engineer shall be responsible for all concrete inspections (including semi-controlled inspection).

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- 2.1 Coarse and Fine Aggregates for Concrete shall be well graded in accordance with 2.6.1.1. Maximum size of course aggregate shall be 3/4". All sieve sizes (1-1/2" to No. 200) shall be used in determining grading of both coarse and fine aggregates.
- 2.2.4 Contractor shall submit to the Engineer for approval a minimum of two (2) suppliers of aggregate he proposes to use.
- 2.2.5 Contractor shall furnish confirmation to the Engineer that he can obtain 100% of the needed aggregates from one area prior to approval to place concrete.
- 2.3 Maximum cementitious material factor shall be 680 lbs/cu. yd of concrete for 4000 psi concrete
- For concrete mixed with only Portland Cement, the total alkalis in the cement (calculated as the percentage of NA_2O plus 0.658 times the percentage of K_2O) shall not exceed 0.40%.
- For concrete mixed with Portland Cement and an appropriate amount of fly ash, the total alkalis in the Portland Cement (calculated as the percentage of NA_2O plus 0.658 times the percentage of K_2O) shall not exceed 0.85%.
- An approved mineral admixture Type F (Fly Ash) shall be substituted for cement in the ratio of 20% by weight.
- 2.4 All concrete, unless noted otherwise on the Contract Drawings, shall be air entrained and contain a water reducing or high range water reducing admixture. For proportioning of air content and admixtures, see Chapter 3, Sections 3.5, 3.6 and 3.8.
- 3.3 All concrete shall be Class 40, 4000 psi based on 28 day compressive test. All concrete shall be proportioned and tested in accordance with Section 1.4.3 of the General Specifications 11 - Concrete, unless noted otherwise.
- 3.4 All concrete shall be normal weight. Lightweight Concrete shall not be used unless noted otherwise.
- 3.6 Slump:

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1. Slump for all concrete shall be 3 +/- 1 inches, unless indicated otherwise.
 2. Where high range water reducing admixture is used, the specified water-cementitious material ratio shall be reduced by 0.02 and concrete shall be proportioned for no higher than 3-inch slump. The slump after addition of the high range water reducing admixture shall not exceed 8 inches when measured at the point of placement.
 3. A tolerance of up to 2 inch above the maximum indicated slump shall be allowed for one batch in any five consecutive batches tested provided that it can be demonstrated that the specified water-cementitious material ratio is not exceeded.
- 3.5.1.1 When the above tolerances are exceeded, the condition shall be immediately investigated and corrective action taken. Corrective action may include modification of the mix as required by the NYC Building Code. A report of the condition and the remedial action taken shall be filed with the Engineer designated for Controlled Inspection within 48 hours.
- 4.3.7.1 Form ties for all structures containing or resisting liquid pressure shall have water stops at mid-thickness of the wall.
- 5.3 Deformed billet steel bars shall comply with the requirements of ASTM A615, grade 60.
- 6.4 Expansion Joints
- 6.4.1 General Information - Expansion joints with joint fillers and joint sealants shall be constructed where shown and as indicated on the Contract Drawings.
- 6.4.2 Materials and Installation
- 6.4.2.1 Joint Fillers - Expansion joint filler shall conform to ASTM D1752, Type 1. The joint sealant shall be separated from the filler by a suitable bond breaker of polyethylene film or tape as recommended by the sealant manufacturer.

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6.4.2.2 Joint Sealants

- a. A two component thiokol polysulfide base synthetic rubber sealant such as Pecora Synthacalk GC-2, Sonneborn-DeSoto Sonolastic 2-part, or approved equal shall be used in all expansion joints in concrete and masonry and wherever else specified or shown on the Contract Drawings.

It shall be furnished in pour grade or gun grade depending on installation requirements. Primers shall be used as called for by the manufacturer. The sealant shall be furnished in colors as directed by the Engineer.

- b. A two component pourable polyurethane sealant such as Pecora NR-300. Sonneborn-DeSoto Sonolastic Paving Joint Sealant SL-2, or approved equal shall be used in all concrete floors subject to heavy traffic and wherever else specified or shown on the Contract Drawings.

- 6.4.2.3 Installation of Joint Fillers and Sealants - Joint fillers and sealants shall be installed in accordance with manufacturer's recommended procedures and as shown on the Contract Drawings. Adhesive for holding sponge rubber joint filler to concrete shall be Scotchgrip Cement No. 1300 as manufactured by Minnesota Mining and Manufacturing Co, or W.R. Meadows, Inc., or approved equal.

Joint filler that will be exposed after removal of forms shall be cut and trimmed to ensure a neat appearance and shall completely fill the joint except for the space required for the sealant. The filler shall be held securely in place and no concrete shall be allowed to enter the joint or the space for the sealant and destroy the proper functions of the joint.

A bond breaker of polyethylene film shall be used between filler and sealant. The joint shall be thoroughly clean and free from dirt and debris before the primer and the sealant are applied. Where the finished joint will be visible, masking of the adjoining surfaces shall be carried out to avoid their discoloration.

The sealant shall be neatly tooled into place and its finished surface shall present a clean and even appearance.

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6.5 Waterstops

6.5.1 Work Included

6.5.1.1 Description - The Contractor shall furnish and install all waterstops for expansion and construction joints as indicated on the Contract Drawing, specified herein or required for a complete installation.

6.5.1.2 General Requirements

1. General Specifications - Waterstops shall be manufactured from virgin polyvinylchloride and shall meet or exceed all requirements set forth in the U.S. Corps of Engineers Specification CRD C572.
2. Samples - The Contractor shall submit to the Engineer one (1) sample of each type of PVC waterstop. Each sample is to include a splice.

6.5.2.1 General Information - Prior to installation, the Contractor shall submit layout drawings for approval, showing diagrammatically or otherwise the extent of the waterstop installations that are proposed to ensure that all construction and expansion joints will be watertight. The drawings shall include elevations, sections, etc. and all details to show that a continuous watertight installation shall be provided.

Construction joints made in other than positions shown on the Contract Drawings for the convenience of the Contractor are subject to the Engineer's approval and shall have water stops installed in these non-indicated construction joints at no additional cost to the City.

6.5.2.2 Materials and Installation

1. Materials - All waterstops shall be of polyvinylchloride extruded from an elastomeric plastic compound of which the basis resin shall be polyvinylchloride. The compound shall contain any additional resins, plasticizers, stabilizers or other materials needed to ensure qualities which will meet the requirements herein specified.

The required minimum physical characteristics for this material are per ASTM D-638:

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Tensile strength - 1,750 psi
Ultimate elongation - not less than 280%

No reclaimed PVC shall be used for the manufacture of the waterstops. The Contractor shall furnish certification that the proposed waterstops meet the above requirements.

Waterstops for construction joints shall be flat ribbed type, 6 inches wide with a minimum thickness at any point of 3/8 inches.

Waterstops for expansion joints shall be ribbed with a center bulb, 9 inches wide with a minimum thickness at any point of 3/8 inches. Center bulb shall have an outside minimum diameter of 1 inch and an inside minimum diameter of 1/2 inch.

2. Installation - Waterstops shall be installed in the work so that they are embedded to an equal depth in concrete on both sides of the joint and the waterstops shall be kept free from oil, grease, mortar or other foreign matter. Waterstops shall be adequately secured against movement during the pouring of concrete. Forms adjacent to waterstops shall be rigidly constructed and braced to prevent the concrete from leaching through joints and the displacement of waterstops due to power vibrating of the concrete. Concrete adjacent to waterstops shall be placed in 12 inch lifts and power vibrated to prevent honeycombing, voids and separation of aggregates at the surfaces of concrete separation joints.
 - a. Splices - Splices at the intersection of runs of waterstops shall be made by heat sealing the adjacent surfaces in accordance with the manufacturer's recommendations using a thermostatically controlled electric source of heat. Only straight butt joint splices will be allowed in the field. At least three satisfactory field splices shall be made as samples on site. The Engineer may require tests on these splices by an approved laboratory, at the Contractor's expense, to certify the tensile strength of the joint. The strength attained shall be at least 80% of the unspliced material before any is used in the work.

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- b. Defective Work - Defective work, as determined by the Engineer, shall be remedied by cutting and rebuilding the concrete walls and slabs, replacing the waterstop assemblies or remedied by other methods as approved by the Engineer.
- c. Responsibility - The final responsibility for constructing a watertight condition at expansion joints and construction joints remains with the Contractor as part of the work under this Contract.

6.6.2.1 The Contractor shall coordinate and/or provide for the installation of anchor bolts, pipes, sleeves, inserts, chases, recesses, and all other embedded items, required in the work.

6.6.5.3 The Contractor shall submit equipment pad layout drawings.

6.7 Precast Concrete

- A. The Contractor shall furnish and install all precast items shown or specified in the Contract Documents, including all appurtenances necessary to make a complete installation. This section does not include prestressed or postensioned concrete.
- B. Without limiting the generality of other requirements of these specifications all work hereunder shall conform to the applicable requirements of the referenced portions of the following documents, to the extent that the requirements therein are not in conflict with the provisions of this Section.
 - 1. Precast Prestressed Concrete Institute Standard MNL-117.
 - 2. ASTM C478 Specification for Precast Reinforced Concrete Manhole Sections.
 - 3. ACI 318 Building Code Requirements for Reinforced Concrete.

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4. ACI 350 R - Concrete Sanitary Engineering Structures.

C. Submittals

1. The Contractor shall submit shop drawings for all precast concrete items. Submitted drawings shall show all dimensions, location and type of lifting inserts, and details of reinforcement and the method of anchorage of surrounding work.
2. For all precast items which are manufactured, the Contractor shall also submit a list of the design criteria used by the manufacturer.
 - a. For all precast items which are manufactured, and which have a clear dimension, in any direction, greater than or equal to 4'-0", the Contractor shall submit design calculations per criteria stated on the contract drawings. The precast concrete calculations shall be stamped and signed by a Professional Engineer registered in the State of New York.
3. The Contractor shall submit approved ICBO reports for all lifting inserts, showing allowable design loads on the inserts.

D. Quality Assurance

1. Precast concrete units shall be made by an experienced manufacturer and shall be constructed as shown on the Drawings and specified herein and shall be free of defects, checks and cracks. Care shall be taken in the mixing of materials, casting, curing and shipping to avoid any of the above.
2. The Contractor shall notify the Engineer a minimum of 24 hours prior to casting and when the units have been fabricated and await the Engineer's consent prior to shipping to the site.

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3. The Engineer may elect to examine the units at the casting yard or upon arrival of same at the site. The Engineer shall have the option of rejecting any or all of the precast work if it does not meet with requirements shown on the Drawings or specified herein. All rejected work shall be replaced at no additional cost to the City.

E. Products

1. The joint sealing compound shall be Quik-Seal, a preformed, cold applied, ready to use plastic joint sealing compound as supplied by Quikset Utility Vaults, Santa Ana, California; Ram-Nick by K.T. Snyder Company; or approved equal.
2. Mortar used between the sections of precast concrete manholes and vaults shall be as recommended by the manhole section manufacturer.
3. Non-shrink grout shall be used where grouting is required.

F. Design

1. The precast concrete units shall be designed for the dead load of the units plus a minimum superimposed horizontal Truck load of H20 for the spans shown on the Drawings unless shown or noted otherwise on Drawings.
2. Deflection shall not exceed 1/360 of span at design load.

G. Fabrication

1. All precast items shall be fabricated in accordance with PCI Manual for Quality Control for Plants and Production of Architectural Precast Concrete Product.

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H. Installation

1. Required pads, plates and reinforcing bars shall be furnished for casting and anchorage in the adjoining work. The precast concrete units shall be installed with the units tight and at right angles to the supporting beams or walls. The units shall be aligned and leveled in accordance with the procedures recommended by the manufacturer. Units shall be grouted by a mixture of not less than one part cement to three parts fine sand, care being taken to see that joints are filled. Damp grout that may have seeped through shall be removed before it hardens.
2. All openings in the precast units shall be made by the Contractor and are the responsibility of the Contractor. Where details for an opening are not shown on the Drawings, the opening shall be made in accordance with the recommendation of the manufacturer.
 - a. For precast planks, when an opening causes a loss in carrying capacity of the unit, the adjacent units shall be designed to carry the additional dead and superimposed load transferred from the unit with the opening. The Contractor shall provide saddle headers to transfer the load to adjacent members.
3. Damaged units shall be replaced at no additional cost to the City.

8.7.6

Connecting Concrete to Existing Structures

- A. Where new concrete work is to be made integral with existing concrete work, the Contractor shall proceed as follows and as shown or specified.
1. Roughen surface of existing concrete by chipping.
 2. Cut existing concrete where required or as indicated on the contract drawings.

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3. Where it is necessary to expose existing reinforcement, the reinforcing rods shall be cleaned by wire brushing and new reinforcement shall be hooked into existing reinforcement and lapped, drilled into existing concrete and set with an approved adhesive, or welded as directed. Proper preheating shall be required prior to welding. Clearance around each bar shall be in accordance to ACI 318 requirements.
 4. Where expansion anchors are shown, holes shall be drilled in the existing concrete as indicated on the contract documents and to the minimum depths as recommended by manufacture so as to provide a minimum bond strength of 125% of yield.
 5. Waterstops to be set into existing concrete shall be as shown on the Contract Drawings.
 6. Thoroughly wash all surfaces and install waterstops and reinforcing steel as required.
 7. Apply bonding compound in strict conformance with the manufacturer's instructions.
 8. Apply new concrete in strict conformance with bonding compound manufacturer's recommendations.
- B. Where portions of existing concrete structures or masonry bulkheads are to be removed and where the remaining concrete is to be finished smooth, the Contractor shall do the following as a minimum:
1. Remove concrete or masonry to the depths shown on contract drawings or required by the Engineer.
 2. Cut off projecting reinforcement to a depth of at least 2 inches measured from the finished concrete surface. Where shown, reinforcement shall be bent across cut face and covered with new concrete.

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3. Thoroughly coat the roughened concrete surfaces by applying bonding compound in strict conformance with the manufacturer's instructions.
4. Cement mortar shall be placed to a thickness slightly in excess of the finished surface and shall be steel-trowel-finished, flush with the adjacent surfaces.
5. The color of new concrete in the exposed surfaces shall match the color of the existing adjoining concrete as closely as possible.
6. Cement mortar shall consist of one part Portland cement and two parts of sand by volume.

Whenever new concrete is connected to existing concrete, the existing concrete shall be coated with bonding compound. Surface preparation, application and curing shall be done in strict accordance with the manufacturer's directions.

8.7.7

Cutting and Patching Opening for Pipe, and Other Penetrations, in Existing Concrete

- A. The Contractor shall cut the existing concrete within the limits required, expose the existing reinforcement, and perform the work in such manner to prevent damage to the existing adjacent concrete and/or equipment. Unless otherwise permitted, line drilling is required. The exposed reinforcement shall be cleaned by wire brushing, then cut and bent to permit the installation and finally bent around the new pipe or thimble. Additional reinforcement shall be provided as shown on the Contract Drawings. When reinforcing is required to be welded to structural members, the work shall be done by approved and licensed welders using size and length of beads shown on the Contract Drawings.
- B. Coating of the existing concrete shall be as previously specified under Section 8.7.6. Non-shrinking grout shall be used for setting wall casting, sleeves, and wherever called for into existing concrete.

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- C. Dowels and anchors shall be set with an approved epoxy adhesive in strict accordance with manufacturer requirements.
- D. Openings shall be provided with keyed joints meeting the Engineer's approval prior to coating and patching.
- E. Where such work will be visible in the completed work, the adjacent surfaces shall be made to match as closely as possible.

- 8.10.5 Non-Shrink Grout - Non-shrink, non-staining grout shall be "Euco N-S" by the Euclid Chemical Company, or "Masterflow 713" by Master Builders, or approved equal. Non-shrink grout shall be mixed and placed in strict accordance with the directions of the manufacturer.

Non-shrink grout shall be used for setting the structural items where noted on the Contract Drawings.

- 8.12 Concrete Sealer

Concrete sealer shall be a one (1) part polyurethane sealer and dustproofer, "Eucothane" as manufactured by the Euclid Chemical Company, or approved equal.

Concrete sealer shall be applied on all equipment pads.

- 8.13 Pigmented Admixture

This section describes Pigmented Admixture for coloring Portland cement mixtures.

It shall be certified by the manufacturer that the Pigmented Admixture shall comply with the requirements of ACI 212.3R-10, Section 6.1., as water-reducing admixtures, and that their water reducing components have been tested for compliance with ASTM C-494 (Specification for Chemical Admixtures for Concrete). It shall be certified by the manufacturer that the Pigmented Admixture shall consist of pure synthetic mineral oxide only, and shall comply with ASTM Designation C979. It shall also be certified by the manufacturer that the Pigmented Admixture shall be single-component admixture, complying with both ASTM C494

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and ASTM C979, not as a combination of two or more additives or admixtures.

The pigmented Admixture shall produce a color equal to the standards on file at the office of the New York City Department of Transportation, Bureau of Highways, Division of Roadway Engineering, 40 Worth Street, New York, NY 10013 and The Landmarks Commission, 225 Broadway, 23rd Floor, New York, NY 10007. The color shall be approved by the Engineer.

The Pigmented Admixture manufacturer shall certify that when used at the recommended dosage, the pigmented admixture has no effect on or increases the compressive strength of the concrete by 5-10% when compared with a control batch of the same mix design and slump but without the Pigmented Admixture. Testing shall be done at 28 days after depositing, and shall be measured in pounds per square inch. The test results shall be an average of at least three (3) cores of cylinders per test.

Calcium Chloride shall not be used in the composition of the admixture nor in the composition of the concrete.

The Pigmented Admixture shall be packaged by the manufacturer in incremental amounts by weight for a single cubic yard of concrete, with the designated dosage clearly marked on each package.

Air entraining agent complying with ASTM Designation C260 shall be used in combination with the Pigmented Admixture.

No other agents or admixtures shall be used with the Pigmented Admixture in the concrete, unless stated in writing by the manufacturer of the Pigmented Admixture to be of no consequence to the colorfastness of the concrete mixture.

The Pigmented Admixtures shall be mixed and delivered in accordance with ASTM Designation C 94.

The same type and brand of cement, source of sand and water/cement ration shall be maintained for each load of concrete used in the entire project.

The slump of the concrete shall remain consistent throughout the project at four inches. If held-back water is added at the job site,

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the concrete should be mixed at mixing speed for an additional five minutes after addition of the water and before depositing.

The Contractor shall furnish for approval and on site a concrete sample for each color specified using the Pigmented Admixture. The sample shall be at least 4' x 4' x 4" and shall be given the specified surface texture and cured with the methods specified for the concrete installation. The Contractor shall not order the admixture until the samples are approved by the Engineer. Once approved, the samples shall be used for assessing color conformance of pigmented concrete installed.

Water must not be sprinkled or otherwise added to the surface of the slab during finishing. Evaporation retardants may be fog-sprayed provided they are not detrimental to the finished color of the concrete.

8.13.1

Curing Membrane

If the concrete is pigmented as per this Section, the curing membrane shall be of the liquid-membrane forming type and shall be color-matched to the pigmented concrete. Additionally, the curing membrane shall be of a type recommended by the Pigmented Ad mixture manufacturer and shall conform to both ASTM C309 and all local, State, and Federal regulations concerning volatile organic compounds (VOC). Plastic sheeting, burlap, paper, or other unspecified material shall not be used as a curing membrane.

Prior to making any field samples and the placing of any colored concrete, the Contractor, concrete supplier, engineer-in-charge, and/or city representative shall meet and discuss methods of handling the colored concrete.

10.4

Rubbed Finishes

The following shall be produced on concrete which has met the requirements of smooth form finish (Section 10.3.2).

10.4.1 Smooth Rubbed: Where this finish is required, it shall be applied no later than one day following form removal. No rubbing shall be done before the concrete is thoroughly hardened and the mortar used for patching is firmly set. A smooth, uniform surface shall be obtained by wetting the

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surface and rubbing it with a carborundum brick or other abrasive to eliminate irregularities until uniform color and texture are produced. Unless the nature of the irregularities requires it, the general surface of the concrete shall not be cut into. Corners and edges shall be slightly rounded by the use of the carborundum brick. Brush finishing or painting with grout or neat cement will not be permitted.

10.5.2 Smooth Rubbed Finish (Section 10.4.1) - for all other exterior surfaces and interior vertical surfaces.

10.5.3 Smooth Form Finish (Section 10.3.2) - for all other interior overhead surfaces exposed to public view and interior walls of tanks/culverts.

10.5.4 Grout Cleaned Finish (Section 10.4.2) - for all exposed surfaces to be painted.

D. Measurement and Payment

The quantity to be measured for payment under this Section shall be the total number of cubic yards of approved additional or requested concrete placed as directed by the Engineer.

The contract price per cubic yard of approved nonstructural concrete shall be as indicated on the BID SCHEDULE OF PRICES, Item BMP-7.103-A respectively. The bid price shall constitute full compensation for all labor, materials, equipment and work incidental thereto, necessary to complete this item in accordance with the plans and specifications to the satisfaction of the Engineer.

No separate payment shall be made for concrete associated with construction of Concrete Structures. All costs shall be included in the unit cost of the Concrete Structures item, specification section 7.129.

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7.104 STEEL REINFORCEMENTA. Description of Work

1. The Contractor shall furnish and install all reinforcing steel as indicated on the Contract Drawings and specified herein.

2. General Requirements

- a. General Specifications - Steel reinforcement, electrically welded mesh and steel wire shall conform to the requirements of Chapter 5 - General Specification 11, Concrete, November 1991 and the Standard Sewer Specifications, December 1996.

Metal chairs, ties or wires shall not extend to the concrete surfaces. Approved form ties shall provide deep recesses which shall be carefully filled with grout after forms are stripped.

- b. Shop Drawings - The Contractor shall submit to the Engineer for approval, shop drawings and other material required to substantiate conformance with the requirements set forth on the Contract Drawings and the Specifications. Shop drawings shall include, but not be limited to the requirements of General Specification 11 - Concrete.

Detailed placing and shop fabricating drawings, prepared in accordance with ACI 315 shall be furnished for all concrete reinforcement. These drawings shall be made to such a scale as to clearly show construction joint locations, openings, the arrangement, spacing and splicing of the bars. No materials shall be cut or fabricated until related drawings have been approved by the Engineer.

- c. Submittals - The Contractor shall also submit the following:

- 1) Mill test certificates.
- 2) A description and sample of the reinforcing steel manufacturer's marking pattern.
- 3) Request to use mechanical couplers along with manufacturer's literature on mechanical couplers with instructions for installation, and certified test reports on the couplers capacity.

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B. Execution

1. General Information - The Contractor shall install under this Section of the Detailed Specifications all steel reinforcement required for a complete installation for the structural work of this Contract. Bar sizes shall be as indicated on the Contract Drawings except as otherwise ordered or approved by the Engineer.
2. Materials and Installation - The steel reinforcement shall conform to the requirements as hereinbefore specified and to General Specification 11 - Concrete, Chapter 5 - Reinforcement. Reinforcing bars shall be deformed new billet steel bars conforming to ASTM A615, Grade 60. Wire mesh reinforcement shall conform to ASTM A185.
3. Welding - Wherever welding of reinforcing rods to other reinforcement or structural shapes is indicated, the welding of reinforcing steel shall conform to General Specification 11 - Concrete, Chapter 5.
4. Coiled Reinforcing - Shall not be permitted.
5. Mechanical Couplers - Hot-forged sleeve type couplers shall not be used.
6. Dowel Adhesive System - Where shown on the Drawings, reinforcing bars anchored into hardened concrete with a dowel adhesive system shall use a two-component adhesive mix which shall be injected with a static mixing nozzle following manufacturer's instructions. Thoroughly clean drill holes of all debris and drill dust with wire brush prior to installation of adhesive and reinforcing bar. The embedment depth of the bar shall be per manufacturer's recommendations, so as to provide a minimum allowable bond strength that is equal to 125 percent of the yield strength of the bar, unless noted otherwise on the Drawings. Engineer's approval is required for use of this system in locations other than those shown on the Drawings.
7. Delivery, Storage and Handling
 - a. All reinforcing shall be neatly bundled and tagged for placement when delivered to the job site. Bundles shall be properly identified for coordination with mill test reports.
 - b. Reinforcing steel shall be stored above ground on platforms or other supports and shall be protected from the weather at all times by suitable covering. It shall be stored in an orderly manner and plainly marked to facilitate identification.

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- c. Reinforcing steel shall at all times be protected from conditions conducive to corrosion until concrete is placed around it.

8. Placing

- a. Reinforcing steel shall be accurately positioned as shown on the Drawings and shall be supported and wired together to prevent displacement, using annealed iron wire ties or suitable clips at intersections. All reinforcing steel shall be supported by concrete, plastic or metal supports, spacers or metal hangers which are strong and rigid enough to prevent any displacement of the reinforcing steel. Where concrete is to be placed on the ground, supporting concrete blocks (or dobies) shall be used in sufficient numbers to support the reinforcing bars without settlement. In no case shall concrete block supports be continuous.
- b. The portions of all accessories in contact with the formwork shall be made of plastic or steel coated with a 1/8 inch minimum thickness of plastic which extends at least 1/2 inch from the concrete surface. Plastic shall be gray in color.
- c. Tie wires shall be bent away from the forms in order to provide the specified concrete coverage.
- d. Reinforcing bars additional to those shown on the Drawings, which may be found necessary or desirable by the Contractor for the purpose of securing reinforcing in position, shall be provided by the Contractor at no additional cost to the City.
- e. Reinforcing placing, spacing, and protection tolerances shall be within the limits specified in ACI 318 except where in conflict with the Building Code, unless otherwise specified.
- f. Reinforcing bars may be moved within one bar diameter as necessary to avoid interference with other concrete reinforcing, conduits, or embedded items. If bars are moved more than one bar diameter, or enough to exceed placing tolerances, the resulting arrangement of bars shall be as acceptable to the Engineer.
- g. Welded wire fabric shall be supported on slab bolsters spaced not less than 30 inches on centers, extending continuously across the entire width of the reinforcing mat and supporting the reinforcing mat in the plane shown on the Drawings.

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- h. Bars with kinks or bends not shown on the Drawings shall not be used.

9. Splicing

- a. The length of lap for reinforcing bars, unless otherwise shown on the Drawings shall be in accordance with ACI 318 for a class B splice.
- b. Laps of welded wire fabric shall be in accordance with ACI 318. Adjoining sheets shall be securely tied together with No. 14 tie wire, one tie for each 2 running feet. Wires shall be staggered and tied in such a manner that they cannot slip.
- c. Mechanical splices shall be used only where shown on the drawings or when approved by the Engineer.
- d. Couplers which are located at a joint face shall be a type which can be set either flush or recessed from the face as shown on the Drawings. The couplers shall be sealed during concrete placement to completely eliminate concrete or cement paste from entering. After the concrete is placed, couplers intended for future connections shall be plugged and sealed to prevent any contact with water or other corrosive materials. Threaded couplers shall be plugged with plastic plugs which have an O-ring seal.

C. No Separate Payment

No separate payment shall be made for this work of this specification. All costs shall be included in the various Contract Items of this Contract.

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7.105 WELDINGA. Description of Work

1. The Contractor shall perform all welding as indicated on the Contract Drawings and as specified herein.

B. General Requirements - All welding shall be in accordance with specified standards as modified or supplemented by these Specifications. No welding shall be done when the base-metal temperature is lower than 32 degrees Fahrenheit. The subcontractor shall be responsible for the quality of the welding and shall set up and record procedures for welding all metals included in the work, Welding shall not be started until procedure, welders, and welding operators have been qualified by tests and copies of all records and reports submitted for approval. Costs of such testing shall be borne by the Contractor. Each weld shown or indicated on the Contract Drawings shall be made as specified on the approved procedure specifications provided to cover each type of weld. Welding of any special steel shall adhere, without deviation, to the written instructions of the steel manufacturer.

1. Welded Construction - Welded construction shall be used only where indicated on the Contract Drawings and approved shop drawings. The AWS Specification D1.1 (latest edition) Structural Welding Code or AWS D1.4 (latest edition) Structural Welding Code - Reinforcing Steel, as applicable, and other requirements of this Section shall apply to the welded joints. Unless otherwise specified, welding shall be by automatic submerged arc, or semi-automatic submerged arc.
2. Test Specimens - Test specimens shall be prepared by the Contractor for each type of welded joint as designated in paragraph entitled Procedure Qualification. Destructive tests of specimens for procedure and welder qualifications shall be conducted in accordance with AWS D1.1, Section 4. Qualifications, and the requirements specified herein.
3. Groove Welds - All groove welds shall be 100 percent complete penetration welds as defined in AWS D1.1 or shown in 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.

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C. Welding Procedure

1. General Information - Welding procedures and procedure qualification tests shall be required for all welding covered by this specification to demonstrate that the combination of process, material, and technique produces the desired welds. These procedures, when qualified, become the welding procedure specification which must be followed in making weldments on materials within ranges shown in the Contract Drawings (and Specifications), and provide a means of assuring reproducible results and quality control. Procedure specifications and procedure qualification test results shall be kept by the Contractor and shall be available for examination by the Engineer. Five copies of the procedure specifications and test results shall be submitted for approval. Welding procedure specifications and tests shall be individually identified or completed on the shop details and erection drawings. Welding shall not be performed on any contract item before approval of procedure specification and qualification testing by the Engineer.
 - a. Welding Procedure Specification - A separate Procedure Specification shall be prepared for each type of weld which varies in accordance with the definition of essential changes as listed in AWS D1.1, Section 5.
 - b. Procedure Qualification - Each type of weld made by a specific process shall be qualified by tests as specified in AWS D1.1 or as specified herein for reinforcing steel.
 - c. Procedure Specification Requalification - When an essential variable, as specified in AWS D1.1, is changed, the procedure must be requalified.
 - d. Dissimilar Steels - Where dissimilar steels are welded together, the procedure shall be the same as for the lower-strength steel.
 - e. Groove Welds - All groove welds shall be 100 percent complete penetration welds as defined in AWS D1.1 or shown in 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.
 - f. Welded Studs - Gun welded studs shall conform with the requirements of AWS D1.1, Section 7.

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- e. Electrodes - Electrodes for structural steel welding shall conform with AWS D1.1, Section 4, as applicable.

D. Performance Certification Of Welders And Welding Operators

1. General Information - Each welder and welding operator assigned to work on this Contract shall be certified in conformance with AWS D1.1, the requirements of this Specification. Welders shall be New York City certified, and all welding shall be done in conformity with the New York City Building Code.
- a. Welder's Certificates - Upon completion of the applicable qualification tests, each welder and welding operator shall be provided with a certificate by the Contractor. The certificate shall state the type of welding and positions for which he is qualified, the code under which he is qualified, and the firm or individual certifying the qualification tests. The certificate shall be kept on file at the job site by the Contractor and shall be made available for examination and approval by the Engineer. The certificate will remain in effect except when requalification of the welder or welding operator is required as specified in AWS D1.1 and the requirements of this Specification.
- b. Welder's Identification - The Contractor shall assign each welder identifying number, letter, or symbol which shall be used by the welder to identify all welds made by him. For identification, the welder shall lightly stamp his symbol adjacent to the weld by means of a metal stamp.
- c. Welder's Record - The Contractor shall maintain a record of all welders and welding operators employed on the Contract showing the date and results of tests and the identification mark assigned to each welder. These records shall be certified by the Contractor and made accessible to authorized personnel. Copies of the record shall be furnished to the Engineer.
- d. Technique - Technique shall conform to AWS Specification D1.1, Section 4, entitled Technique, and the requirements of this Specification.

E. Supervision

All shop and field welding shall be under the immediate supervision of a representative of a standard testing agency or an approved inspection agency

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reporting directly to, and under the control of, the Department of Design and Construction. The Contractor shall submit the name of such agency to the Commissioner for approval before starting work. The costs of all welding inspections and tests shall be borne by the Contractor.

F. Inspection and Tests During Construction

The Engineer will make periodic checks of each welder to determine that welds are being made as specified in the approved procedure specifications. Welding speed may be estimated. All welds will receive 100 percent visual inspection by the Engineer to determine weld size and profile, surface cracks, overlap, and undercut. The Engineer reserves the right to perform any test on any weld, including liquid penetrant, magnetic particle, radiographic, and ultrasonic.

G. Acceptance Requirements

1. Welds, other than stud welds, are acceptable if inspection indicates conformance within the following limitations:
 - a. Cracks - All welding exhibiting any cracks, either in the weld metal or the parent metal, will be rejected.
 - b. Undercut - Undercut shall not be more than 1/32 inch deep.
 - c. Convexity or Reinforcement - Convexity or reinforcement of a weld face shall not exceed the limits shown in AWS D1.1, and there shall be no overlap.
 - d. Fusion - Incomplete fusion or lack of penetration will not be allowed.
 - e. Small Inclusions - Slag inclusions, porosity, and other fusion defects less than 1/16 inch in greatest dimension will be allowed if well dispersed and the sum of the greatest dimensions in any linear inch of welded joint does not exceed 3/8 inch.
 - f. Large Inclusions - Slag inclusions, porosity, and other fusion defects 1/16 inch or larger in greatest dimension will be allowed providing such defects do not exceed the limits specified in AWS D1.1.

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H. Repair of Defective Welds

1. In lieu of rejection of an entire piece or member containing welding which is unsatisfactory or which indicates inferior workmanship, the corrective measures listed hereunder may be permitted by the Engineer whose specific approval shall be obtained for making each correction. Corrective measures shall be made at the Contractor's expense and to the satisfaction of the Engineer and/or an acceptable independent testing lab.
2. Defective or Unsound Welds or Base Metal - Defective or unsound welds or base metal shall be corrected either by removing and replacing the entire welds, or as follows:
 - a. Convexity and Overlap - Excessive convexity and overlap, defined in paragraph Acceptance Requirements, shall be reduced by removal of excess weld metal.
 - b. Concavity - Any concavity of weld, crater, undersize welds, undercutting: clean and deposit additional weld metal.
 - c. Discontinuities - Excessive weld porosity, slag, inclusions, defined in the paragraph entitled Acceptance Requirements, and incomplete fusion: remove defective portions and reweld.
 - d. Cracks - Cracks in weld or base metal: remove crack throughout its length, including sound weld metal 2 inches beyond each end of the crack; follow by the required rewelding.
3. Removal - The removal of weld metal or portions of the base metal shall be done by chipping, grinding, oxygen cutting, oxygen gouging, or air carbon-arc and in such a manner that the remaining weld metal or base metal is not nicked or undercut. Defective portions of the weld shall be removed without substantial removal of the base metal.
4. Additional Metal - Additional weld metal shall be deposited using an electrode smaller than that used for making the original weld, and not more than 5/32 inch diameter. The surface shall be cleaned thoroughly before welding.
5. Inaccessibility - Where work performed subsequent to the making of a deficient weld has rendered the weld inaccessible or has caused new conditions which would make the correction of the deficiency dangerous or ineffectual, the original conditions shall be restored by removing the welds or members, or both, before making the corrections, or the

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deficiency shall be compensated for by additional work done according to an approved revised design.

6. Caulking - Caulking of welds shall not be permitted.
7. Improper Fit - Improperly fitted parts may be cut apart and rewelded. Members distorted by welding shall be straightened by mechanical means or by carefully supervised application of a limited amount of localized heat. The temperature of heated areas shall not exceed 1,200 degrees F (a dull red color). Temperature shall be carefully measured with temperature indicating crayons during the heating operation. Parts to be heated for straightening shall be substantially free of stress and from external forces, except those stresses resulting from mechanical means used in conjunction with the application of heat.
8. Peening - No peening shall be done on the root or surface layers of a weld. Peening of intermediate weld layers may be used only if authorized by the Engineer and directed by him. Care shall be exercised to prevent overpeening which may cause overlapping, scaling, cracking, flaking, or excessive cold working of weld and base metal.

I. No Separate Payment

No separate payment shall be made for this work of the specification. All costs shall be included in the various Contract Items of this Contract.

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7.106 OUTLET STILLING BASIN

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7.107B RIP-RAP AND ANGULAR NATURAL FIELD STONEA. Description of Work

Under this item, the Contractor shall perform all work necessary to install rip-rap stone or angular natural field stone where directed by the Engineer, to protect the soil surface from erosive forces and/or improve the stability of soil slopes as well as water feature bottoms that are subject to seepage or have poor soil structure.

In general, rip-rap stone shall be utilized for both temporary and permanent constructed features such as erosion control features, channel side slopes and bottoms, grade sills, slope drains, grade stabilization structures, storm drains, and cut and fill slopes subject to seepage, erosion or weathering, particularly where conditions prohibit the establishment of vegetation.

Angular natural field stone shall be utilized to stabilize, reinforce or restore naturally occurring features as well as features that are intended to appear natural, such as stream side slopes, banks and bottoms, wetlands, shorelines subject to erosion, culvert inlets and outlets, outlet stilling basins and natural upland side slopes.

Rip-rap stone may be substituted with angular natural field stone as directed by the Engineer. The Contractor may use field stones excavated in the project site, contingent upon the approval of the Engineer.

B. Materials UsedRip-Rap Stones/Angular Natural Field Stones

Stones shall be a well-graded mixture with 50% by weight larger than the specified design size. The diameter of the largest stone size in such a mixture shall be 1.5 times the d50 size with smaller sizes grading down to 1 inch. The stone size installed shall be as directed by the Engineer and as shown on the Contract Drawings.

The minimum layer thickness shall be 1.5 times the maximum stone diameter, but in no case less than 6 inches or as specified on the Contract Drawings.

Stones for rip-rap shall be hard, durable quarry materials. Stones used for natural field stones shall be hard, durable field materials and shall be dark in coloration. They shall be angular and not subject to breaking down when exposed to water or weathering. The specific gravity shall be at least 2.5.

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Stones shall be free of decomposed stone, clay rock dust and other objectionable material. Existing stone walls and broken concrete or recycled stone shall not be used as stones. Broken concrete is not acceptable.

C. Construction Methods

Subgrade Preparation

Prepare the subgrade for stones to the required lines and grades shown on the plans. Compact any fill required in the subgrade to a density approximating that of the undisturbed material or overfill depressions with stones. Remove brush, trees, stumps and other objectionable material. Cut the subgrade sufficiently deep so that the finished grade of the stones will be at the elevation of the surrounding area. Channels shall be excavated sufficiently to allow placement of the stones in a manner such that the finished inside dimensions and grade of the stones meet design specifications.

Rip-Rap/Angular Natural Field Stone Placement

Placement of the stones shall follow immediately after placement of the filter. Place stones so that it forms a dense, well-graded mass of stone with a minimum of voids. The desired distribution of stones throughout the mass shall be obtained by selective loading at the quarry and controlled dumping during final placement. Place stones to its full thickness in one operation. Do not place stones by dumping through chutes or other methods that cause segregation of stone sizes. Be careful not to dislodge the underlying base or filter when placing the stones.

The toe of the stones shall be keyed into a stable foundation at its base as shown on the Contract Drawings. The toe shall be excavated to a depth of 2.0 feet. The design thickness of the stones shall extend a minimum of 3 feet horizontally from the slope. The finished slope shall be free of pockets of some stone or clusters of large stones. Hand placing will be required to achieve proper distribution of stone sizes to produce a relatively smooth, uniform surface. The finished grade of the stones shall blend with the surrounding area.

D. Measurement and Payment

The quantity to be measured for payment under this Section shall be the total number of cubic yards of approved stones, measured in stockpiles, containers and/or vehicles and placed as directed by the Engineer.

The contract price per cubic yard of approved stone material placed shall be as indicated on the BID SCHEDULE OF PRICES Item No. BMP-7.107-B. The bid price shall constitute full compensation for all labor, materials, equipment and

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work incidental thereto, necessary to furnish, place and incorporate and all other work incidental thereto, in accordance with the plans and specifications to the satisfaction of the Engineer.

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7.108A ALUMINUM GRATING

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7.109 GEOTEXTILE FABRIC

A. Description of Work

Under this item, the Contractor shall furnish all equipment and perform all work necessary to place geotextile fabric as indicated in the Contract Drawings and specifications and as directed by the Engineer.

B. Construction Methods

The geotextile fabric shall be Enkadrain 9120 or equivalent with the following specifications:

<u>Property</u>	<u>Test Method</u>	<u>Unit</u>	<u>Specification</u>
Material	Non-woven geotextile fabric		
Unit Weight	ASTM D1777	oz/sq. yd	4.3 (min)
Flow Rate	Falling Head Test	gpm/sq. ft.	120 (min)
Puncture	ASTM D751	lbs.	60 (min)
Thickness		in.	0.8 (min)

C. Measurement and Payment

The quantity to be measured for payment under this Section shall be the number of square feet of surface area on which Geotextile Fabric has been installed in accordance with the plans and specifications and directions of the Engineer.

The cost for all labor, materials and equipment required to place the geotextile fabric under the concrete structures shall be deemed included in the price bid under detailed specifications for concrete structures Section 7.129.

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7.110 SHEETING AND BRACING

A. Description of Work - The Contractor shall furnish and install sheeting together with all bracings as required for excavations in accordance with the provisions contained herein.

B. General Requirements

1. Shop Drawings - The Contractor shall submit to the Engineer for approval, shop drawings and other material required to substantiate conformance with the requirements set forth on the Contract Drawings and these Specifications.
2. Calculations - The Contractor shall submit to the Engineer for approval design calculations of his proposed sheeting and bracing plan. Such calculations shall incorporate all applicable loads as per the New York City Building Code and shall be signed and sealed by a New York State licensed professional engineer. The Contractor shall include with the calculations his detailed plan of operation as regards to the installation of the sheeting, method of excavation and removal of sheeting for the review by the Engineer.
3. The Contractor shall have at least three (3) projects similar in scope and type within the last five years in driving sheet piles.
4. The Contractor shall be responsible for the adequacy of all sheeting and bracing and for all damage resulting from sheeting and bracing failure or from placing, maintaining and removing it.

C. Construction Sheeting

1. General - Sheeting required by the Contractor for sheeting excavations, etc. shall be designed and submitted by the Contractor for the Engineer's review. Sheeting shall be removed at the conclusion of construction unless otherwise indicated or approved by the Engineer. Sheeting shall be either steel or wood sheeting as specified herein below.
2. Steel Sheeting - Sheeting shall conform to the requirements of ASTM A328. Sheet piles shall be new and shall be of the continuous interlock type of the section, length and weight shown on the Contract Drawings.
3. Structural steel and other accessories such as walers, braces, tie-rod assemblies, plates and similar members used with sheet piling shall conform to ASTM A36.

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4. Fastening - Bolts, nuts and washers shall conform to the requirements of ASTM A325 or A307. Connections shall be provided by the Contractor in accordance with AISC Specification for the Design, Fabrication and Erection of Structural Steel. Connections shall be subject to the Engineer's approval. Welding shall conform to the requirements of Detailed Specification 7.106, Welding.
5. Wood Sheeting - Timber of wood sheeting shall be Douglas Fir standard grade or Southern Yellow Pine No. 25R with extreme fiber unit bending stress not less than 1200 psi. All lagging shall be full size lumber (undressed), and shall be sound, free from shakes, large knots, and other defects which might impair its strength. Used timber may be furnished if equal in strength to that of corresponding new timber. Where conditions require tight sheeting to prevent loss of ground, tongue and groove wood sheeting shall be used.
6. Sheeting to be Left in Place - Construction sheeting to be left in place shall be indicated on the drawings. The Contractor shall cut off piling 2 ft. below ground surface or to the grades shown on the Contract Drawings.
7. Bracing and Anchorage - Bracing and anchorage shall be shown on the shop drawings.
8. Installation - The Contractor shall examine the areas and conditions under which steel sheet piling is to be installed. The Contractor shall notify the Engineer in writing of conditions detrimental to the proper and timely completion of the work. The Contractor shall not proceed with work until unsatisfactory conditions have been corrected in a manner acceptable to the Engineer.

D. No Separate Payment

The quantity to be measured for payment under this Section shall be the total number of square feet supplied and installed in accordance with the plans and specifications and direction of the Engineer.

All costs for the installation of sheeting and bracing performed in conjunction with the construction and installation of concrete structures will be included under the unit bid price for Concrete Structures Section 7.129.

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7.111 VALVES

A. Description of Work. The Contractor shall furnish, shop test, install, adjust, field test and place in satisfactory operation the valve, and auxiliary equipment as shown on the Contract Drawings, specified herein and as required for a complete installation.

B. General Requirements

1. Shop Drawings. The Contractor shall submit to the Engineer for approval shop drawings to substantiate conformance to the requirements set forth on the Contract Drawings and these Specifications. Shop drawings shall include, but not be limited to, outline and dimensional drawings including detailed sections of the equipment, complete equipment and component identification, and material specification.

Drawings shall include comprehensive schematic diagrams showing wiring for each individual item of electrical equipment and all interconnecting wiring, comprehensive schematic diagrams showing all hydraulic elements; the latter to be clearly indicated so it can be furnished and installed by others, if such is applicable.

A listing of the quantity and type of recommended lubricants, spare parts and special tools and appliances to be furnished shall be included with the shop drawing submittal.

C. Gate Valves

1. Gate valves shall be flanged end, metal seated, rising stem type valves. Bodies, gates and stems shall be Type 304 stainless steel. Flanges shall be carbon steel. Packing shall be TFE impregnated synthetic fiber. Valves shall have offset, bevel gear operators arranged as shown on the drawings. Valves shall be DeZurik gate valves or equal.
2. All buried valves and other valves located below the operating deck or level, specified or noted to be key operated, shall have an operator shaft extension from the valve or valve operator to finish grade or deck level, a 2-inch square AWWA operating nut. All valves shall have a 5 1/4 " valve box with a locking lid with a 5 point hex head brass bolt. The locking lid shall be as manufactured by Star Pipe Products or approved equal.

Except as otherwise specified, all buried valves shall be painted with 2 coats of asphalt varnish in accordance with the requirements of AWWA

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Standard C 500. This protective coating shall be protected from damage until the valve is backfilled.

3. All operators, unless otherwise specified, shall turn counter-clockwise to open. All valve operators shall be provided with the valve by the valve manufacturer. The valve manufacturer shall be solely responsible for the selection of the proper operator to meet the operating conditions specified herein. Field calibration and testing of the operators and valves to ensure a proper installation and an operating system shall be the responsibility of the valve manufacturer.

All valves shall have a minimum design pressure rating of 150 psi and capable of a test pressure of 300 psi. Buried service valves shall have mechanical joint pipe ends. Buried service valves shall be provided with AWWA operating nuts, extension stems and cast iron valve boxes. Extended valve stems, stem guides and operating nuts shall be provided as indicated or required.

4. Valves for buried service for nominal pipe sizes 3 to 12 inches shall be resilient seats and non-rising stems with double O-ring seals conforming to AWWA C509. The ends of valve ends shall be flanged, mechanical joint, or Aring-title joint as required for the type of pipe used. Valves shall be provided with 2 inch square operating units.

D. Execution

1. Installation

The procedures regarding unloading, inspection, storage and where applicable installation, described in the Appendix of AWWA C500 entitled Installation, Operation and Maintenance of Gate Valves shall be used for all valves.

All valves shall be manually opened and closed before installation to check their operation, and the interior of the valves shall be cleaned. Valves shall be placed in the positions shown on the Drawings.

2. Valve Supports

Valves shall be supported as integral components of the piping systems.

All horizontally mounted valve operators whose weight exceeds 25 pounds shall be supported independently of the valve and piping system.

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All vertically mounted valve operators whose weight exceeds 100 pounds shall be supported independently of the valve and piping system.

Valve supports shall anchor the valves against an unbalanced force in either direction. The magnitude of the force shall be based on a pressure equal to twice the maximum working pressure with a maximum allowable stress of 2 of the supports yield strength.

3. Testing

All valves shall be hydrostatically field tested at the aforementioned test pressures. Any leakage of a sweating of joints shall be stopped and all joints shall be tight.

Testing shall be performed in accordance with the specifications and the ANSI and/or AWWA standards contained herein including leakage tests. Copies of the certified test results shall be provided by the manufacturer to the Contractor and submitted to the Engineer for approval.

The Contractor shall obtain and submit certified statements that the valves comply with the requirements of the standards specified herein.

4. Painting and Coatings

Valves shall be shop primed for interior and exposed piping service and shall be coated for buried service with a one (1) mil coating in conformance with the outside coatings.

E. No Separate Payment

No separate payment shall be made for this work of the specification. All costs shall be included in the various Contract Items of this Contract.

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7.112

STONE PIERS FOR PEDESTRIAN/VEHICLE ENTRANCE

NO TEXT ON THIS PAGE

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7.113 MISCELLANEOUS PIPINGA. Work Included

Contractor shall furnish, install, test and place into satisfactory operation all piping and fittings as shown on the Contract Drawings and specified herein. Work performed under this Section shall conform to the NYCDDC General Specifications for Sewer Construction, except as specified and/or modified herein.

B. Piping Materials1. Ductile Iron Pipe and Fittings:

Ductile iron pipe and fittings shall comply with the requirements of the NYCDDC General Specifications for Sewer Construction except as modified herein.

- a. Ductile iron piping thickness classification shall be Class 54 or 56 as stated in Paragraph GS-30.4 of GS-30, respectively.
- b. All flexible couplings and flanged coupling adapters with the exception of piping encased in concrete shall be harnessed as shown on the Contract Drawings.
- c. Push-on Joints: Conform to ANSI A21.11 for rubber ring compression push-on joint.

2. Reinforced Concrete Pipe

Reinforced Concrete Pipe and fittings shall comply with the requirements of General Specifications 51A and the NYCDDC Standard Sewer Specifications, section 5.02.

- a. Size
 - 1) Precast reinforced concrete pipe shall be of the sizes prescribed in ASTM Designation C76.
 - 2) Size of pipe shall be as specified.
- b. Materials, Workmanship And Finish
 - 1) Concrete - The Concrete shall be a homogeneous mixture of such proportions and quality that the pipe will conform

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to the design and test requirements of these specifications. In no case, however, shall the proportion of Portland Cement in the mixture be less than six (6) bags per cubic yard of concrete. Each bag shall be ninety-four (94) pounds.

- 2) Cement - Cement shall be Portland Cement (Type II - Moderate Sulfate Resistant).
- 3) Aggregates - Fine aggregate and coarse aggregate shall conform to the requirements of General Specification 11.
- 4) Concrete Reinforcement - Reinforcing steel shall be steel bars or steel wire fabric conforming to the requirements of General Specification 11. Steel reinforcing shall be circular.

C. Extra Strength Vitrified Pipe

Extra strength vitrified pipe sewers and fittings shall comply with the requirements of the NYCDDC Standard Sewer Specification Section 5.03.

D. Installation

1. General

- a. Store and handle pipe in accordance with requirements of AWWA C600, latest revision and additional requirements of the manufacturer.
- b. Install piping as shown on the Contract Drawings, specified herein and as recommended by the manufacturer.
- c. Request instructions from Engineer before proceeding if there is a conflict between the manufacturer's recommendations and the Contract Drawings or Specifications.
- d. Pipe, fittings and accessories that are cracked, damaged or in poor condition or with damaged linings shall be rejected.
- e. Make sure that the inside of the piping is free from dirt and debris prior to and during installation. Remove debris from installed piping prior to testing.

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E. Buried Pipe:

1. Conform to manufacturer's instructions and to AWWA C600 where applicable.
2. Provide pipe bedding for all buried piping as shown on the Contract Drawings.
3. Pipe, fittings and specials shall be carefully lowered into the trench in a manner as to prevent damage to the pipe or pipe coatings.
4. Install all pipe accurately to line and grade shown unless otherwise approved by the Engineer. Remove and relay pipes that are not laid correctly.
5. Slope piping uniformly between elevations given.
6. When it is necessary to deflect pipe from a straight line either in the vertical or horizontal plane, the maximum deflection shall not exceed 75 percent of the manufacturer's recommended values for the joint.
7. Ensure that water level in trench is at least 6 inches below bottom of pipe. Do not lay pipe in water. Maintain dry trench until jointing and backfilling are complete.
8. Start laying pipe at lowest point and proceed toward the higher elevations, unless otherwise approved by the Engineer.
9. Place bell and spigot pipe so that bells face the direction of laying, unless otherwise approved by the Engineer.
10. Excavate around joints in bedding and lay pipe so that only the barrel receives bearing pressure from the trench bottom.
11. Blocking under piping shall not be permitted unless specifically excepted by the Engineer for special conditions. If permitted, conform to requirements of GS-30.18 and GS-30.19.
12. Prior to laying pipe every precaution shall be taken to ensure that no foreign material enters the piping. Interior of all pipe and fittings shall be inspected and all dirt, gravel, sand, debris or other foreign material shall be completely removed from pipe interior before it is moved into the trench. Bell and spigot mating surfaces shall be thoroughly wire brushed and wiped clean and dry immediately before pipe is laid.

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13. All pipe and fittings shall be carefully examined for cracks, damage or other defects while suspended above the trench before installation. Defective materials shall be immediately removed from site.
14. Every time that pipe laying is not actively in progress, the open ends of pipe shall be closed by a water-tight plug or cap.
15. Field cutting pipe, where required, shall be made with a machine specially designed for cutting piping. Tools as allowed by GS-30.18, if in accordance with the pipe manufacturer's recommendations, shall be used for field cutting ductile iron pipe. If these tools are not recommended by the manufacturer, the manufacturer's recommended tools shall be used in the work. Cuts shall be carefully done, without damage to pipe or lining, so as to leave a smooth end at right angles to the axis of pipe. Cut ends shall be tapered and sharp edges filed off smooth. Flame cutting will not be allowed.
16. Touch up protective coating in a satisfactory manner prior to backfilling. Joint coatings and touch up shall be applied equal to the shop applied coatings.
17. No pipe shall be completely backfilled until the Engineer approves of the installation after demonstration of successful testing.

F. Testing

1. Test all piping as specified below except as otherwise authorized by the Engineer.
2. Notify the Engineer 48 hours in advance of testing.
3. Provide all testing apparatus, including pumps, hoses, gages and fittings.
 4. Pipelines shall hold the specified test pressure for a period of 2 hours.
5. Pipelines which fail to hold specified test pressure or which exceed the allowable leakage rate shall be repaired and retested.
6. Test pressures required are at the lowest elevation of the pipeline section being tested unless otherwise specified.
7. Conduct all tests in the presence of the Engineer. Repeat tests in the presence of local authorities having jurisdiction if required by them.

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G. Measurement and Payment

No separate payment shall be made for piping associated with BMP construction. All costs shall be included in the unit cost of the Concrete Structures item, specification section 7.129.

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7.114 STEEL WEIR PLATES

NO TEXT ON THIS PAGE

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7.114B FRP WEIR PLATESA. Work Included

1. Description - The Contractor shall provide all labor, materials, equipment and incidentals as shown, specified and required to furnish and install fiberglass-reinforced weir plates complete and operational with all anchor bolts, fasteners and accessories.
2. Shop Drawings - The Contractor shall submit to the Engineer for approval shop drawings and other material required in accordance with the requirements set forth on the Contract Drawings and the Specifications. Shop drawings include, but are not limited to:
 - a. Manufacturer's literature, illustrations, specifications and engineering data including: materials of construction, dimensions, weight and performance data.
 - b. Drawings showing the general arrangement of the weir and methods of installation with detailed mounting information.

B. Materials

1. General Information - FRP weir plates shall be 1/2" thick unless otherwise noted and constructed to the dimensions as per Contract Drawings.
2. Bolting hardware shall be locking type.
3. Bolting Hardware shall be type 316L stainless steel for all bolts, nuts and washers.
4. A neoprene side seal shall be placed on the sides of the weir plates. The neoprene side seal material shall be D2000 grade 2BC515.

C. Details of Construction

1. Weir plates shall be type I fabricated as defined in Section 1.1 of AWWA F102.
2. Weir plates shall be constructed with the following material:

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- a. Fibrous Glass: Materials used shall be continuous filament Type E (electrical borosilicate), glass with a chrome or silane finish and a styrene soluble binder compatible with the resin. Surfacing veil, if used, shall be 0.010 to .020 inch thick Type C (chemical) or equivalent with silane finish and a styrene soluble binder on both sides.
3. Additives: Use thixotropic agents, mold release agents, promoters catalysts and low-shrink thermoplastic agents required for molding compounds used in the matched-die molding.
4. Plastic Resin:
 - a. Resin shall be a commercial-grade polyester thermosetting resin, which has either been evaluated in a laminate or which has been determined to be acceptable for the service conditions intended.
 - b. Resin shall contain no fillers or additives except as follows:
 1. A thixotropic agent, up to 5 percent by weight, which does not interfere with laminate quality or with the required chemical resistance of the laminate, may be added for viscosity control.
 2. Pigments, dyes or colorants used shall be light stable, not soluble in water and compatible with the resin. Color shall be selected by DEP's authorized representative.
 3. Ultraviolet Stabilization: Provide 0.25 percent by weight ultraviolet stabilizers in all laminates. The laminate shall exhibit not greater than 2 percent deterioration of flexural and tensile properties after 1000 hours of exposure in a Type E, single open-flame, sunshine carbon-arc lamp apparatus as detailed in ASTM G23.

D. Laminate Construction for Weir Plates

1. General: Produce fiberglass-reinforced plastic fabrications by the matched-die molding process to ensure smooth resin-rich surfaces and edges, dimensional accuracy and consistency. Mold weir plate notches within dies for increased corrosion and weather resistance. Sand and seal all cut edges with non air inhibited resin to ensure edges are completely sealed and to prevent water or chemical penetration of laminate. The laminate shall consist of exterior layer and an interior layer.

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2. Exterior Layer: The exterior surface shall be free of cracks and crazing with a smooth finish. This surface shall consist of 0.01 to 0.02 inch of resin-rich layer reinforced with chopped strand glass. Other methods of surface protection shall be submitted to the Engineer for approval.
3. Interior Layer: The interior layer shall be constructed to provide the necessary physical properties. Where separate layers such as mat, cloth or woven roving are used, all layers shall be lapped a minimum of one inch. Laps shall be staggered. If woven roving or cloth is used, a layer of chopped strand glass shall be placed as alternate layers. A minimum of 0.1 inch of the laminate next to the exterior surface shall be reinforced with non-continuous glass strands having fiber lengths from 0.5 to 2.0 inches.

Laminate glass to resin ratio shall be 30 percent glass and 70 percent resin.

4. Cut Edges: All cut or machined edges shall be coated with resin with all voids filled and no glass fibers exposed.
5. Dimensions:
 - a. Flat Crested Weir Edge: Weir plates shall be straight and vary not more than $\pm 1/8$ inch in 3 feet.
 - b. Weir Plate Anchor Bolt Holes/Slots - Holes for wall mounting shall be dimensioned as shown on contract drawings. Variation in center-to-center dimensions between holes shall not exceed $\pm 1/8$ inch.
6. Finish and Appearance:
 - a. The flat surfaces and edges of all weir plates, baffles, mounting brackets, closure plates and gates shall be free from porosity, voids and dry glass. Make surfaces and edges resin-rich to provide maximum resistance to corrosion and weathering.

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- b. Fabrications containing porosity, voids, dry glass, delamination or defects not allowed in Table 1 of AWWA F102 may be rejected. Repair of defects to meet maximum allowable level of deviation specified in Table 1 of AWWA F102 will be permitted provided repair work is performed in a neat manner, is blended smooth and does not affect the serviceability of the fabrication. All such remedial work shall be subject to approval of Engineer.

- 7. Minimum Physical Requirements: All laminates shall meet the minimum physical properties listed below:

Value of Property	Test Method	Property
Tensile Strength	ASTM D638	15 x 10 ³ psi
Flexural Strength	ASTM D790	25 x 10 ³ psi
Flexural Modulus	ASTM D790	0.8 x 10 ⁶ psi
Barcol Hardness	ASTM D2583	40
Izod Notched Impact	ASTM D256	13 ft-lb/in.
Water Absorption (24 hr @ 23°C)	ASTM D570	0.1% max.

E. Accessories

- 1. Provide all mounting brackets, anchor bolts, supports, stabilizing bars, angles or rods, fasteners and similar accessories required for installation of the equipment furnished. All metal accessories shall be Type 316 stainless steel.

F. Manufacturer

- 1. Plasti-Fab, Inc.
- 2. Warminster Fiberglass Company
- 3. Or equal.

G. Inspection

- 1. Contractor shall install all Work in complete accordance with the manufacturer's instructions and recommendations, and the approved Shop Drawings.

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2. Contractor shall not install damaged items until repairs are made in accordance with manufacturer's written instructions and approval by Engineer. Only minor repair work will be permitted in the field. All damaged items requiring remedial work shall be returned to the manufacturer for repair or replacement.

H. Installation of Weir Plates

1. Install all work in conformance with the approved Shop Drawings.
2. Install at locations and elevations shown, unless otherwise approved by the Engineer.
3. Set all weir plates level within $\pm 1/16$ -inch over the entire weir length unless noted otherwise on the contract documents.

I. Measurement and Payment

For all weir plates to be provided for the Sweet Brook project site, no separate payment shall be made Installed FRP weir plates or the work of the specification. All costs shall be included in the unit cost of the Concrete Structures item, specification section 7.129.

The Contract price for each FRP weir plate shall be as indicated on the Bid Schedule of Prices Item No. BMP-7.114-1 to BMP-7.114-2. 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. The FRP Weir Plate unit price shall include but not be limited furnish, delivering and installing the weir plate.

FRP Weir Plates Summary

<u>Item</u>	<u>Description</u>
BMP-7.114-1	FRP Weir Plate #1- Conference House
BMP-7.114-2	FRP Weir Plate #2- Detroit Avenue

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7.115 HOODS

NO TEXT ON THIS PAGE

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7.116 ALUMINUM SLIDE GATE

NO TEXT ON THIS PAGE

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7.117 GRAFFITI RESISTANT COATINGA. Description of Work

Under this Item, the Contractor shall furnish and apply Graffiti Resistant Coating to exterior stone, concrete, wood or other surfaces in accordance with OSHA guidelines, manufacturer's recommendations and the plans, specifications and directions of the Engineer.

B. General

The Contractor shall apply Graffiti Resistant Coatings as follows:

1. For previously painted masonry, concrete (vertical surfaces) and bethabara wood (both painted and unpainted), metal surfaces (both painted and unpainted), apply Graffiti Solution System (G.S.S.) manufactured by American Polymer Corporation, ARMAGLAZE 9000 manufactured by Aquarius Coating, Inc., or approved equal.
2. For new and unpainted masonry and concrete, the Contractor shall apply Professional Water Sealant & Anti-Graffiti, manufactured by Professional Products of Kansas, Inc., Blok-Guard & Graffiti Control Ultra manufactured by Prosoco, Inc., or approved equal.

C. Quality Assurance

Graffiti Resistant Coating shall be applied only by an approved installer per installation instructions who shall be trained by the manufacturer of each respective product and shall be certified by the manufacturers as qualified to install materials specified for this project. Only qualified Contractors or Subcontractors and their trades persons, meeting the above requirements shall be deemed approved. Submit a copy of current SSPC Certificate if applicable.

D. Product Delivery, Storage and Handling

1. The Contractor shall deliver materials in sufficient quantity to allow for continuity of work. Protect all materials and equipment during transit, delivery, storage and handling to prevent damage and deterioration.
2. Avoid fire; open flame and sparks. Container contents, even when empty, may ignite explosively when exposed to heat, welding, cutting torch, pilot lights and other flames and ignition sources at locations distant from the material storage and handling point.

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3. Avoid inhalation, ingestion, skin contact, and eye contact.
4. Protect shrubs, plants and grass during application. Avoid wind drift which may injure passersby or damage vehicles and adjacent properties.
5. For additional cautions, human health data and protective equipment to be used (including respiratory) refer to Material Safety Data Sheets.
6. Containers shall be kept closed when not in use.
7. Dispose of excess waste materials and empty containers in accordance with all local, state and federal regulations. Empty containers as may be classified as hazardous; they retain product residues such as vapor, liquid or solid. Do not transfer contents into other containers for storage.

E.

Products

1. "G.S.S" Coatings. Note: This coating shall be applied to surfaces listed under "General" heading of this Specification (i.e. previously painted masonry, concrete and wood surfaces and metal surfaces both painted and unpainted).
 - a. G.S.S. Barrier Standard: Sealer product; standard undercoat - not high solids version. This Standard version shall be used with Clear overcoat. Barrier shall be applied over painted porous surfaces (not metal)¹
 - b. G.S.S. Barrier High Solids: Shall be used with Pigmented top coat. The high solids version is not recommended for use with clear top coating. High solids barrier consists of a one component, acrylic copolymer coating (see Manufacturer's Product Guide for more information).
 - c. G.S.S. 10 Clear Coating (Low VOC): Anti-graffiti product; overcoat G.S.S. 10 consists of a polymer composition; two (2) component resin and catalyst system. It is a non-sacrificial permanent coating with flat/matte finish. G.S.S. 10 Part A is premeasured to use for Part B.
 - d. G.S.S. Pigmented Coating: Anti-graffiti product; top coat. Two (2) component polyurethane, non-sacrificial, protective coating.

¹

For steel and aluminum surfaces, in lieu of G.S.S.-Barrier, use a water-borne urethane primer such as Bond-Plex, manufactured by Sherwin-Williams Company; or approved equal.

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Color shall be selected from either the manufacturer's standard color guide or Sherwin-William Industrial and Marine Coatings, System 4000 color chart or approved equal. Finish shall be flat/matte (not gloss) unless otherwise noted. (pigmented coating shall be used in lieu of clear coating when previously painted substrate is not uniform in color and requires concealing with an opaque top coat.)

2. P.W.S. Coatings: Note: This coating shall be applied to surfaces listed under "General" heading above (i.e. new and unpainted masonry and unpainted concrete).

F. Execution

1. Surface Preparation
 - a. Surfaces shall be thoroughly dry, cleaned and free of dust, surface dirt, oil, grease and other contaminants that might prevent penetration of the coatings. Newly constructed surfaces, repointed surfaces and concrete shall be cured for at least 28 days before application. Glossy, glazed and slick troweled surfaces should be lightly etched or abraded before application of coatings. Surface defects, voids, joints or cracks must be properly sealed or filled, allowing any patching compounds to be completely cured before application. Cleaning may be accomplished by high pressure washing, sand blasting or chemical cleaning. When chemicals are used, they should be removed by high pressure water cleaning before application of the sealant. Use of raw acids shall not be permitted. Allow cleaned surfaces to dry completely. A test must always be made prior to application using the same cleaning and application procedures as to be used on the project. This test area shall remain available to be inspected by the Engineer.

G. Application Procedures

1. General product application must not be initiated during inclement weather, or when precipitation appears imminent. Application should be completed at least four (4) hours before precipitation begins.
2. For the G.S.S. Type Coating Systems consisting of both undercoat and topcoat, refer to manufacturer's Application Guide along with information specified herein.

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- a. G.S.S. Barrier Undercoat sealer shall only be applied when temperature is between 50°F and 95°F. The surface to receive Barrier shall be visibly dry and relative humidity shall be such that condensation does not form on the surface during application.
- b. Apply two (2) coats of Standard Barrier Undercoat (3 to 4 mils total) over all previously painted masonry and wood surfaces using either brush, roller or spray. Ensure that the coatings are applied evenly and built up sufficiently to create a protective layer over the underlying surface and to eliminate any future "shadowing" or "ghosting" which would appear after the graffiti removal if the surface is not adequately sealed and coated. Barrier shall be applied creating a pinhole-free surface. Allow 1 to 2 hours between coatings. Avoid over-application of Barrier coating to avoid pooling or puddling which can result in permanent whitening. Application of Barrier in direct sunlight can also result in permanent whitening.
- c. G.S.S. 10 Overcoats shall be applied over G.S.S. Barrier undercoat. Prior to installation of overcoats, the barrier coats shall be allowed a minimum of 12 hours drying time. Moisture shall not be permitted on undercoating prior to application of G.S.S. 10 coating. G.S.S. 10 shall be activated by mixing parts A and B. These two portions have been premeasured at a precise ratio. The Contractor shall not mix at any other ratio and shall not add thinner or water. Part B shall be poured into Part A container. While mixing together, stir well with a lifting motion to ensure that the two parts are well balanced. If the coating must be thinned for application purposes, thin with MEK only and only after Parts A and B have been mixed together. The coating may be applied by brush, roller or spray. Apply two (2) coats of G.S.S. 10 of 1 to 2 mils thickness each coat. Allow one (1) to two (2) hours before applying the second coat. If using roller, direct the roller upwards from bottom toward top maintaining a wet wedge.
- d. Coverage rates will vary depending upon porosity of the surface and method of application. Once activated, the coating has a pot life of approximately 4 to 6 hours under normal conditions (80°F or less). The lid shall not be left off the container unnecessarily.

H. For the Professional Water Sealant (P.W.S) Type Cleaning System, refer to Manufacturer's Application Guide along with information specified herein.

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1. P.W.S shall be applied only when temperature is between 60°F and 80°F and relative humidity is 50%. Under these ideal weather conditions, the coating will dry to the touch in approximately twenty-five (25) minutes. At lower temperatures, drying time will be longer.
2. The coating shall be applied over all new and unpainted masonry, concrete and wood surfaces using a two (2) coat application process, with a drying time of not more than two and one-half (2-1/2) hours between applications.

Curing time will vary depending upon the temperature and humidity conditions. The second coat shall require six (6) to eight (8) hours to develop full graffiti protection.

3. On vertical applications, P.W.S. shall be applied with a low pressure airless sprayer at an angle to allow the sealant to run down the face rather than to penetrate deep into the voids of the substrate. On porous and rough stone surfaces, it shall be necessary to apply a mist coat before flood coating.
4. On horizontal surfaces, such as wooden bench slats, P.W.S. shall be applied by brooming, brushing, rolling or using airless spray equipment. The coating shall not be permitted to puddle or pond. Over-application may cause surface to become slippery when wet. Excess sealant shall be wiped up immediately.
5. For low pressure spray application, the setting shall be about 40 psi to avoid atomization of the material. Spray equipment shall be fitted with stainless steel or brass fittings and gaskets suitable for solvent solution. A fan spray tip of 50E with flow rate of approximately 4/10 of a gallon per minute is recommended. Coatings shall be applied in a saturating spray application from the top down. Apply sufficient material to create a six (6) inch to eight (8) inch rundown below the contact point. Allow the first application to penetrate the masonry surface until dry to the touch. If a second application is required, less material will be needed.
6. For brush application, brushes should be nylon or other synthetic material resistant to solvent solution. When applying Professional Water Sealant with a brush, apply sufficient material to thoroughly saturate the surface. Avoid excessive overlapping. Take care of brush out runs and drips, and to avoid buildup of Professional Water Sealant.

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7. Container shall be kept tightly sealed until ready to use. Stir thoroughly before use. Product shall not be diluted or altered in any way. Coverage rates will vary depending upon surface porosity and texture. Once opened, Professional Water Sealant must be used within 24 hours.

I. Clean-Up Instructions

Clean application equipment immediately after each use. For G.S.S products, avoid having the G.S.S. 10 coating set up on or inside application equipment, by cleaning frequently with any of the following solvents (do not use solvents other than listed): xylene, lacquer thinner, MEK or n-butyl acetate. If coating has begun to set up and cannot be cleaned with the above, G.S.S. Erasol shall be used for cleaning. All drips and over spray shall be cleaned while still wet. For spraying equipment, cleaning with MEK every one (1) to two (2) hours is recommended. Since G.S.S 10 adheres permanently to surfaces, including human skin, spills shall be cleaned immediately. For P.W.S. products, clean equipment with mineral spirits or paint thinner.

J. Cure Time Required Prior To Remover Use

For G.S.S. products, full curing time required before graffiti can be removed from newly applied protective coating is seven (7) days at ambient temperatures. Curing period is longer during cooler temperatures. A test patch shall be performed during cooler temperatures to determine whether the G.S.S. 10 top coat has cured sufficiently to remove graffiti with Erasol Remover product. Apply a small amount of Erasol Remover product on a clean spot of the coated surface and let it stand for 24 hours undisturbed. When the coating appears to have softened, it has not fully cured. When the coating remains hard, then Erasol may be used to remove graffiti.

K. Graffiti Removal

1. For permissible materials to be used in removing any graffiti which may accumulate during construction contract duration, the Contractor shall refer to listing found under Section 7.116.12 (Extra Materials).
2. For graffiti removal procedures, see manufacturer's literature and instructions. Use of chemicals which are not included in manufacturer's list of components for remover system may damage or remove the protective coating, thereby necessitating the reapplication of sealant/coating systems.

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- 3. Use of remover products which are not part of the complete system (i.e. not manufactured by the same companies as protective coatings) will void the 10 year manufacturer's warranties/guarantees.

L. Submittals

- 1. The Contractor shall submit manufacturer's technical data sheets, vapor transmission testing results and applicable OSHA regulations for storage, handling and application of both the Graffiti Resistant Coatings and Graffiti Remover products to the Engineer for approval.
- 2. The Contractor shall submit manufacturer's product guarantee/warranty for a period of ten (10) years from the date of purchase, stating that the coatings will allow for the removal of all types of paint and other graffiti materials when same manufacturer's removal product has been used subject to listing of manufacturer's limitations which shall be included with the submittal. Manufacturer and/or its Certified Applicator shall remove the graffiti and recoat the surface at their own expense. The G.C. Contractor shall provide, sealed in plastic, a statement of the warranty with the name, telephone number and address of the manufacturer of the product to be contacted in the event that product fails. G.C. shall forward one (1) copy of the warranty to the following at the time of final acceptance:

DEP Staten Island Bluebelt Field Office
 182 Joline Avenue
 Staten Island, New York 10307
 718-984-0489
 718-984-4430 (fax)

- 3. The Contractor shall submit written certification from the respective manufacturers of coatings, certifying that installers have been properly trained and are currently approved by the manufacturers to install the specified graffiti resistant coatings. Provide copy of certification to the Engineer prior to start of Contract work.

M. Measurement and Payment

No separate payment shall be made for this work of the specification. All costs shall be included in the unit cost of the Concrete Structures item, specification section 7.129.

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7.118A

BEEHIVE GRATES

NO TEXT ON THIS PAGE

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7.119

LADDERS

NO TEXT ON THIS PAGE

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7.120 TRASH RACKA. Work Included

1. Description. The Contractor shall furnish and install trash rack as shown on the Contract Drawings.

The work shall include all labor and materials necessary to furnish, paint, deliver, install and test the equipment.

2. General Requirements.

- a. General Specifications. Except as modified by the Detailed Specifications, the work performed under this section shall conform to the requirements of the latest NYCDDC Standard Sewer Specifications
- b. As-Built Conditions - The Contractor shall perform an as-built survey to verify all pertinent dimensions prior to fabrication of the bar rack and the Contractor shall have full responsibility for the proper fit of the furnished bar rack sections at the location designated on the Contract Drawings.
- c. Shop Drawing. The Contractor shall submit to the Engineer for approval shop drawings and other material required to substantiate conformance with the requirements set forth on the Contract Drawings. Shop drawings shall include dimensional drawings including detailed sections of structural steel and equipment, complete identification and material specifications.

C. No Separate Payment

No separate payment shall be made for this work of the specification. All costs shall be included in the various Contract Items of this Contract.

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7.121

MANHOLES, CHAMBERS & CATCHBASINS

NO TEXT ON THIS PAGE

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7.122 MANHOLE STEPS

NO TEXT ON THIS PAGE

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7.123

ASPHALT PAVING FOR PATH

NO TEXT ON THIS PAGE

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7.124 TIMBER STOP LOG

NO TEXT ON THIS PAGE

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7.125 ACCESS HATCHESA. Description of Work

Under this item, the Contractor shall furnish, and install access hatches in accordance with the contract drawings and specifications, and direction of the Engineer.

B. Submittal

1. Complete fabrication and erection drawings for the access hatch shown on the contract drawings.

C. Materials

1. Access hatches shall be aluminum unless noted otherwise.
2. All access hatches shall be checker plate with an approved raised pattern, non-skid surface.
3. Access hatches shall be designed to carry a minimum live load of 150 psf, or a concentrated load of 300 pounds at the center, whichever produces the greatest stress.
4. Access hatches shall not exceed an allowable fiber stress of 16,000 psi. Live load deflection shall be limited to $L/240$ of the span, but not more than $\frac{1}{4}$ -inch.
5. All access hatches shall be fabricated from $\frac{1}{4}$ " plate, minimum and shall be stiffened as required to maintain allowable stress and deflection requirements specified herein. Stiffeners shall consist of angles or bars welded to the bottom of the plate.
6. Hinges, where indicated on the drawings, shall be insulated, heavy-duty, cadmium plated bronze with stainless steel pins and fasteners.
7. All access hatches as indicated on the drawings shall be provided with recessed handles. Handle material shall match hatch material.

D. Fabrication

1. All measurements and dimensions shall be based on field conditions and shall be verified by the Contractor prior to fabrication. Such verification shall include coordination with adjoining work.

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2. All fabricated work shall be shop fitted together as much as practicable, and delivered to the field, complete and ready for erection. All miscellaneous items such as stiffeners, fillets, connections, brackets, and other details necessary for a complete installation shall be provided.
3. All works shall be fabricated and installed in a manner that will provide for expansion and contraction, prevent shearing of bolts, screws, and other fastenings, ensure rigidity, and provide a close fit of sections.
4. Finished members shall conform to the lines, angles, and curves shown on the drawings and shall be free from distortions of any kind.
5. All shearings shall be neat and accurate, with parts exposed to view neatly finished. Flame cutting is allowed only when performed utilizing a machine.
6. All shop connections shall be welded unless otherwise indicated on the drawings or specified herein. All fastenings shall be concealed where practicable.

E. Installation

1. Assembly and installation of fabricated system components shall be performed in strict accordance with manufacturer's recommendations.
2. All gratings, access hatches, and access doors shall be erected square, plumb and true, accurately fitted, adequately anchored in place, and set at proper elevations and positions.

F. Measurement and Payment

No separate payment shall be made for this work of the specification. All costs shall be included in the various Contract Items of this Contract.

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7.126A GRANITE CASCADES

NO TEXT ON THIS PAGE

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7.127 TEMPORARY ASPHALT PAVEMENT

NO TEXT ON THIS PAGE

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7.128 ASPHALT PAVING

NO TEXT ON THIS PAGE

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7.129 CONCRETE STRUCTURESA. Work Included

The Contractor shall install, test and place in satisfactory operation all Concrete Structures as shown on the Contract Drawings and specified herein. Concrete Structures include but are not limited to headwalls, retaining walls, perimeter walls, weir walls, hydraulic flow splitters, hydraulic riser boxes, culverts, sewers, chambers, catch basins, manholes, sand filters, pedestrian bridges and stone piers.

B. General Requirements

1. General Specifications-The General Specification: 11-Concrete (Dated November 1991) of the Department of Design and Construction (DDC) is declared to be part of this specification, the same as it fully set forth elsewhere herein. Copies of this specification may be obtained from the Department. Concrete work shall conform to all requirements of that specification except as modified by the applicable sections of this Detailed Specification.
2. Refer to Sect 7.103.C: Detail Requirements as contained within this contract specification.
3. Submittals

The Contract shall submit to the Engineer for approval shop drawings and other materials required to substantiate conformance to the requirements set forth on the Contract Drawings and the Specifications in accordance with the Standard Sewer Specifications. Submittals shall also include all material required under the "Submittals" section of the chapters of General Specification 11, Concrete, and any additional submittals hereinafter specified.

C. Measurement and Payment

The quantity to be measured for payment under this Section shall be the total number of Concrete Structures installed as directed by the Engineer.

The Contract price for each Concrete Structures shall be as indicated on the Bid Schedule of Prices Item No. BMP-7.129-1 to BMP-7.129-5. 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. The Concrete Structures unit price shall include but not be limited to concrete, reinforcement, excavation, backfilling, crushed stone, geotextile, sheeting and bracing, stone facing, hatches, manhole covers, grating, railings, piping, hoods,

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valves, weir plates, ladders, steps, trash racks and bronze plaque. The unit price shall also include removal of all existing structure and debris found at the proposed new structure location.

D. Concrete Structures Summary

<u>Item</u>	<u>Description</u>
BMP-7.129-1	Structure #1- Sheldon Ave West Head Wall
BMP-7.129-2	Structure #2- Heenan Ave Head Wall
BMP-7.129-3	Structure #3- Sheldon Ave East Head Wall
BMP-7.129-4	Structure #4- Outlet Chamber and Piping
BMP-7.129-5	Structure #5- Weir

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MORTARED STONE WALL

7.201 WORK INCLUDED

Under this item, the Contractor shall furnish all labor, materials and equipment for completing the construction of mortared stone wall 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 Number</u>	<u>Title</u>
7.201	Work Included
7.202	Masonry Mortar
7.203	Masonry Accessories
7.204	PA Colonial Field Stone

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7.202 MASONRY MORTARA. Description of Work

1. Description. Furnish all labor and material necessary for the preparation and placing of all mortar for masonry and stone work.
2. General Requirements.
 - a. General Specifications. Masonry mortar and grout materials shall comply with the requirements of this Section, except where otherwise shown or specified. Where no description has been specified for any material required, the current Reference Standard RS 10-1, Masonry - City of New York Building Code, shall apply. Concrete materials shall conform to the requirements of General Specification 11 -Concrete.
 - b. Code. The use of masonry cement mortar, as approved by the Board of Standards and Appeals, is optional. Masonry cement mortar shall fulfill the requirements of the Administrative Code of the City of NY and it shall be a mix of one part cementitious material to two-and-three-fourths parts of sand by volume. It shall be furnished in sacks containing one cubic foot each, and shall be marked with the weight.
 - c. Test. Masonry mortar samples shall be provided by the Contractor upon request from the Engineer. Samples will be subject to tests in conformance with ASTM C270.
 - d. Job mock-up. Sample panels will be constructed at the site. At that time, adjust mortar samples to achieve desired colors at the discretion of the Engineer.

B. Materials

1. Cement. Unless otherwise qualified, the term "portland cement" whenever used in connection with masonry work shall conform to the requirements of General Specification 11 - Concrete. Masonry cement shall fulfill the requirements of ASTM C91.
2. White Portland Cement. White portland cement shall be approved domestic product containing no ingredient that will stain other materials with which the cement comes in contact. It shall not contain more than 0.03% by weight of soluble alkali and shall fulfill the requirements of ASTM C150.

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3. Lime Putty. Lime putty shall be made from hydrated lime except that quicklime may be used when adequate time and facilities are available for aging. Suitable precautions shall be taken to protect the putty from exposure to the sun and to prevent excessive evaporation when stored.
- a. Hydrated lime shall be mixed with the amount of water called for in the printed directions of the manufacturer to form a putty and shall be allowed to stand for at least 24 hours before using. The hydrated lime may be sifted into the water, or the putty may be screened or punched through a sieve, or treated in any other manner, so as to obtain a smooth lump-free putty. Hydrated lime shall fulfill the requirements of ASTM C6.
- b. Quicklime (pulverized) shall be slaked in suitable large batches, with the amount of water called for in the printed directions of the manufacturer, to form a thick cream. Lime shall be sifted into water. During cool or cold weather, precautions shall be taken to maintain the heat and prevent premature cooling during the process of hydration. The slaked quicklime shall be passed through a No. 10 sieve and stored for at least 72 hours before using. When the use of lump quicklime, slaked on the job, in lieu of pulverized quicklime is specifically approved for plastering, the cooling and aging period shall be not less than 14 days. Quicklime shall fulfill the requirements of ASTM C5.
- c. Pressure hydrated lime shall be used as recommended by the manufacturer and shall conform to the requirements of ASTM C206.
4. Fine Aggregate. Sand shall conform to all the physical and chemical requirements and fulfill all the test requirements of NY Specification 24-S-30 for types as herein specified.
- Fine aggregate for thin joints for units with cut or ground edges shall be Class A Type 2A but with not less than 95% passing thru No. 16 sieve.
- Fine aggregate for masonry work in general, glass block and plaster shall be Class A Type 2A. For joints which are 1/2" wide or more, Type 2A shall be used.
- White sand shall be pure silica sand or marble dust having a gradation approximately within the limits specified for thin joints.

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Sand in setting bed mortar for tile shall be as described for masonry work, except that not more than 5% shall pass thru a No. 100 mesh sieve.

Fine aggregate for pointing mortar tile (ceramic and quarry) shall be as specified for masonry work, except that 100% shall pass thru a No. 30 mesh sieve with no more through than 5% passing through a No. 100 mesh sieve.

Before the start of work, sample of fine aggregate shall be submitted to the Engineer for approval.

5. Water. Water used in connection with masonry work shall be clean and free of injurious amounts of oil, acid, alkali, organic matter or other deleterious substances, or shall be the water used in the City for drinking purposes.
6. Waterproofing and Non-Shrink Admixtures. An approved waterproofing plasticizer with pozzolanic properties containing pure stearic acid and equal to "Omicron" by Master Builders, or "Hydrocide" powder by Sonneborn Building Products Division of Contech, Inc., shall be added to produce a non-shrinking waterproof mortar. Admixture will be mixed with mortar as per manufacturer's requirements or if manufacturer does not specify in a 15:1 volumetric ratio of mortar to admixture.
7. Grout. Grout shall be mixed to a thick consistency. Neat grout shall be composed of cement and water only. Non-staining cement shall be used for non-staining grout.

C. Mixes

1. General Specifications. The mortar mixtures shall conform to ASTM C270. The proportions of cement specified herein are the minimum.
2. Type M Mortar. ASTM C270; composed by volume in proportions of 1/2 part portland cement, 1 part masonry cement and not more than 4 parts sand, measured in a damp, loose condition, with waterproofing added, with a minimum average compressive strength at 28 days of 2,500 psi. Use Type III mortar for all masonry work which is below grade.
3. Mixing. Mortar shall be freshly mixed and the quantity of each batch shall not be in excess of the amount that will be used before the same has started to set. Retempering will not be permitted. The ingredients for each batch shall be accurately measured and combined in the proportions specified, all parts being measured by volume. Mortar shall be mixed in a batch mixer or by hand and shall be of uniform color and consistency.

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Mixer drums shall be entirely emptied of a batch before charging for a succeeding batch is started. The mixing time shall be not less than 5 minutes, approximately 2 minutes of which shall be for mixing the dry materials and not less than 3 minutes for continuing the mixing after the water has been added.

4. Coloring. Mortar shall be colored using cement during the mixture process. After mixing mortar shall be of uniform color.

D. Measurement and Payment

No separate payment shall be made for this work of the specification. All costs shall be included in the various Contract Items of this Contract.

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7.203 MASONRY ACCESSORIESA. Description of Work

1. The Contractor shall provide all labor, materials and equipment necessary to place all masonry accessories as specified and shown on the Contract Drawings.
2. General Requirements.
 - a. Samples. Submit three of each item to the Engineer as specified in the General Conditions.
 - b. Job Mock-Up. A sample panel will be constructed at the site. At that time furnish all anchors, ties and reinforcement necessary to construct the sample panel.
 - c. Manufacturer.
 - 1) Acceptable manufacturers of anchors, ties and accessories: Hohmann and Barnard, Inc., Hickman Building Products, Inc., or approved equal.
 - 2) Acceptable manufacturers of joint reinforcement: Dur-O-Wall, Inc., AA Wire Products or approved equal.
3. Product Delivery, Storage and Handling. Materials shall be stored under cover in a dry place and protected from the elements.

B. Materials

1. Anchors and Ties for Exterior and Interior Work . Non-corrosive, stainless steel.
 - a. Corrugated or Crimped Ties. 22 gauge, not less than 7/8-inch wide, not less than 5 inches long.
 - b. Dovetail Type Masonry Anchors for Fastening Stone to Slot Inserts in Concrete. Shall be designed to fit the slots, not less than 16 gauge, 7/8-inch wide, turned up 1/4-inch at the end. Dovetail slots shall be 20 gauge filled type, furnished under this Section and installed under General Specifications 11, Concrete.

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C. Installation

1. Clean off foreign coatings that will destroy or reduce the bond immediately before placing reinforcing anchors and ties.
2. Provide all anchors, anchor slots, ties, masonry joint reinforcement and other anchorage devices necessary to anchor masonry work to the structure and to other masonry.
3. Coordinate placement of vertical slots 16-inch o.c. for anchorage of masonry furring and facings in front of concrete. Continuous slots shall not be placed closer than 3 inches to the edges of concrete work.

D. Measurement and Payment

No separate payment shall be made for the Masonry Accessories associated with construction of Concrete Structures. All costs shall be included in the unit cost of the Concrete Structures item, specification section 7.129.

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7.204 PA COLONIAL FIELD STONEA. Description of Work

The Contractor shall furnish all labor, materials, equipment and services necessary to install stone facing as specified herein and as shown on the Contract Drawings.

B. General Requirements.

1. Samples. Furnish sufficient stone units including special shapes required, to show range of colors, texture, finishes and dimensions.
2. Job Mock-Ups.
 - a. Construct two 4 ft.-0 in. x 6 ft.-0 in. sample panels of stone units, with at least one 90E corner, and coping. Show backup and reinforcement.
 - b. The Contractor shall construct the three types of sample panel as often as required by the Engineer to achieve approved samples. Do not proceed with construction until sample panels are accepted by the Engineer.
 - c. Retain accepted samples as reference standard for project.
 - d. Demolish and remove sample panels from the site after completion and acceptance of all masonry work.
3. Store all stone units above ground on level platforms which allow air circulation under stacked units; cover and protect against wetting prior to use.
4. Handle units on pallets of flat bed barrows and do not permit free discharge from conveyor units or transporting in mortar trays.
5. Do not place concrete masonry units, when air temperature is below 40°F (4°C) without specific instructions in writing from the Engineer,

C. Stone Facing Work1. Materials

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- a. Stones: All stones shall be quartzite sandstone, commonly known as Pennsylvania Colonial Field Stone or natural local stone as approved by the Engineer.

All stones shall generally have a minimum length of one (1) foot six (6) inches and a minimum height of six (6) inches. All stones shall generally have a maximum length of three (3) feet zero (0) inches and a maximum height of twelve (12) inches. Stone widths shall generally be no more than twelve (12) inches, and shall generally conform to the width of the stone ledge provided.

All stones shall be free of soil and debris in order to achieve a secure bond with the mortar.

D. Installation

1. Lay stone with not less than 1" nor more than 2" of the specified mortar between stone and the back-up wall, and in accordance with the approved mock-up.
2. Joints shall have a nominal thickness of 3/8-inch, and uniform.
 - a. Strike joints flush in surfaces not exposed to view.
 - b. Point joints tight in unparged masonry below ground, or water level.
 - c. Tool joints in exposed surface when thumb-print hard with round jointer.
3. Contractor shall field verify condition of existing structures and surfaces as per ACI guidelines 201.1R prior to laying of stone.
4. Laying
 - a. Lay only dry units. Stones shall be laid in cement mortar so as to form full bed, end and side joints at one operation. Stones shall be laid with flat side down and best side facing outward. Those stones with best face on all sides shall be used for the top course as wall cap.
 - b. Stones shall be tightly wedged together and flash point mortared in place.

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- c. Provide full mortar coverage on horizontal and vertical face shells. Provide full mortar coverage also on webs, in all starting courses, in piers, columns and pilasters, and adjacent to cells or cavities to be filled with grout.
 - d. Shove vertical joints tight.
 - e. All stones shall be laid in a horizontal banding pattern, utilizing the one-over-two and two-over-one method. Set units plumb, true and line, and with level courses accurately spaced. Adjust units to final position while mortar is soft and plastic.
 - f. Keep open spaces at control joints and expansion joints free of mortar by using a continuous wood or metal strip temporarily set in the wall.
 - g. If units are displaced after mortar has stiffened, remove, clean joints and units of mortar, and relay with fresh mortar.
 - h. When jointing fresh mortar to set or partially set stone construction clean exposed surface to set masonry and remove loose mortar prior to laying fresh masonry. If necessary to stop off a horizontal run of masonry, rake back one-half block length in each course. Do not use toothing to join new masonry to set or partially set masonry when continuing a horizontal run.
5. Anchors and Reinforcement
- a. Units at corners and at intersections shall be bonded with masonry bond and preformed joint reinforcement spaced vertically 16-inch o.c.
 - b. Where block passes concrete, anchor with one dovetail anchor for each 2 square feet of wall surface.
6. Built-In Work
- a. Avoid cutting and patching.
 - b. Install bolts, anchors, nailing blocks, inserts, frames, vents, flashings, conduit and other built-in items as masonry work progresses. Solidly grout spaces around built-in items.
 - c. Coordinate the work of this Section with work of all other trades so that no requirements are overlooked.

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7. Protection of Work

- a. Protect sills, ledges and off-sets from mortar drippings or other damage and remove misplaced mortar or grout immediately.
- b. Cover top of walls with non-staining waterproof coverings when work is not in progress. Provide minimum 2 ft. overhang of protective covering each side of wall and securely anchor.
- c. Protect face materials against staining.

8. Pointing and Cleaning

- a. At final completion of unit masonry work fill holes in joints and tool the same.
- b. Cut out and repoint defective joints.
- c. Dry brush masonry surface after mortar has set, at end of each day's work and after final pointing.
- d. Leave work and surrounding surfaces clean and free of mortar spots and droppings.
- e. Wash down all exposed brick with an approved masonry-type detergent, and then thoroughly rinse with clean water. Before applying any cleaning agent to the entire wall, apply it to a sample wall in a location approved by the Engineer. Cleaning shall not proceed until the sample area has been approved by the Engineer after which the same materials and methods shall be used on the entire work. Acid solutions or acid-type detergents shall not be used.

E. Measurement and Payment

No separate payment shall be made for PA Colonial Field Stones furnished and installed as facing on Concrete Structures. All costs shall be included in the unit cost of the Concrete Structures item, specification section 7.129.

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EARTHWORK AND GRADING

7.300 WORK INCLUDED

Under earthwork and grading, the Contractor shall provide all labor, material, 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>
7.301	Debris Removal and Disposal
7.302	Clearing, Grubbing and Removals
7.303	Temporary Wood Tree Guards
7.304	Excavation
7.305	Crushed Stone
7.306	Tree Removal and Disposal
7.307A	Grading
7.308	Fill On-Site
7.310	Plant and Sod Salvage
7.312	Demolition and Site Clearing

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7.301 DEBRIS REMOVAL AND DISPOSALA. Description of Work

Under this item, the Contractor shall remove all debris and objectionable material in the work areas. Debris such as household, yard wastes and construction fill, fencing, abandoned structures, stones, wood as well as construction debris and any other objectionable debris shall be removed from the specific areas within the limits of the Contract, in accordance with the plans and specifications as directed by the Engineer. Removal of fallen trees which are resting on the ground shall be included in this item. The removal and disposal off-site of the following items shall be included in this Item: abandoned vehicles, large appliances, tires, auto engines, other auto debris, scrap pieces of metal, plastic, wood, asphalt and concrete rubble, other dumped fill, household waste and yard waste. This work is to be done before installation of guide rail and/or landscaping activities and other pertinent work of this Contract.

Stones deemed suitable for reuse shall be stockpiled on-site at a location determined by the Engineer or DEP Representative. Stones deemed not useful for contract purposes shall be removed by the Contractor from the site.

The Contractor shall carefully protect all trees, shrubs and other growth to remain, and shall be liable for any and all damages to property caused by Debris Removal operations. All trees, plants, and constructed features damaged during Debris Removal shall be replaced or restored to their original condition to the satisfaction of the Engineer.

This item shall apply only to those areas not covered by the item, Clearing, Grubbing and Removals. All debris removal in areas covered by Clearing, Grubbing and Removals shall be paid for under the unit price bid for Clearing, Grubbing and Removals.

B. Construction Methods and General Removal Protocol

All removal of debris from wooded areas, marshes, ponds and stream beds shall be performed by hand, except those areas that can be reached by machines located on paved roads or hard-packed open surfaces. Debris shall be removed to the nearest street edge for removal by the Contractor.

In sensitive natural areas, the removal of debris may cause more damage to the landscape than the benefits derived from the clean-up. Therefore, for debris that is inaccessible from a hard surface, the Contractor shall consult with the Engineer to decide if it shall be removed. Engineer will inform the Contractor of any debris items not to be removed due to inaccessibility and anticipated damage to soils and vegetation.

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Every effort to protect overhanging branches from damage by machines shall be taken. No plant material shall be removed except as ordered by the Engineer.

1. Where accessible from paved road or existing packed dirt road, use front-end loader and/or backhoe to remove items to nearest street. Heavy machinery must remain on paved/hardened surfaces.
2. With the consent of Engineer, remove debris from wooded, field, or marsh areas by hand. Use existing trails where possible. For marsh areas, choose an entry point that minimizes the impact on vegetation. Blow torches, hand tools, and wheel barrows can be used to disassemble and remove large items. In order to minimize leakage from vehicles, separately remove and dispose of fluid-containing car parts.
3. With the consent of Engineer, remove items in open water by hand, unless of large enough size to warrant the use of a winch. In both cases, choose an entry point that will have the least impact on the shoreline, considering both the edge vegetation and bank stability. If using a winch, attach chains to the object and pull to shore. The vehicle housing the winch must remain on a paved or hardened surface. Once on shore, remove the debris according to the land conditions (i.e. by hand or with heavy equipment).

C. Measurement and Payment

The quantity to be measured for payment shall be as described herein. The quantity shall be for debris removal within the specified Work Areas.

Measurement shall be made in containers and/or vehicles, and the quantity to be paid for will be eight-tenths (8/10) of the yardage determined by such measurements.

The price bid shall be unit price per cubic yard for debris removal and disposal as indicated on the BID SCHEDULE OF PRICES Item No. BMP- 7.301. The bid price shall constitute full compensation for all materials, labor, equipment, and work incidental thereto, necessary to complete this item in accordance with the plans and specifications to the satisfaction of the Engineer.

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7.302 CLEARING, GRUBBING AND REMOVALSA. Description of Work

Under this item, the Contractor shall clear, grub and remove all objectionable material such as trees (with calipers 6 inches or less), shrubby growth and brush, vines, stumps of all sizes, roots and weeds, within the limits of the BMP project site, in accordance with the plans and specifications as directed by the Engineer.

Trees with calipers 6 inches or less shall be removed under this item. Trees with calipers over 6 inches shall be removed under the Tree Removal item.

No trees or shrubs shall be removed except as ordered by the Engineer. All cleared and grubbed material shall be removed from the sites of the Contract and properly disposed of by the Contractor. No additional payment will be made for this, but the cost thereof shall be deemed included in the price bid for this item.

Every effort to protect overhanging branches from damage by machines shall be taken.

The Contractor shall carefully protect all trees, shrubs, and other growth which are to remain, and shall be liable for any and all damages to property caused by clearing and grubbing operations. All trees, plants and other property to remain which are damaged shall be replaced or restored to their original condition to the satisfaction of the Engineer, at no additional cost to the City.

The Contractor shall not remove stones from the site unless otherwise directed by the Engineer. Where stones are found to be in locations conflicting with areas to receive work, stones shall be relocated and stockpiled to adjacent on-site areas. The contractor shall retain and stockpile boulders on site for use in BMP construction as directed by Engineer.

B. Construction Methods and General Removal Protocol

Unless otherwise directed, the Contractor shall clear, grub and remove only objectionable surface and subsurface material heretofore described to a depth of six (6) inches below the ground surface as directed by the Engineer. If such areas are in fill greater than six (6) inches, trees and shrubs may be cut flush with the ground surface.

C. Measurement and Payment

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The quantity to be measured for payment under this section shall be the total number of square feet successfully cleared and grubbed and all objectionable material removed in accordance with the plans and specifications and directions of the Engineer. The quantity shall be for clearing, grubbing and removal of all objectionable material within the project work limits.

For supplying all labor, materials and equipment necessary for clearing, grubbing and removals, the Contractor shall receive a unit price bid.

The Contract price per square foot for Clearing, Grubbing and Removals shall be as indicated on the BID SCHEDULE OF PRICES Item No. BMP-7.302. The bid price shall constitute full compensation for all labor, materials, equipment and work incidental thereto, necessary to complete the work in accordance with the plans and specifications to the satisfaction of the Engineer.

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7.303 TEMPORARY WOODEN TREE GUARDSA. Description of Work

Under this Section, before the commencement of any contract site work, the Contractor shall furnish and erect temporary wooden tree guards around existing trees to be safeguarded from construction activities in accordance with the plans, specifications and directions of the Engineer. For Temporary Wooden Tree Guard detail, refer to Contract Drawings. In order to avoid surface and subsurface root damage and soil compaction, the Contractor shall not be permitted to stockpile materials of any nature within the drip lines of trees to remain. Tree protection shall include securely tying up branches to prevent mechanical injury if deemed necessary by the Engineer. All equipment used on site shall be appropriate to the scale of the project. "Appropriate-sized" equipment shall be described as only equipment which can operate effectively on site without causing damage to existing vegetation.

B. Materials

Lumber to be used for temporary wooden tree guards shall be unpainted Yellow Pine, Douglas Fir or Spruce. All nails shall be hot-dipped galvanized steel.

C. Method

Unless otherwise directed, the Contractor shall install the temporary tree guards as shown on the drawings without causing damage to the existing trees to be protected. If any temporary wooden tree guards are destroyed or sustain damage during the course of the work, they shall be immediately repaired, or replaced by a new temporary wooden tree guard at no additional expense to the City.

Temporary wooden tree guards shall remain in place until all work which might cause damage or defacement to protected trees has been completed. Upon the completion of work to the satisfaction of the Engineer, the Contractor shall remove and dispose of all temporary tree guards from existing trees. All work shall be done in a careful, neat, and workmanlike manner.

If any trees are removed from a work site in violation of the plans and specifications (specifically the tree removal authorization issued by the City Planning Commission under the Special South Richmond Development District regulations of the Zoning Resolution of the City of New York), the Contractor shall be held responsible. Such trees shall be replaced without any extra expense to the City.

D. No Separate Payment

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The cost for all labor, materials and equipment required for the temporary wooden guards shall be deemed included in the price bid under DETAILED SPECIFICATIONS FOR CLEARING, GRUBBING AND REMOVALS. No separate payment shall be made for temporary wooden tree guards.

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7.304 EXCAVATIONA. Description of Work

The Contractor shall furnish all labor, materials, equipment and services necessary to perform all excavation as indicated on the Contract Drawings and as specified herein.

B. General Requirements

1. General Specifications - Except as modified and supplemented hereinafter in the Detailed Specifications, work performed under this Section shall conform to the NYCDDC Sewer Construction General Specifications.
2. Shop Drawings - The Contractor shall submit to the Engineer for approval shop drawings and other documentation required to show conformance with the requirements set forth on the Contract Drawings and these Specifications. Shop drawings shall include, but not be limited to, the requirements for shop drawings as specified in General Specification.

C. Excavation

1. General Information - 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 NYCDDC Sewer Construction General Specification, except as otherwise specified herein. Excavation shall include removing boulders of size less than one-half cubic yard. Excavation shall also include the removal of existing buried pipelines, the plugging of those remaining sections of the pipelines and the plugging of all existing buried pipelines to be abandoned but not removed.

The limits of excavation shown on the drawings are the payline and 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 performing the excavation to the levels and surfaces indicated.

2. Excavated Materials - The Contractor shall dispose off site all excess and unsuitable materials. Boulders and stones deemed suitable for reuse shall be stockpiled on-site at a location determined by the Engineer or DEP Representative.
3. Hazardous and Non-Hazardous Waste - Prior to starting the work, the contractor shall perform soil sampling as detailed in Section 7.317-Soil

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Sampling and Disposal. Sampling and subsequent removal of contaminated soils shall be paid for under that item.

3. Care of Water - 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 care for water during construction, including a coordinated sequence of operation for the entire project. Approval by the Engineer will not relieve the Contractor of his responsibility for the safety of the work, existing structures and adjacent property.
4. Stockpiling - Topsoil that has been excavated and approved for use on-site is to be stockpiled separate from subsoil. Topsoil shall be excavated to a depth of 18" or as directed by the Engineer. Location of stockpiling shall be approved by the site Engineer. If the Engineer deems necessary, subsoils shall be separated and stockpiled according to soil horizons.

D. Measurement and Payment

The quantity to be measured for payment under the pay item Excavation shall be the total number of cubic yards, measured in containers and vehicles, and the quantity to be paid for will be 75% of the yardage determined by such measurements.

The contract price per cubic yard of material excavated and disposed of off-site shall be indicated on the BID SCHEDULE OF PRICES Items No. BMP-7.304-A. The bid price shall constitute full compensation for all labor, materials, equipment and work incidental thereto, necessary to complete the work in accordance with the plans and specifications to the satisfaction of the Engineer.

All costs for excavation performed in conjunction with the construction and installation of concrete structures will be included under the unit bid price for Concrete Structures Section 7.129.

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7.305 CRUSHED STONE

A. Description of Work

The Contractor shall provide and install Crushed Stone or Gravel bedding as indicated on the Contract Drawings and as specified herein.

B. Materials

Pea gravel used in micro pools shall uniform graded pea gravel, ASTM C33, Size No. 7. Stone shall be washed prior to installation, and installation shall only proceed with approval of the Engineer.

Crushed stone used shall conform to the following gradation and shall be compacted to 98 percent density as determined by ASTM D698.

<u>Sieve Size</u>	<u>Percentage of Dry Weight Passing Designated Sieve Size</u>
1"	100
1/2"	90-100
1/4"	0-15

C. Construction Methods

Crushed stone shall be installed as per the Contract plans and to the satisfaction of the Engineer.

D. Measurement and Payment

The quantity to be measured for payment under this Section shall be the total number of cubic yards of approved crushed stone as measured in vehicles and containers.

The contract price per cubic yard of crushed stone, shall be as indicated on the BID SCHEDULE OF PRICES Items No. BMP-7.305. The bid price shall constitute full compensation for all labor, materials, equipment and work incidental thereto, necessary to complete the work in accordance with the plans and specifications to the satisfaction of the Engineer.

No separate payment shall be made for crushed stone used as bedding for Concrete Structures. All costs shall be included in the unit cost of the Concrete Structures item, specification section 7.129.

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No separate payment shall be made for crushed stone used as bedding for Permanent Accessways. All costs shall be included in the unit cost of the Permanent Accessway item, specification section 7.606.

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7.306 TREE REMOVAL AND DISPOSALA. Description of Work

Under this item, the Contractor shall cut and remove within the BMP Project limits and associate Bluebelt work areas, all trees over six (6) inches in caliper, where shown on the plans or as directed by the Engineer. Trees removed as a result of sewer construction and road work outside the limit of work described in this Addendum are not included in this item and are included elsewhere in these Contract Documents.

Trees with calipers six (6) inches or less shall be removed under the item Clearing, Grubbing and Removals.

The Contractor shall carefully protect against damage all existing trees, plants and other features to remain. He/she shall be liable for any damage to such trees, plants, structural features and other property caused by tree removal operations, and all damaged trees, plants, structural features and other property shall be replaced or restored to their original condition to the satisfaction of the Engineer.

The Contractor shall cut and remove all trees designated for removal within the limits of the Contract or as directed by the Engineer. The stumps and roots of these trees shall be removed to a depth of six (6) inches below the ground surface in grass and planted areas, and such other areas as might be designated. In areas of fill greater than six (6) inches, such trees shall be cut flush with the existing ground surface.

In areas of major construction, the stumps and roots of all trees designated for removal shall be grubbed and excavated to a depth of three (3) feet below the ground surface except in areas of fill greater than three (3) feet, where such trees may be cut flush with the ground surface.

Cutting of trees shall be done by competent workers only and in a professional manner, under the supervision of a certified arborist. All trees shall be "topped" and "limbed" previous to felling unless otherwise directed by the Engineer. For increased wildlife value, the Engineer may direct the Contractor to leave various topped and limbed tree trunks lying on the ground surface. These modifications shall be included in the unit price for tree removal. The Engineer may direct the Contractor to stockpile excavated root wads as well as topped and limbed tree trunks at a location approved by the Engineer for utilization under other items within this Contract. All branches, limbs, trunks, stumps, roots and other debris deemed not acceptable for reuse shall be removed from the site or otherwise disposed of to the satisfaction of the Engineer.

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No trees are to be removed except as ordered by the Engineer. All trees shall be calipered at four and one-half feet above existing grade prior to removal (diameter at breast height). This item shall include the removal of snag trees which are obstructing flow in stream channels because these trees have collapsed due to undermined stream banks, as directed by the Engineer. Unless directed otherwise by the Engineer, snag trees shall be flush cut where the Engineer determines that the root mass should remain to help stabilize the streambank.

B. Measurement and Payment

The quantity of tree removal to be paid for under this section shall be the number of trees of each size group, removed and disposed of in accordance with the plans and specifications and directions of the Engineer.

A tree having a single root system and more than one trunk at a height calipered at four and one-half feet above existing grade shall be considered a multiple trunk tree. The caliper of a multiple-trunk tree, to be measured for payment, shall be the square root of the summation of the squares of the calipers of the several trunks, except that trunks of less than three (3") inch caliper will not be considered or included.

The Contract price per unit for tree removal shall be as indicated on the BID SCHEDULE OF PRICES Item Nos. BMP-7.306-A through BMP-7.306-D. The prices bid shall be unit prices per tree of each size group and shall include the cost of all labor, materials and equipment necessary for removing and disposing of trees, and all other incidentals necessary or required to complete the work in accordance with the plans and specifications to the satisfaction of the Engineer. This payment for tree removal shall include the costs for all stump removal and disposal. No payment shall be made under this section for removing stumps that existed on the site prior to tree removal operations. The removal of stumps that are on the site before any trees are removed shall be deemed included in the price bid under DETAILED SPECIFICATIONS FOR CLEARING, GRUBBING AND REMOVALS.

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7.307 A GRADINGA. Description of Work

The Contractor shall furnish all labor, materials, equipment and services necessary to perform all grading as indicated on the Contract Drawings and as specified herein.

B. General Requirements

1. General Specifications - Except as modified and supplemented hereinafter in the Detailed Specifications, work performed under this Section shall conform to the NYCDDC Sewer Construction General Specifications.
2. Shop Drawings - The Contractor shall submit to the Engineer for approval shop drawings and other documentation required to show conformance with the requirements set forth on the Contract Drawings and these Specifications. Shop drawings shall include, but not be limited to, the requirements for shop drawings as specified in General Specification.

C. Grading - The Contractor shall perform filling, compacting, and grading of the indicated areas of site, including minor cutting and filling high and low areas, and leveling such areas to elevations and within limits shown on the Contract Drawings. All work shall be performed in accordance with the applicable requirements of the NYCDDC Sewer Construction General Specifications.D. Compaction

1. BMP Areas- Compaction shall not be done in BMP and landscaped areas.
2. Other Areas- Each layer of fill or backfill shall be compacted by a minimum of four complete passes with an approved tamping roller, pneumatic-tired roller, three-wheel power roller, or other approved compaction requirement. Compaction shall not be less than 95 percent of the maximum density modified proctor as determined by ASTM D1557, Method D.
3. Field Control - Sufficient in place density tests shall be performed by the Contractor in order to satisfy the Engineer that the specified density is being obtained. These tests shall be made at no cost to the City and shall be made using the calibrated sand cone method (ASTM D1556) or other method as determined by the Engineer.

E. Finished Excavation, Fills, and Embankments - All areas covered by the project, including excavated and filled sections and adjacent transition areas, shall be

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uniformly graded. The finished surface shall be reasonably smooth, compacted, and free from irregular surface changes. The degree of finish shall be that ordinarily obtainable from blade-grader operations. Surfaces shall be finished not more than 0.15 foot above or below the established grade or approved cross section.

- F. Protection – Newly graded areas shall be protected from traffic and erosion, and any settlement or washing away that may occur from any cause, prior to acceptance, shall be repaired and grades re-established to the required elevations and slopes, at no additional expense to the City.

The Contractor shall provide temporary ground cover sufficient to restrain erosion on all disturbed areas upon which further active construction is not taking place.

- G. Measurement and Payment

The quantity to be measured for payment under the pay item Grading shall be the total number of square feet of work area graded. The contract price per square foot for grading shall be as indicated on the BID SCHEDULE OF PRICES Item No. BMP-7.307-A. The bid price shall constitute full compensation for labor, materials, equipment and work incidental thereto, necessary to complete the work in accordance with the plans and specifications to the satisfaction of the Engineer.

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7.308 FILL ON-SITEA. Description of Work

This work shall consist of providing and placing approved fill material where required throughout the project area only. The Contractor may use approved fill material excavated from sewer and foundation trenches and stockpiled excavated soils within BMP project limits as long as it meets the approved definition. Reuse of onsite excavated material requires that the material be screened prior to placement as fill. The approved fill material shall be provided, placed, spread, compacted and fine graded to the elevations, lines, grades and cross-sections indicated on the drawings as directed by the Engineer.

B. Definition

Approved fill is hereby defined as clean earth, consisting of a mixture of silt and clay. Fill material shall have a liquid limit less than or equal to 40 and a plasticity index less than or equal to 20, as determined by ASTM D4318. This mixture must be free of any roots, trees, tree stumps, leaves or other organic matter. Furthermore, this material must also be free of any metals, masonry (i.e. construction debris), stones over one and one-half (1-1/2) inches in diameter and deleterious material. In addition, the fill shall have a gradation such that 100% (by weight) passes a 3" sieve, 50-100% passes a #10 sieve, 20-90% passes a #60 sieve, and 0-20% passes a #200 sieve.

Fill used in planted areas shall be clean earth, consisting of a mixture of silt, clay, and sand. No custom ("select fill") fill shall be used in area which are to be planted.

C. Measurement and Payment

The quantity to be measured for payment under this Section shall be the total number of cubic yards of approved fill, measured in containers or vehicles, provided and placed as indicated on the Contract Drawings and as directed by the Engineer.

The contract price per cubic yard of approved fill material placed shall be as indicated on the BID SCHEDULE OF PRICES Item No. BMP-7.308. The bid price shall constitute full compensation for all labor, materials, equipment and work incidental thereto, necessary to complete the work in accordance with the plans and specifications to the satisfaction of the Engineer.

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No separate payment shall be made for fill used to backfill structures. All costs shall be included in the unit cost of the Concrete Structures item, specification section 7.129.

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7.309

IN-STREAM SEDIMENT REMOVAL

NO TEXT ON THIS PAGE

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7.310 PLANT AND SOD SALVAGEA. Work Included

The Contractor shall furnish all labor, materials, equipment and services necessary for Plant and Sod Salvage as indicated on the Contract Drawings and as specified herein. Plant salvage involves many ecological, horticultural and site-specific issues and shall be designed and supervised by the Restoration Specialist.

B. Manual Plant Salvage

Activities under this item shall include all work necessary and incidental for the removal, storage and transplanting of existing native small trees, shrubs and herbaceous plant material. Work shall be done under the guidance of the Restoration Specialist with experience in transplanting and nurserymen techniques. Plant salvage activities shall precede the use of heavy trucks, excavating or grading equipment in salvage areas, except equipment used for the salvage work itself.

Transplanting is only to occur when plants are dormant during the fall and winter and when soil is moist. Evergreen material shall be transplanted from April 1st to May 15th and from September 1st to October 15th. Deciduous material shall be transplanted from March 1st to May 1st and from October 15th to December 1st. Only trees and shrubs that lack insect or disease damage shall be transplanted. The majority of trees and shrubs salvaged shall not exceed five (5) feet in height as larger specimens have a higher mortality rate.

All plants shall be dug to retain as many fibrous roots as possible and the roots shall be contained securely in place. The Contractor shall use approved transplanting equipment. Temporary storage shall be in suitably sized containers or, where appropriate, as burlap wrapped balls. Root balls of trees and shrubs shall be wrapped with wet burlap to prevent soil from separating from roots and desiccation. Size and weight of root balls shall be in accordance with Table 3.5 "Size and Weight of Earth Ball Required to Transplant Wild Stock" in the latest edition of the New York State Standards and Specifications for Erosion and Sediment Control, published by the Empire State Chapter of the Soil and Water Conservation Society. After transplanting, all shrubs shall be pruned and watered in accordance with standard horticultural practices.

C. Plant Removal

The following specifications shall be used to properly remove plants. A straight edged spade shall be used to manually remove herbaceous plants and small shrubs and trees. For plant material under three (3) feet tall, a spade shall be plunged straight down around the material to be removed at least eight (8) inches from

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stem. The cut around plant material taller than three (3) feet shall be a minimum of one (1) foot. The spade shall then be carefully worked under the roots. If a large root is encountered, it shall be cut cleanly with sharp pruning shears or loppers. Small plants shall be lifted out of ground, keeping root ball and associated soil intact and placed in temporary containers of appropriate size. The soil within the containers shall be covered with wet mulch, wood chips or leaves and kept moist.

Shrubs and trees larger than three (3) feet shall be removed in the following manner. Two people shall be used for removing such material. An appropriately sized piece of burlap shall be placed alongside the plant material to be removed. The spade head shall be placed under the root ball. While one person pries the plant up with the spade handle, the other shall grasp the plant at the base of the stem. Using the spade to support the root ball, the plant shall be lifted out of the hole and placed on the burlap. The corners of the burlap shall be pulled up around the root ball and natural twine (not nylon or plastic) shall be used to tie it around the root ball. The burlap and root ball shall be immediately watered. Roots shall not be allowed to become dry or be exposed to air.

D. Storage

Under ideal circumstances, salvaged material shall be transplanted immediately to the donor site. If storage is necessary and approved by the Restoration Specialist or DEP Representative, salvaged plants shall be stored temporarily at a designated storage location, properly heeled in and watered until such time that they are used for re-establishment. The temporary storage area shall be scraped to remove weeds and weed seeds before plants are stored and shall have the same soil type, exposure and hydrological regime as the donor site. The temporary storage area shall be completely fenced with plastic snow fence or welded wire fence. The top two (2) inches of the container as well as spaces between the containers shall be filled with wet mulch, wood chips or leaves. The salvaged plants shall be planted as soon as designated receptor sites are available during the dormant season.

A capillary bed shall be constructed for wetland plant storage at the discretion of the Restoration Specialist or DEP Representative. The frame of the capillary bed shall be one (1) foot deep and four (4) feet wide by ten (10) feet long. The frame shall be lined with heavy plastic (>3 mil) and filled with approved soil or mulch. Holes are to be punched in the plastic liner in each corner six (6) inches from the bottom of the frame. This will prevent the entire bed from filling with water. At least two (2) inches of water shall be maintained in the capillary bed at all times.

Plants shall be potted prior to placement within the capillary bed as this will reduce the number of times the roots will need to be disturbed. Potted plants are to be placed in the bed and surrounded and partially covered with soil or mulch. Plants shall not be stored for more than one (1) year.

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E. Tree Spade

Tree spades shall be equal to or better than those marketed by Vermeer Manufacturing Company, P. O. Box 200, Pella, Iowa 50219; (515-628-3141). Native shrubs and small trees shall be transplanted as per the manufacturer's recommendations and with the supervision of the Restoration Specialist or DEP Representative as to not damage plant material.

Prior to transplanting, shrubs and trees should be tagged and their future locations selected and marked by the Restoration Specialist or DEP Representative. Plant material shall only be transplanted during the dormant season.

If plant material is to be stored prior to planting, the material shall be properly balled or containerized as per sound horticultural practices (American Association of Nurserymen Standards) and toed into the soil in an appropriate predetermined location. The storage site shall be approved by the Restoration Specialist or DEP Representative and have the same soil type, exposure and hydrology as the donor site. The temporary storage area is described in paragraph D.

Evergreen material shall be transplanted from April 1st to May 15th and from September 1st to October 15th. Deciduous material shall be transplanted from March 1st to May 1st and from October 15th to December 1st. Only trees and shrubs that lack insect or disease damage shall be transplanted. The majority of trees and shrubs salvaged shall not exceed six (6) feet in height as larger specimens have a higher mortality rate.

F. Whole Sod Salvage

Whole sod placement shall be done under the guidance of a Restoration Specialist with experience in sod salvage. The Contractor shall remove whole sods from all designated donor wetlands, including native moss mats, sedge and fern tussocks, woody hummocks, whole shrubs and small trees and associated herbaceous vegetation. The salvaged sod shall be transported and placed into the created wetland over previously-placed organic sediments or over mineral soils, depending on the depth of sod. Sods shall be cut, transported and placed such that the sods and plants remain substantially intact and plants and roots maintain their accustomed vertical and horizontal orientations. Whole sod cutting shall be capable of transporting trees up to two (2) inches in caliper and ten (10) feet in height.

Whole sod cutters shall be manufactured by Munro Ecological Services, or approved equal. The referenced manufacturer supplies hydraulically-operated attachments equipped for positive sod displacement.

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Salvage and placement of whole sod and organic soils shall occur in tandem so that all salvage equipment can work on firm mineral soil and there is no unnecessary treading of organic soil, sods or plant material. Sods shall not be stored without the approval of the Restoration Specialist and requires the use of specialized storage equipment.

The work shall proceed as follows:

1. A rank of whole sod shall be cut and removed from the edge of the donor site. If the sod is of the proper thickness, it may be placed directly into the receptor site. The sod shall otherwise be set aside temporarily until the receiving subgrades are properly prepared.
2. If underlying organic soils are to be salvaged from donor sites, it should be excavated and transported to the receiving wetland in such a way as to prevent unnecessary treading by heavy equipment.
3. If both underlying organic (A horizon) soils and mineral (B horizon) soils are to be salvaged from donor sites, they shall be excavated and stockpiled separately, and transported and placed into the receptor site in separate lifts, as they existed in-situ. The soil horizons shall be tamped, not compacted in place. Soils shall be excavated and transported to the receptor site in such a way as to prevent unnecessary treading by heavy equipment.
4. Salvaged whole sods shall be carefully placed on top of those sediments or elsewhere on mineral soils.
5. Another rank of whole sods shall be cut and removed from the donor site.
6. All organic sediments underlying the removed rank of sods shall be excavated, transported, distributed and then salvaged. Whole sods shall be placed on top.
7. This procedure shall be repeated until all usable whole sods have been salvaged to the satisfaction of the Restoration Specialist. Sods shall be placed deliberately spaced apart as well as contiguously to imitate the irregularity of other existing wetlands in the area. The Restoration Specialist shall inspect local "model" wetlands prior to placement of whole sods to better understand the desired pattern of layout.
8. Sod placement shall be true to elevation as shown on the plans. Target elevations shall be corrected by the Contractor if actual site conditions appear to differ from projected site conditions during and after excavation.

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G. Plant Salvage at BMPs

Within this contract, the BMPs' periphery and adjacent areas will be recontoured and restored. As such, the BMP edge and adjacent areas shall serve as the donor site for both soils and plant salvage.

Prior to salvaging plants and soil, the receptor site shall be fully prepared. The plant material shall be excavated including the soil to a depth of 18". Extreme care shall be taken to avoid damaging plants or crumbling soil below. If the receptor site is deeper than 18", additional soil shall be excavated from the donor site to be placed below. This material shall be stockpiled on tarps and placed separately prior to the placing of the top 18" layer. The plant material and topsoil shall be stored on tarps, kept moist and protected until it can be placed. Work shall be scheduled so that plant material can be transplanted within thirty six (36) hours of being excavated. Method for transplanting material shall be selected to minimize compaction of soil. Soil shall be tamped, not compacted in place. Salvaged plant material shall be well-watered in place.

The material to be salvaged shall include the plant species listed below, but shall not be limited to these plants, as determined by the Restoration Specialist, or DEP Representative. In the areas to be excavated, locate and transport the following species to the cleared areas (plants are listed in order of importance to salvage):

Woody Plants

Acer negundo _____	Box-Elder
Acer spp. _____	Maple saplings
Quercus spp. _____	Oak saplings
Salix nigra _____	Black Willow
Cornus amomum _____	Silky Dogwood
Rubus spp. _____	Raspberry
Sambucus canadensis _____	Elderberry
Viburnum dentatum _____	Arrowwood Viburnum

Perennials and Herbaceous Plants

Peltandra virginica _____	Arrow Arum
Carex spp. _____	Sedges Eupatorium spp.
Solidago spp. _____	Goldenrod
Typha spp. _____	Cat-Tail
Symplocarpus foetidus _____	Skunk-Cabbage
Parthenocissus quinquefolia _____	Virginia Creeper

H. Measurement and Payment

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The quantity to be measured for payment under this section shall be the total number of crewday (shifts) necessary for completion of the plant salvage operation. A crewday (shift) is defined as one period from 8AM - 4PM, including lunch and breaks. The crew shall consist of two workers.

The contract price per unit for Plant Salvage shall be as indicated on the BID SCHEDULE OF PRICES Item No. BMP-7.310-A4. 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 Engineer.

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7.311

CONSTRUCTED WETLAND TREATMENT

NO TEXT ON THIS PAGE

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7.312 DEMOLITION AND SITE CLEARING

A. Description of Work - The Contractor shall demolish, remove, and dispose of all existing structures, to the extent indicated and as specified herein.

Items to be demolished and cleared include, but are not limited to, the following:

1. The encroachments from Lots 27, 31, 35 and the Sinclair Avenue Right of Way within Block 6291, including the storage trailer located on Lot 27 and the Sinclair Avenue Right of Way.
2. Demolish and remove approximately 220 LF of the existing 58" x 91" storm sewer at the downstream end of Sheldon Avenue, as directed by the Field Engineer. See the Suggested Sequence of Construction.
3. Remove the existing outlet structure and in-stream concrete downstream of the outlet structure, as directed by the Field Engineer. See the Suggested Sequence of Construction.
4. Removal of existing asphalt and concrete paving, curbs and fencing as required.
5. All debris in the yard surrounding the structures shall also be removed and disposed of off-site. The debris includes 10' chain link fence surrounding the existing pond.

B. General Requirements

All demolition and removals shall be in accordance with the New York City Building Code.

1. Shop Drawings - The Contractor shall submit to the Engineer for approval shop drawings and other material required to substantiate conformance to the requirements set forth in these Specifications. Shop drawings shall include, but not be limited to, the extent and schedule of demolition, demolition procedure, safety precautions as specified. Approval of shop drawings by the Engineer is required before demolition may be started. The Contractor shall verify the existing conditions of the structures and site prior to submitting the Shop Drawings.
2. Permits to be Obtained - Before proceeding with the demolition and clearing work, the Contractor shall obtain all necessary permits required by the City Departments and other agencies having jurisdiction.

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3. The Contractor shall provide adequate fire protection during demolition in accordance with New York City Fire Department Requirements.
4. The Contractor shall obtain all necessary approvals from all utilities in regards to disconnecting all existing utility connections.

C. Demolition Procedures

General

1. Install approved sediment and erosion control measures prior to demolition.
2. The limits of demolition are:
 - i. The encroachments from Lots 27, 31, 35 and the Sinclair Avenue Right of Way within Block 6291, including the storage trailer located on Lot 27 and the Sinclair Avenue Right of Way.
 - ii. 220 LF of the existing 58" x 91" storm sewer at the downstream end of Sheldon Avenue, as directed by the Field Engineer.
 - iii. The existing outlet structure and in-stream concrete downstream of the outlet structure.
 - iv. Asphalt and concrete paving, curbs and fencing as required.
 - v. All debris in the yard surrounding the structures shall also be removed and disposed of off-site. The debris includes 10' chain link fence surrounding the existing pond.
 - vi. Use of explosives will not be permitted.
 - vii. In performance of this work, the Contractor shall provide protection of adjacent existing structures and existing vegetation. Any trees or shrubs damaged or removed by the Contractor during demolition activities shall be replaced by the Contractor at no additional expense to the City
3. Clearing and Grading - Resulting excavation from the demolition of the structures shall be backfilled and compacted to conform to surrounding grades. All associated debris materials shall be removed from site and disposed of by Contractor. Burning will not be permitted.
4. Restoration - The backfilled and graded demolition site shall be restored in accordance with specification sections 7.401.3 paragraph I and specification section 7.403. The restoration will include the preparation

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and application of topsoil over the demolition and clear area and the planting of trees, shrubs and herbaceous plants and the application of Staten Island Native Wildflower Meadow Seed Mix.

The quality of plant material to be planted as part of the restoration work is as shown on the Plant Schedule below:

PLANT SCHEDULE, BMP SB-1			
Common Name	Taxonomic Name	Size	Spacing
EMERGENT ZONE			
PLANTS			
ARROW ARUM	<i>Peltandra virginica</i>	2 3/4" or DP 50	18" OC
DUCK POTATO	<i>Sagittaria latifolia</i>	2 3/4" or DP 50	18" OC
GIANT BURREED	<i>Sagittaria eurycarpum</i>	2 3/4" or DP 50	18" OC
NARROW-LEAVED CATTAIL	<i>Typha angustifolia</i>	2 3/4" or DP 50	18" OC
PICKERELWEED	<i>Pontederia cordata</i>	2 3/4" or DP 50	18" OC
SOFT STEM BULRUSH	<i>Scirpus validus</i>	2 3/4" or DP 50	18" OC
LAKE SEDGE	<i>Carex lacustris</i>	2 3/4" or DP 50	18" OC
BAYONET RUSH	<i>Juncus militaris</i>	2 3/4" or DP 50	18" OC
WATER PLANTAIN	<i>Alisma plantago-aquatica</i>	2 3/4" or DP 50	18" OC
LOW WETLAND			
SEED			
FACW WET MEADOW SEED MIX	SEE LIST IN SPECIFICATIONS		
PLANTS			
RICE CUTGRASS	<i>Leersia oryzoides</i>	2 3/4" or DP 50	18" OC
SOFT RUSH	<i>Juncus effusus</i>	2 3/4" or DP 50	18" OC
BLUE FLAG IRIS	<i>Iris versicolor</i>	2 3/4" or DP 50	18" OC
FOX SEDGE	<i>Carex vulpinoidea</i>	2 3/4" or DP 50	18" OC
SWEETFLAG	<i>Acorus calamus</i>	2 3/4" or DP 50	18" OC
SWAMP MALLOW	<i>Hibiscus moscheutos</i>	2 3/4" or DP 50	18" OC
LIZARD'S TAIL	<i>Saururus cernuus</i>	2 3/4" or DP 50	18" OC
WOOLGRASS	<i>Scirpus cyperinus</i>	2 3/4" or DP 50	18" OC
SWAMP MILKWEED	<i>Asclepias incarnata</i>	2 3/4" or DP 50	18" OC
HIGH WETLAND			
SEED			
FACW WET MEADOW SEED MIX	SEE LIST IN SPECIFICATIONS		
PLANTS			
SWITCHGRASS	<i>Panicum virgatum</i>	2 3/4" or DP 50	18" OC
NEW YORK IRONWEED	<i>Vernonia noveboracensis</i>	2 3/4" or DP 50	18" OC
NEW ENGLAND ASTER	<i>Symphyotrichum novae-angliae</i>	2 3/4" or DP 50	18" OC
NEW YORK ASTER	<i>Symphyotrichum novi-belgii</i>	2 3/4" or DP 50	18" OC

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TRUMPETWEED	<i>Eupatoriadelphus fistulosus</i>	2 3/4" or DP 50	18" OC
RIVERBANK WILD RYE	<i>Elymus virginicus</i>	2 3/4" or DP 50	18" OC
FACULTATIVE			
SEED			
NATIVE WILDFLOWER MIX			
PLANTS			
GRASS LEAVED GOLDENROD	<i>Euthamia graminifolia</i>	2 3/4" or DP 50	18" OC
PURPLE JOE-PYE WEED	<i>Eupatorium purpureum</i>	2 3/4" or DP 50	18" OC
BROOMSEDGE	<i>Andropogon virginicus</i>	2 3/4" or DP 50	18" OC
SWITCHGRASS	<i>Panicum virgatum</i>	2 3/4" or DP 50	18" OC
WHITE SNAKE ROOT	<i>Ageratina altissima</i>	2 3/4" or DP 50	18" OC
VIRGINIA WILD RYE	<i>Elymus virginicus</i>	2 3/4" or DP 50	18" OC
UPLAND			
SEED			
NATIVE WILDFLOWER MIX			
PLANTS			
CANADA GOLDENROD	<i>Solidago canadensis</i>	2 3/4" or DP 50	24" OC
WRINKLELEAF GOLDENROD	<i>Solidago rugosa</i>	2 3/4" or DP 50	24" OC
COMMON MILKWEED	<i>Asclepias syriaca</i>	2 3/4" or DP 50	24" OC
VIRGINIA CREEPER	<i>Parthenocissus quinquefolia</i>	2 3/4" or DP 50	24" OC
WILD BERGAMONT	<i>Monarda fistulosa</i>	2 3/4" or DP 50	24" OC
SMOOTH BLUE ASTER	<i>Symphyotrichum laevis</i>	2 3/4" or DP 50	24" OC
INDIANGRASS	<i>Sorghastrum nutans</i>	2 3/4" or DP 50	24" OC
BONESET	<i>Eupatorium perfoliatum</i>	2 3/4" or DP 50	24" OC
LITTLE BLUESTEM	<i>Schizachyrium scoparium</i>	2 3/4" or DP 50	24" OC
TREES			
WHITE OAK	<i>Quercus alba</i>	5 - 6' whip	
PIN OAK	<i>Quercus palustris</i>	5 - 6' whip	
RED OAK	<i>Quercus rubra</i>	5 - 6' whip	
PIGNOT HICKORY	<i>Carya glabra</i>	5 - 6' whip	
GRAY BIRCH	<i>Betula populifolia</i>	5 - 6' whip	
BLACK CHERRY	<i>Prunus serotina</i>	5 - 6' whip	
STAGHORN SUMAC	<i>Rhus typhina</i>	5 - 6' whip	
SHRUBS			
EASTERN RED CEDAR	<i>Juniperus virginiana</i>	3 - 4' tall	
BLACKHAW	<i>Viburnum prunifolium</i>	3 - 4' tall	
BLACK RASPBERRY	<i>Rubus occidentalis</i>	3 - 4' tall	
GRAY DOGWOOD	<i>Cornus racemosa</i>	3 - 4' tall	
LIVESTAKES			
SILKY DOGWOOD	<i>Cornus amomum</i>	18 – 24" long	*
PUSSY WILLOW	<i>Salix discolor</i>	18 – 24" long	*

* Install along bank of channel 24" OC

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All restoration work shall be as directed by the Restoration Specialist who shall prepare a detailed plan for planting the cleared site.

5. Disposal - All materials resulting from the demolition work will become the property of the Contractor. The materials shall be removed from site to Contractor's own place of disposal at Contractor's expense in conformance with existing applicable laws and regulations.

I. Measurement and Payment

No separate payment shall be made for the Demolition and Removal. All costs shall be included in the unit cost of the Debris Removal and Disposal item, specification section 7.301.

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7.313

REMOVAL OF POND SEDIMENTS

NO TEXT ON THIS PAGE

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7.314

DISPOSAL OF OUTFALL CHAMBER SEDIMENTS

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7.315

GREENBELT/RICHMOND CREEK RESTORATION

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7.316

GREENBELT/RICHMOND CREEK RESTORATION ALLOTMENT

NO TEXT ON THIS PAGE

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7.317 SOIL SAMPLING AND DISPOSAL

NO TEXT ON THIS PAGE

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7.318 SAND/WOOD CHIP MIX FOR STEP POOLSA. Description of Work

Under this item, the Contractor shall provide a sand/wood chip mix in accordance with the plans and directed by the Engineer. Mix shall be 20% wood chip, 80% sand by volume, and placed under step and pool sections of the step-pool sequence.

B. MaterialSand

Sand shall be 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.

Sand shall conform to ASTM-C-33 Standard for Concrete Aggregates, 0.02 inches to 0.04 inches in size. Sand substitutions such as Diabase and Graystone (AASHTO) #10 are not acceptable. No calcium carbonated or dolomitic sand substitutions are acceptable. No "rock dust" can be used for sand.

Tests shall be required and shall serve as a representative analysis for every 200 cubic yards of material utilized. No sand shall be delivered in a frozen or muddy condition.

Wood Chips

Woods chips shall conform to specification section 7.406. Wood chips shall be mixed with sand to approximately 20% by volume.

C. Measurement and Payment

The quantity of sand to be paid for under this item shall be the number of cubic yards of sand furnished from off-contract site sources (i.e. suppliers approved by the engineer), mixed with wood chip and placed and incorporated in the completed work in accordance with the plans and specifications to the satisfaction of the Engineer, measured in trucks used for delivery, at the site of the work. The quantity of sand to be paid for under this item shall be measured in cubic yards in trucks used for delivery. No clean sand shall be furnished until ordered by the Engineer. Delivery ticket with name and address of vendor, date and estimated volume must be supplied to the Engineer prior to truck measurement.

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The contract price per unit of sand used in the sand/wood chip mix shall be as indicated on the BID SCHEDULE OF PRICES Item No. BMP-7.318. The bid price shall be a unit price per cubic yard of Sand, and shall include the cost of all labor, materials and equipment necessary to prepare receiving areas, furnish, mix with wood chip, place, and all other work incidental thereto, in accordance with the plans and specifications to the satisfaction of the Engineer.

All costs for wood chips used in the sand/wood chip mix shall be included in the unit cost of Wood Chips, specification section 7.406.

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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	Landscaping for Terrestrial Zone and Wetland Zone
7.403	Top Soil for Restored Area
7.405	Vector, Pest and Wildlife Control
7.406	Wood Chips
7.407	Jute Mesh
7.408B	Herbicide Application
7.413	Temporary Goose Exclusion Fence
7.414	BMP As-Built Plans
7.415	Vine and Invasive Plant Removal
7.418	Clean Sand for Restored Areas
7.419	Tree and Root Pruning

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7.401 LANDSCAPING FOR TERRESTRIAL ZONE AND WETLAND ZONE

A. 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. In addition, the contractor will also furnish and deliver Permanent Seed Mix as directed by the Engineer.

B. General Requirements

1. Reference Standards

- a. American Association of Nurserymen, Inc., (American National Standards Institute) Nursery Stock (Z60.1)
- b. American Joint Committee on Horticultural Nomenclature Standardized Plant Names.
- c. A Checklist of New York State Plants, Contributions to a Flora of New York State, Checklist III, Bulletin #458, Richard S. Mitchell, State Botanist, New York State Museum, 1986.
- d. A Comparative Flora of Staten Island, 1879 - 1981, Buegler and Parisio, Staten Island Institute of Arts & Sciences.

C. Quality Assurance

1. Source Quality Control:

- a. If private nursery sources are used, they must be within a 250-mile radius of the planting site. All specified plants shall have also been grown in the same USDA climatic zone as that of the planting site.

All seed and original stock material for herbaceous plants shall have been collected from locally adapted ecotypes within a one-hundred mile radius of the project site. Plant material may have to be contract grown in order to meet this requirement.

No substitutions of specified plants will be accepted without prior approval of the Engineer or his/her duly authorized representative.

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- b. General. Ship landscape material with certificates of inspection when required by governmental authorities. Comply with governing regulations applicable to landscape material.
 - c. Packaged Material. Package standard products with manufacturer's certified analysis. For other material, such as topsoil, provide analysis by recognized laboratory made in accordance with methods established by the Association of Official Agricultural Chemists, wherever applicable, or as further specified.
 - d. 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.
2. Trees and plants shall be specified as in the Contract Documents. Nurseries which collect plants from the wild shall be rejected. No substitutions shall be permitted, except as authorized in writing by Engineer. If specified landscape material is not obtainable, submit proof of non-availability to Engineer, together with proposal for use of equivalent material. All plants specified within this Contract are native to the State of New York. Species native to this region, but not listed as native within A Checklist of New York State Plants or A Comparative Flora of Staten Island, may be accepted on a case-by-case basis.
 3. The Contractor shall provide trees and plants of quantity, size, genus, species and variety shown and scheduled in the Contract Documents for landscape work and complying with recommendations and requirements of ANSI Z60.1 "American Standard for Nursery Stock". The Contractor shall provide healthy, vigorous stock, grown in a recognized nursery in accordance with good horticultural practice and free of disease, insects, eggs, larvae and defects such as 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 Standardized Plant Names as adopted by the American Joint Committee on Horticultural Nomenclature, 1942 Edition. Size and grading shall conform to those of the American Association of Nurserymen. All wetland plants shall come from Staten Island stock or within 250-mile radius of Staten Island.
 5. Certified analyses by a recognized laboratory shall be submitted by the Contractor for approval by the Engineer for topsoil before delivery to the site. Analyses must include mechanical analysis, magnesium, nitrogen, potassium, and phosphorus levels, soluble salts, pH and organic matter.

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Standards and formatting for topsoil analyses shall conform to those of Cornell Cooperative Extension of Nassau County. Associated costs and additional guidelines for topsoil analyses shall be as specified under DETAILED SPECIFICATIONS FOR TOPSOIL FOR RESTORED AREA.

6. Inspection:
- a. The Engineer or DEP representative shall inspect trees and shrubs at place of growth before planting, for compliance with requirements for genus, species, variety, size and quality. Contractor shall be responsible for all inspection costs beyond a 50-mile radius from New York City.
 - b. Plant 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.
 - c. The Engineer retains the right to further inspect trees for size and condition of balls and root systems, insects, injuries and latent defects, and to reject unsatisfactory or defective material at any time during progress of work. The Contractor shall remove rejected trees immediately from project site.
 - d. Tagged samples of plant materials shall be delivered to the site and planted in locations approved by the Engineer. These tagged samples shall be maintained, protected and used as standards for comparison with the plants furnished for the work.
 - e. The Contractor shall be responsible for all certificates of inspection of plant material that may be required by Federal, State or other authorities to accompany each shipment of plants. On arrival, the certificates shall be filed with the Engineer. The Engineer shall receive a copy of each shipping invoice immediately after the delivery has arrived at the job site.

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. Subcontractors. Subcontractors proposed for landscaping and associated restoration and site work must be approved by the Engineer prior to start

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of work. The Contractor shall submit at least three (3) alternative Subcontractors to the Engineer for review and approval. The Subcontractors proposed shall be evaluated on the following criteria, prioritized in descending order:

- a. The Contractor shall submit a minimum of three (3) projects similar in scope and type within the last five years whereby the Contractor was directly responsible for the installation, restoration and maintenance of native habitats and wetlands. References and xerographic reproductions of photographs of the projects shall be submitted. Projects shall not be more than five years old.
 - b. Demonstrated capacity to accomplish the work in the required time including qualification of experienced foreman and key personnel.
 - c. Experience in digging and transplanting field stock.
 - d. Experience with City agencies, such as the Department of Parks and Recreation, Central Park Conservancy, Botanic Gardens, HPD and the Port Authority.
 - e. Other references or experience deemed appropriate to obtaining approval.
2. List of growers/nurseries.
 3. Certified arborist or nurseryman, experienced in tree pruning and removal.
 4. List of all materials and certificates specified within this Item.

The General Contractor shall submit the following information (as listed in 5 through 8) prior to construction:

5. Certificates:
 - a. All necessary State, Federal and other inspection certificates as may be required by law.
 - b. Two (2) copies to the Engineer of manufacturers' or vendors' certified analysis for soil treatments and fertilizer materials shall be submitted with samples.
 - c. Certification and guarantee that all plant material is true to name and in conformance with these specifications.

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- d. The invoice or a written statement showing the size and grade of materials received or shipped, together with the source and health of the plant material and verification that balled and burlapped plants were sprayed with an anti-desiccant within 48 hours prior to digging. No plants shall be accepted that have been collected from property other than that owned or leased by a nursery.
 - e. Certification that all herbaceous plant material was grown from seed or stock collected from locally adapted ecotypes within a one-hundred mile radius of the project site.
6. Planting Schedule. Submit proposed planting schedule within one month of official Notice to Commence Work, indicating dates for each type of landscape work during normal seasons and as specified in the Contract for such work in area of site. Included shall be a schedule of nursery visits for the Engineer or DEP Representative to tag plant material. Correlate from date of substantial completion. Once accepted, revise dates only as approved in writing, after documentation of reasons for delays.
 7. List of equipment, methods of operation, and maintenance plant, including methods for protection of existing vegetation.
 8. Manufacturer's Literature. Manufacturer's literature for all materials furnished shall be submitted with samples of same.
 9. 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. 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.
 10. The 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 or Restoration Specialist. The plan shall include proposed methods of watering and weeding, including but not limited to tree gators (bags), sprinklers, drip hoses, irrigation, tanker vehicles and hand watering, etc., as well as manual weeding and weeding tools. No additional payment will be made for watering and weeding during installation and during the three year guarantee period.

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The approved plan and schedule do not relieve the Contractor in any way from any aspect of the replacement of dead plant material. The Landscape Subcontractor may alter the maintenance schedule based on weather and field conditions.

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. Trees and Plants. The Contractor shall provide trees and plants of the stock type and quantities shown on the Contract Drawings. Do not prune prior to delivery unless otherwise approved by the Engineer. Do not bend or bind-tie trees or plants in such a manner as to damage bark, break branches or destroy natural shape. Provide protective covering during delivery, and insure that all balled and burlapped stock, container stock, tube stock, and/or bare root material is handled properly and is not dropped.
- c. All plant materials shall be protected from drying out and from wind damage during delivery.
- d. The Contractor shall deliver trees and plants after preparations for planting have been completed and plant immediately. If planting is delayed more than 6 hours after delivery, set trees and plants in shade, protect from wind, weather and mechanical damage, and keep roots moist by covering with mulch, burlap or other acceptable means of retaining moisture. Water as necessary.
- e. The Contractor shall not remove container grown stock from container until planting time.
- f. Material should be planted in the ground immediately after delivery to site. Plants should be covered with damp-not wet-leaf compost while awaiting ground installation. Do not allow the plants to dry out or freeze.
- g. Fertilizer delivered to the job site shall be in original, unopened containers bearing the manufacturer's chemical analysis and essential information. Fertilizer containers shall be protected from exposure to precipitation and direct sunlight.

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- h. All materials shall be stored in upland areas that are protected from weather.

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. Job Conditions

Terrestrial and Wetland Buffer Zone Plantings: Unless otherwise directed by the Engineer, evergreen material shall be planted and transplanted from April 1st to May 15th and from September 1st to October 15th. Deciduous material shall be planted and transplanted from March 1st to May 30th and from October 15th to December 1st. Container-grown herbaceous material shall be planted and transplanted from March 1st to May 30th and from August 15th to September 15th (SEE PLANTING SCHEDULE). Perform actual planting when conditions are suitable. No plant material shall be planted when the ground is frozen or in excessively moist condition. All material labeled as fall planting hazard shall be installed during the spring only. Notify the Engineer before proceeding with any planting operations.

Wetland Plantings:

1. Time of Planting and Transplanting. All wetland plantings shall be installed in time frames indicated under the above Terrestrial and Wetland Buffer Zone Planting section. Perform actual planting when conditions are suitable. No plant material shall be planted when the ground is frozen or in excessively moist condition. Notify the Engineer before proceeding with any planting operations.
2. The Contractor shall proceed with and complete landscape work as rapidly as portions of site become available, working within seasonal limitations for each kind of landscape work required.
3. Utilities. The Contractor shall determine location of underground utilities and perform work in a manner which will avoid possible damage. Hand excavate, as required. Maintain grade stakes set by others until removal is approved by the Engineer.

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4. Excavation. When conditions detrimental to plant growth are encountered, such as rubble fill, adverse draining conditions, or obstructions, notify the Engineer.

5. Preservation and Restoration of Existing Trees and Shrubs.
 - a. In order to avoid surface and subsurface root damage and soil compaction, the Contractor shall not be permitted to stockpile materials of any nature under the drip line of existing trees and shrubs. This directive shall apply to all areas within or outside the Contract limit line.

 - b. The Contractor shall assume the responsibility for any remedial work such as root and top pruning required and/or necessary to prevent loss of plant material when this article is violated or when trees or shrubs are injured by construction equipment.

 - c. Compensatory pruning and fertilizing of existing trees and shrubs shall be performed to compensate for damage of roots incurred. Fertilize in areas around undamaged roots only and not adjacent to the trunk or main stem. Fertilizer shall be applied in the fall unless otherwise approved by Engineer.

 - d. Tree pruning shall be performed In accordance with Specification 7.419 Tree and Root Pruning.

 - e. No separate payment will be made for fertilizing and pruning of trees and shrubs in stockpile areas or when trees or shrubs are injured by construction equipment, but the cost thereof will be deemed to be included in the various prices bid for the items for which such pruning and fertilizing are necessary.

 - f. No existing trees, shrubs or herbaceous plants shall be removed, except as specifically required by this Contract or as specified on Contract Documents, or as specifically approved in writing by the Engineer.

 - g. Any areas or items of existing landscape which are removed or damaged shall be replaced by the Contractor at no additional cost to the City. The Contractor shall match the existing condition prior to damage or as directed by the Engineer.

 - h. All existing landscape features including trees, shrubs, perennial, meadows, lawns, wetlands, paving, walls, stairs, etc. shall be

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protected by the Contractor, utilizing methods approved by the Engineer prior to start of work.

G. Guarantee

1. Landscape Guarantee and Replacements

- a. Guarantee. All landscaping work shall have a replacement guarantee for a period of three (3) years beginning at the date of acceptance of the Landscaping work or the date of substantial completion, whichever is later, and shall be considered as included under monies shown within the guarantee provisions of Schedule A.
- b. Operations. The Contractor shall, for a period of three (3) years, cultivate, weed, mulch, prune, and water all trees, shrubs, herbaceous plants, vines permanent seeded areas under this Contract, to the satisfaction of the Engineer. The Contractor shall replace, according to the original specifications, any plant material which is dead or in a dying condition at the request of the Engineer. The Engineer shall be the sole judge as to the condition of the plants. The guarantee and maintenance applies to all planted and grassed areas, meadows, paved and other landscaped areas.
- c. Replacement. 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 normal planting season specified in Section 7.401.2E. Initial replacement of dead material and the repair of bare areas will take place one year following the acceptance of plant material. The replacement shall be of the same variety, size and character as specified for the original planting. Unless a written waiver of this clause is issued, under the terms of the guarantee, replacement plants shall be chosen only by the Engineer.

At the end of the guarantee period, and upon written request, an inspection will be made by the Engineer. If mortality exceeds ten percent or if bare areas occur, the Contractor shall replace plant material.

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H. Materials

1. Topsoil

- a. Topsoil from site stripping shall be used if the material meets specifications listed in 7.403. A soil test(s) shall be made at Contractor's expense to determine if the specifications for all the tests listed in (7.403) have been met. A soil test shall be required and shall serve as a representative analysis for every 200 cubic yards of material utilized.
- b. Additional topsoil shall be furnished from sources off the Contract site when existing topsoil is not sufficient. Material shall consist of natural loam topsoil, free from subsoil, obtained from an area which has never been stripped. Topsoil shall comply with the requirements of Specification section 7.403.

2. Fertilizer

Fertilizer shall be provided as indicated on the Contract Drawings: Osmocote, granular, slow-release in the specified time frame releases and analyses. Fertilizer shall be furnished in standard containers, with name, weight and guarantee analysis of contents clearly marked thereon. Appropriate containers to disperse specified amounts of fertilizer into planting holes shall be supplied and used by the Contractor.

3. Mycorrhizal Inoculants

- a. Mycorrhizal inoculants shall be used in all tree and shrub planting operations in all areas receiving topsoil from off-site sources, or stripped topsoil stockpiled in excess of one year.
- b. The inoculants for trees and shrubs shall be "Mycor Tree Saver" as manufactured by Plant Health Care, Inc., or approved equal. The inoculants shall contain fresh, live and viable spores of both endo (VAM) and ecto (Pt) mycorrhizal fungi. All inoculants shall be delivered in sealed containers or packages of the Vendor, listing the weight, content, date of packaging and name of Vendor.
- c. The inoculants for herbaceous plants and grasses shall be Mycor Plant Saver as manufactured by Plant Health Care, Inc., or approved equal. The inoculants shall contain fresh, live and viable spores of both endo (VAM) and ecto (Pt) mycorrhizal fungi. All inoculants shall be delivered in sealed containers or packages of the Vendor, listing the weight, content, date of packaging and name of Vendor.

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- d. The inoculants shall be stored in unopened containers in a cool, dry location. All containers must be inspected by the Engineer prior to opening. Any inoculants dated eighteen (18) months or more prior to the date of intended use shall not be used. Any inoculant that has been in a wet condition shall not be used. Any inoculant rejected by the Engineer shall be removed from the site.
 - e. For trees and shrubs, the Contractor shall incorporate the inoculant into the top eight inches (8") of the topsoil mix used in the planting operations described in Section 7.403 and as per the manufacturer's instructions. The amount of inoculant used at each plant shall be based on the plant's size - see manufacturer's instructions. For herbaceous plants, the Contractor shall place the inoculant into each planting hole as per manufacturer's application rate and project plans.
 - f. The Contractor shall not apply fungicide to any areas receiving inoculant for a minimum of two weeks following the planting operations.
4. Plant Material
- a. The Contractor shall furnish all plant material shown. Plant material must be true to name and size and conform with the following standards:
 - i. American Joint Committee on Horticultural Nomenclature, Standardized Plant Names (Published by Mount Pleasant Press J. Horace McFarland Company, Harrisburg, PA.).
 - ii. American Association of Nurseryman, "Horticultural Standards" (Published by American Association of Nurserymen, Inc., 635-636 Southern Building, Washington, D.C.).
 - b. Nursery grown plants shall mean plants propagated by seed, division, tissue culture or cloned from existing stock at a nursery, which are healthy, vigorous plants, cultivated in accordance with sound horticultural practice. All plants shall be nursery grown unless collected from natural areas owned or leased for that purpose by the nursery. All plants shall have been grown under the same climatic conditions as those of the planting site. All herbaceous plants shall come from seeds or stock collected within a one-hundred mile radius of the project site. Only those nurseries within a 250-mile radius of the planting site will be accepted as plant sources. In some cases plant material may be obtained outside the 250-mile radius on a case-by-case basis.

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- c. All plants and all balled and burlapped plants shall be freshly dug; neither heeled-in nor plants from cold storage will be accepted. All plants shall have been transplanted or root pruned at least once in the past three years.
- d. All plants shall conform to the measurements specified in the plant list on the Contract Drawings. All plants shall be typical of their species and shall have a normal, healthy habit of growth and be of first quality, sound, vigorous, well-branched and densely foliated. Plants that meet the requirements specified in the plant list, but that do not possess a normal balance between height and spread will not be accepted. No damaged or diseased plants will be accepted.
- e. All deciduous trees shall be well-branched and furnished to the ground. There shall be no abrasion of the bark, no fresh cuts of limbs over 1-1/4" which have not completely calloused over. A heavy fibrous root system is essential. Refer to Plant Schedules on the Contract Drawings for further specifications.
- f. All evergreen trees shall be heavy, symmetrical plants well-furnished to the ground. They may be multiple-stemmed. All evergreen trees must be free from winter injury. A heavy fibrous root system is essential.
- g. Trees 4" caliper or less shall be calipered six inches above ground. Trees greater than 4" caliper shall be calipered one foot above ground.
- h. All trees to be tagged on north side of tree for proper orientation when planting.

5. Mulch

Mulch shall be organic mulch free from deleterious materials and suitable for top dressing of trees, shrubs or plants and shall be shredded hardwood bark, decayed hardwood chips, leaf mold, pine straw, partially decayed leaves, cottonseed hulls, peanut hulls or other organic products. Mulch must be aged at least one year, should not contain elm wood chips, or be from diseased trees. No shredded bark pieces shall be greater than 3" in length and 13" in width. Mulch for seeded areas shall be clean, seed-free salt hay. Mulch shall be free of roots or other parts of invasive exotic plants that may take root in restored area.

6. Compost

Compost having the general properties of humus shall contain organic matter with no admixture of refuse or material toxic to plant growth and shall be completely decomposed and free from deleterious materials such as a glass, paper, plastics,

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metals, etc. Compost shall be "Earthlife", manufactured by Casella Organics, or approved equal.

7. Materials for Anchoring, Staking, Guying, Wrapping

- a. Stakes. The Contractor shall provide straight, sound cedar stakes, 2 x 2-1/2 inch diameter (50 x 50 mm or 63 mm diameter) in size.

In natural areas, where wind-disturbance is unlikely Engineer will determine if stakes are necessary. If it is determined that staking is required, a modified staking system shall be used. The modified stakes shall be shorter than conventional stakes, and shall protrude 18 inches above the finished grade. Stakes shall be anchored and fastened in the same manner as in conventional staking.

- b. Tree guys. The Contractor shall provide guys of 3/4" woven polypropylene fabric, such as "Arbor-Tie" or approved equal. Each end shall be coiled tightly, with enough slack left in guy so as to allow slight movement of tree trunk. Guying shall be performed under the direct supervision of the Engineer.
- c. Wrapping Material. The Contractor shall use standard nursery tree wrapping paper, or burlap manufactured for wrapping tree trunks. Burlap shall be made of jute. Twine for tying shall be lightly tarred sisal (lath) yarn.

8. Topsoil Mix

The topsoil mix shall be a mixture of one part compost, and two parts of topsoil. Topsoil mixed on-site must be tested by Contractor and have pH of 5.5 - 6.5. Ericaceous plantings may require a lower pH. Where site conditions such as heavy clay soils exist, the Engineer shall determine a mix incorporating a percentage of the existing soils.

9. Temporary Seed Mixtures

Soil stockpiles and cleared and graded areas shall receive Ryegrass (annual or perennial).

Nurse/Cover seed shall be certified "Aroostook" winter rye (cereal rye).

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10. Permanent Seed Mixture

Seed mixture shall be as specified in the Contract Drawings unless otherwise directed by the Engineer. The FACW Wetland Meadow Mix shall be manufactured by Ernst Seed Co., or approved equal.

Seed Mixtures – Permanent seeding shall be the Staten Island Native Wildflower Meadow Seed Mix, or the FACW Wetland Meadow Mix, as shown on the following table:

Staten Island Native Wildflower Mix

Common Name-Wildflowers	Scientific Name	Percentage
Black Eyed Susan	Rudbeckia hirta	20
Switchgrass	Panicum virgatum	10
Virginia Wild Rye	Elymus virginicus	10
Indiangrass	Sorghastrum nutans	5
Thin Leaved Coneflower	Rudbeckia tribolia	5
Wild Blue Lupin	Lupinus perennis	4
Rough Stem Goldenrod	Solidago rugosa	4
Joe Pye Weed	Eupatorium fistulosum	4
Wingstem	Verbesina alternifolia	4
Wild Bergamont	Mondard fistulosa	4
Sneezeweed	Helenium autumnale	4
Heath Aster	Aster pilosus	4
New England Aster	Aster novae-angliae	4
Smooth Blue Aster	Aster laevis	4
Blue Vervain	Verbena hastata	4
Common Milkweed	Asclepias syriaca	2
Butterfly Weed	Asclepius tuberosa	2
Eastern Columbine	Aquilegia canadensis	2
Showy Tick Trefoil	Desmodium canadense	2
Forest Sunflower	Helianthus decapetalus	2

Staten Island FACW Wet Meadow Seed Mix

Common Name - Wildflowers	Scientific Name	Percentage
Virginia Wild Rye	Elymus virginicus	20%
Fox Sedge	Carex vulpinodea	15%
Bottlebrush Grass	Elymus histrix	10%
Deertongue	Panicum clandestinum	5%
Pennsylvania Smartweed	Polygonom pensylvanicum	5%
Riverbank Wild Rye	Elymus riparius	5%

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Common Name - Wildflowers	Scientific Name	Percentage
Switchgrass	Panicum virgatum	5%
Black Eyed Susan	Rudbeckia hirta	5
Soft Rush	Juncus effusus	5
Common Milkweed	Asclepius syriaca	5
Pennsylvania Sedge	Carex pensylvanicum	2
Blue Vervain	Verbena hastata	2
White Snakeroot	Eupatorium rugosum	2
Spotted Joe Pye Weed	Eupatorium maculatum	2
Whorled tickseed	Coreopsis verticillata	2
White Wood Aster	Aster divaricatus	2
Heart Leafed Aster	Aster cordifolius	2
Path Rush	Juncus tenuis	2
Swamp Sunflower	Helianthus angustifolius	2
Showy Tick Trefoil	Desmodium canadense	2

11. Erosion Control Mat (Blanket)

The erosion control fabric utilized at BMPs and shown on the Contract Drawings shall conform to Detailed Specification 7.705 Erosion Control Mat.

I. Execution

Installation/Application/Performance For Terrestrial and Wetland Buffer Zone Plants

1. Workmanship. The Contractor shall complete all work in the best manner, so that the work as a whole is of uniform quality and appearance. The Contractor shall conform to the requirements specified hereafter.
2. Preparation.
 - a. Areas described and shown on plans shall be rough graded with suitable local fill to (maximum) four (4) inches below the finished surface, topsoiled, fine graded, prepared for planting and landscaped.
 - b. Subgrade shall be kept free of masonry, concrete, metal waste materials, and debris.
 - c. Remove stones over 1-1/2 inches in any dimension, as well as sticks, rubbish and other extraneous matter.

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- d. No topsoil mix is to be placed until the subgrade is approved by the Engineer.
 - e. For planting beds, spread topsoil mix to minimum depth required to meet lines, grades and elevations shown on the Contract Drawings, after light rolling and natural settlement.
 - f. The planting beds and pits shall be worked up well, and shall be free of other vegetation and large clods of soil.
 - g. Apply fertilizer at rate specified in Contract Drawings during planting and seeding operations. Do not use fertilizer for wetland plants or in excessively wet areas.
3. 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.
4. 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.
5. Installation.
- a. Planting Operations.
 1. Layout: All trees, shrubs and herbaceous shall be laid out in random and naturalistic arrangements, as specified in the Contract Drawings unless otherwise directed by the Engineer. All plant and planting area locations shall be staked prior to planting by the Engineer. Place no plantings within two (2) feet of pavements or structures, unless otherwise indicated.

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2. Loosen subsoil/subgrade to a depth of six (6) inches prior to topsoil placement so that the topsoil and subsoil layers don't mix. Loosen subsoil with rototiller, backhoe or discer. The soil-loosening operation shall be conducted in such a way as to back its way out of the site. After this, no more heavy machinery shall be allowed on the planting beds.
3. Rototill/cultivate soils to a depth equal to the depth of the root ball and two times the diameter of the root ball. Set the tree/shrub on the undisturbed solid ground in the center of the area.
4. Obstructions Below Ground: Remove any rock, rubble, masonry, concrete, metal, stones over one inch or other underground obstructions to the depth necessary to permit proper planting.
5. Disposal: Remove and dispose of all excess excavations and unsuitable materials. Dispose in accordance with all local laws and regulations at Contractor's cost.
6. Apply topsoil, utilizing small equipment that does not compact soil.
7. Plant Beds: All plant material shall be planted in existing on-site and/or locally available topsoil, except for shallow plantings installed within the specified four-inch (minimum) topsoil layer.
8. 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, 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.

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9. Setting Plants: Plant all plants to the same depth as their place of growth, unless otherwise directed. Center the plants in their planting pits. Set in the natural upright position at such a level that, after settlement, a normal or natural relationship of the crown of the plant with the ground surface shall be established. Be careful not to exert any pressure that will damage any portion of the plant.
 10. Topsoil mix shall be lightly tamped around the base of all plants and trees. Avoid compacting the soil. As clay soils are particularly prone to compaction, especially if worked when wet, transplant into clay soils when they are not saturated to the greatest extent possible. Do not leave plants exposed to sun or wind prior to planting. Take special care to avoid desiccation of fibrous-rooted plants.
 11. The Contractor shall be liable for any damage to property caused by planting operations and the Contractor shall, without any additional cost, restore to original condition or replace all trees, plant beds, lawns, meadows and all construction disturbed or damaged in performing the work of this Contract.
- b. Planting Trees and Shrubs.
1. Trees and shrubs shall be planted before herbaceous plants to avoid trampling of the smaller material. The Contractor shall properly sequence plant delivery to achieve this progression.
 2. Balled and burlapped. The roots of balled and burlapped plants shall, if not immediately planted after digging and inspection, be adequately protected by topsoil until planted in their final location. Handle balled plants so that the ball will not be loosened. After the soil has been thoroughly firmed under and around the ball, cut the burlap away from the upper half of the ball and adjust remaining burlap to prevent the formation of air pockets; when directed by the Engineer remove the burlap entirely. Firm the soil at 6" to 8" intervals and thoroughly settle with water. Remove all wire baskets from root balls, unless otherwise directed by the Engineer. Install mulch around trees and shrubs immediately after installation.

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3. Container. Cut containers on 2 sides with an approved can cutter and remove plant from container. Set container grown stock as specified. If container grown plant is root-bound or can be easily pulled from container, plant shall be rejected. Place plant on a cushion of planting soil mixture and carefully work soil mix around roots by hand and puddle with water until the soil mix layers are completely saturated.
4. Tube stock. Plants shall be removed from tube entirely and without damage. Plugs shall have solid soil/root masses with the soil in place. Roots must appear clean and white in coloration. If plug is root-bound or can be easily pulled from tube, plant shall be rejected. Plug shall be installed in hole perpendicular with root collar and even with the surrounding grades. Plant to be firmed in to remove air pockets, then watered to full saturation.
5. Mix granular 12-14 month slow release Osmocote into the top two inches (2") of soil backfill at the rates indicated on the Contract Drawings. Apply Mycorrhizal inoculants directly to the root ball. The top of the root ball/container soil shall be level with the substrate surface. Excess substrate shall be distributed around the planting sites. No saucers shall be constructed around the planting sites with the excess substrate.
6. Mulch pits, trenches and all planted areas. Provide not less than a three (3) inch thick layer of mulch and work into top of soil and finish level with adjacent finish grades. Do not place mulch within six (6) to eight (8) inches of tree trunks, nor should the base of shrubs and other plants be covered by mulch. No separate payment shall be made for mulching planted areas.
7. Prune, thin out and shape trees in accordance with standard horticultural practice. Prune trees to retain required height and spread. Unless otherwise directed by the Engineer, do not cut tree leaders, and remove only injured or dead branches from flowering trees, if any. Prune plant material to retain natural character.
8. Trees shall be placed with the tags facing North. Placing the trees in the same orientation to the North as they were grown in the nursery shall serve to limit bark sun scald.

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9. Guy and stake street trees immediately after planting, as required by the Engineer. Trees planted as part of a natural area restoration must use modified staking system if deemed necessary. Stakes shall be removed after one complete growing season.
10. Stake all trees within 20 feet of a surface water feature, so that they will not be washed away in time of flood.

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.

J. Temporary Seed Mixture

1. Soil stockpiles shall be seeded with a temporary seed mixture if they will be in place for greater than 30 days. Cleared and graded areas shall also be seeded with a temporary seed mixture to temporarily stabilize them, if they will not be landscaped or planted (final) for more than 30 days.
2. Seed mixture – Temporary seeding shall be Ryegrass (annual or perennial) at a rate of 30 lbs per acre or 0.7 lbs per 1,000 sq. ft. If area is seeded during months of October and November, certified "Aroostook" winter rye (cereal rye) shall be used at a rate of 100 lbs per acre or 2.5 lbs per 1,000 sq. ft.
3. Temporary seeding shall be made within 24 hours of construction/disturbance. If not, the soil must be scarified prior to seeding.
4. Method of seeding – seed shall be evenly applied with broadcast seeder, drill or cultipack seeder.
5. If temporary seeding is made under favorable soil and site conditions during the optimum seeding dates (March 21 – May 20 or August 25 – October 15) mulch is not required. Any temporary seeding outside of those dates shall be mulched with salt hay mulch at a rate of 2 tons per acre (100-200 bales/acre).
6. Any area with fail to establish vegetative cover adequate to prevent rill erosion will be reseeded as soon as such areas are identified.

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K. Permanent Seed Mixture

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 shown to receive seed on Contract Drawings and 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.
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 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.
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

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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.

L. Final Acceptance

Trees, shrubs and herbaceous plants must be thriving. Planting beds must be evenly mulched and free of invasive nonnative plant species. Paving/landscape interface must be a smooth, crafted transition free from defects such as gaps, sharp edges or sudden level changes.

M. Final Cleanup

At time of final inspection of work, and before final acceptance, clean any paved areas that are dirty or stained due to work of this Section by sweeping or washing, and remove any defacements or stains. Remove construction equipment, excess materials and tools. Remove from site any debris and dispose of off-site, in accordance with all local laws, and at the Contractor's expense. The Contractor shall also cut all perimeter grass and weeds before final acceptance.

N. Wetland Plantings:

1. Installation

The Contractor shall complete all work in the best manner, so that the work as a whole is of uniform quality and appearance. The Contractor shall conform to the requirements specified hereafter. Plant material scheduled for planting in coconut fiber logs shall also be rooted and potted in coconut fibers, and not in potting soil. This requirement shall serve to safeguard against plants floating out of coconut fiber logs due to the washing away of potting soil.

- a. At the elevations described and shown on the plans, the areas shall be fine graded, prepared for planting and landscaped.
- b. Subgrade shall be kept free of waste material and debris. Subgrade shall be compacted prior to topsoil application at the Engineer's direction.
- c. Remove stones over 1-1/2 inches in any dimension, as well as sticks, rubbish and other extraneous matter.

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- d. The planting areas shall be worked up well, and shall be free of other vegetation and large clods of soil.
 - e. Install erosion control mat.
 - f. Apply fertilizer at rate specified in Contract Drawings during planting and seeding operations.
2. Erosion Control Blankets
- a. Center a blanket in the bottom of the wetland area and anchor the erosion control blankets in a minimum 8" x 8" slot using five evenly spaced staples. Unroll blankets carefully in the direction of water flow, being careful to place blankets loosely and in full contact with the soil.
 - b. Overlap blanket edges approximately 4" with downstream edges over upstream edges.
 - c. Staple blankets using approximately 3 staples per square yard.
 - d. Overlap blanket ends 6" in a minimum 8" x 8" check slot, upper blanket over lower blanket and staple using five evenly spaced staples.
 - e. Cut excess blanket with scissors and anchor at the entrance to the weir/micro pool in a minimum 8" x 8" check slot with five evenly spaced staples.
 - f. Blanket shall not float or "bubble" anywhere after wetland is inundated with water.
3. Planting Operations
- a. Layout: All plants shall be laid out in random and naturalistic arrangements, as specified in the Contract Drawings unless otherwise directed by the Engineer. All plant and planting area locations shall be staked prior to planting by the Engineer. Place no plantings within two (2) feet of pavements or structures, unless otherwise indicated.
 - b. When planting containerized wetland plants, care shall be taken so as not to set the plants in water where there is in excess of 3" - 4" of water between the top of plant and the water surface. When planting dormant wetland plants, care shall be taken so as not to set

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the plants in water where there is in excess of 12" - 14" of water between the top of plant and the water surface.

- c. When planting containerized or tube wetland plants, care shall be taken so to set the plants in the water regime noted on the Contract Drawings plant schedule.
- d. Rototill/cultivate soils to a depth equal to the depth of the root ball and two times the diameter of the root ball. Set the tree/shrub on the solid ground in the center of the area.
- e. Obstructions Below Ground: remove any rock, rubble, masonry, concrete, metal, stones over one inch in diameter or other underground obstructions to the depth necessary to permit proper planting.
- f. Disposal: Remove and dispose of all excess excavations and unsuitable materials. Dispose in accordance with all local laws and regulations at Contractor's cost.
- g. The storm sewers tributary to BMPs should not be put into service for 6 to 8 weeks after completion of the associated wetland plantings. This will permit the wetland plantings to establish themselves.

O. Measurement and Payment

The quantity to be measured for payment under this section shall be the total amount of trees, shrubs, herbaceous plants and seeded areas furnished, planted and maintained.

The contract price per unit for Landscaping Work shall be as indicated on the BID SCHEDULE OF PRICES Item Nos. BMP-7.401-A through BMP-7.401-J inclusive. The price bid shall be a separate unit price per tree, shrub, and herbaceous plant specified within the Contract Drawings, and shall include the costs of all excavating and preparing planting pits and beds, adding soil amendments, furnishing plants, digging, inspecting, planting, pruning, staking, guying, anchoring, wrapping, mulching, fertilizing, furnishing seed, seeding, liming, discing, raking, tilling harrowing, mowing, material, and maintaining all plant material and seeded areas. The price bid shall also include the costs of all rough and fine grading, all specified soils necessary and required for the satisfactory completion of all landscaping work and all other work incidental thereto in accordance with the plans and specifications to the satisfaction of the Engineer.

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The contract price per square foot of seeding shall be as indicated on the BID SCHEDULE OF PRICES Item No. BMP-7.401I.

PLANT MATERIAL SUMMARY FOR LANDSCAPING WORK

<u>Item</u>	<u>Description</u>
BMP-7.401-A inclusive	Canopy Trees (2 1/2" to 3" caliper)
BMP-7.401-C inclusive	Canopy Trees whips - 5'-6'
BMP-7.401-H inclusive	Shrubs
BMP-7.401-I inclusive	Seeding
BMP-7401-J inclusive	Herbaceous Plants - Plugs

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Division VII - Detailed Specifications - Contract
Landscaping and Restoration Work

**Terrestrial and Wetland Zone
Planting, Transplanting and Seeding Schedule**

Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
			4/1	5/15				9/1	10/15		
		3/1		5/30					10/15	12/1	
		3/1		5/30			8/15	9/15			
		3/15		5/15					9/15	10/15	

Evergreen Material

Deciduous Material

Container-Grown Herbaceous
Material

Permanent Seeding

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7.402 SOD

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7.403 TOPSOIL FOR RESTORED AREAA. Description of Work

Under this item, the Contractor shall prepare topsoil areas and shall furnish, place and incorporate topsoil in accordance with the plans and specifications or as directed by the Engineer.

The Contractor shall be liable for any damage to property caused by topsoiling operations and all areas of construction disturbed shall be restored to their original condition to the satisfaction of the Engineer.

B. Material

Material shall consist of natural loam topsoil, free from subsoil. It shall be removed to a maximum depth of one (1) foot, or until subsoil is encountered. Topsoil shall be of uniform quality, friable, free from hard clods, stiff clay, hard pan, partially disintegrated stone, stones larger than one (1) inch diameter, 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 topsoil material.

All topsoil shall be tested by a New York State Cooperative Extension office or by an approved analytical laboratory with 5 years documented history of soil testing for state, city or county projects.

Topsoil from site stripping shall be tested prior to stripping. Soil test shall be performed per five (5) acres and at the extremes of elevations. After site topsoil has been stripped, stockpiled, and amended per soil test results, the stockpiled topsoil shall be tested again. For imported and stockpiled topsoil, soil tests shall be required and shall serve as a representative analysis for every 200 cubic yards of material utilized.

Topsoil shall comply with the following requirements: No topsoil shall be delivered in a frozen or muddy condition.

1. Organic Content: Topsoil shall contain a minimum four (4) percent organic matter and a maximum of fifteen (15) percent organic matter determined by loss, on ignition, of moisture-free samples dried in accordance with the current method of the Association of Official Agricultural Chemists. The acidity range shall be pH 5.5 to pH 6.5 inclusive.

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2. Nutrient Content: Magnesium, nitrogen, potassium, phosphorus levels, and soluble salts.

<u>Range</u>		<u>Nutrient</u>
4	- 8 (PPM)	Phosphorus (P)
66	- 100	Magnesium (Mg)
115	- 164	Potassium (K)
0.36	- 0.75	Boron (B)
0	- 49	Iron (Fe)
0.5	- 1.0	Zinc (Zn)
85	- 120	Nitrogen (N)

Soluble salts shall be less than 2.5 millimhos.

3. Total Petroleum Hydrocarbon Content: Topsoil shall be tested for total petroleum hydrocarbons (TPH) by the Gravimetric-Hexane Method, as approved by the US Environmental Protection Agency. Topsoil shall contain less than 150 ppm total petroleum hydrocarbons. All soil testing positive shall be rejected and removed from the site.

4. Sieve Analysis: (By Wash Test, ASTM Designation C117)

The mechanical analysis of the soil shall be as follows:

Passing 2" sieve 100%
 Passing 1" sieve 95% to 100%
 Passing #4 sieve 90% to 100%
 Passing #100 sieve 30 % to 60%

5. Electrical Conductivity: Topsoil should have a maximum electrical conductivity of 1,000 micromhos/centimeter.
6. Invasive, Nonnative Plant Species: Topsoil shall be free of invasive nonnative plant propagules or if present, topsoil shall be sterilized with documentation.

When topsoil 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.

The Contractor shall at the direction and discretion of the Engineer, or when quantities exceed two hundred (200) cubic yards, furnish a certified report of an approved analytical chemist showing the analysis of representative samples of the topsoil which he/she proposes to use. All samples are to be taken by the Engineer

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and delivered to the laboratory. The price bid shall include inspection and laboratory charges. No topsoil shall be delivered until the approval of samples by the Engineer, but such approval shall not constitute final acceptance. The Engineer reserves the right to reject on or after delivery any material which does not, in his/her opinion, meet these specifications.

The Engineer reserves the right to reject topsoil in which more than sixty (60) percent of the material passing the No. 100 U.S.S. mesh sieve consists of clay as determined by the Buoyoucouc Hydrometer or by the decantation method. All percentages are to be based on dry weight of sample. If the Engineer directs, topsoil which varies only slightly from the specifications may be made acceptable by such corrections as the Engineer deems necessary.

C. Preparation of Topsoil Areas

Before any topsoil is placed, the subgrade shall be graded to a smooth, uniform surface, parallel to and below finished grade, the depths of which are shown on the plans or as directed by the Engineer. The subgrade surface shall be compacted with an approved roller weighing approximately five hundred (500) pounds. Hollows, depressions and gullies shall be filled with acceptable material free from stones over one (1) inch in diameter, cinders, rubbish and other unsuitable material. Fill which is four (4) inches or more in depth shall be compacted to the satisfaction of the Engineer.

All bumps, mounds, and ridges shall be cut down to subgrade elevations as shown in the Contract Drawings. All areas of the subgrade that are not in a friable condition shall be loosened to a depth of twelve (12) inches as directed by the Engineer. All surplus material and debris shall be removed and disposed of as directed by the Engineer.

D. Spreading

Topsoil for upland areas shall be spread and compacted to the overall depth of that which exists within the restoration area or to three (3) inches, whichever is greater. Topsoil for wetland areas shall be spread and compacted to the overall depth of that which exists within the wetland area or to four (4) inches, whichever is greater. The contractor shall use the lightest equipment appropriate to spread and compact the topsoil. Topsoil shall not be handled when, in the opinion of the Engineer, it is too wet.

Topsoil for backfilling planting pits and planting beds shall be mixed with compost having the general properties of humus in the following proportions:

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Two (2) parts of topsoil to one (1) part of compost. They shall be thoroughly mixed by placing the compost evenly over the topsoil piles and turning the piles at least three (3) times or until thoroughly mixed to the satisfaction of the Engineer. Topsoil mixed on-site must be tested by the Contractor and have a pH of 5.5-6.5.

The finish grade shall not be excessively compacted. Finish grade to 12" below soil surface shall be loose, friable soil and not excessively compacted to the satisfaction of the Restoration Specialist. Maximum acceptable compaction is to 83% of the standard (AASHTO) Proctor maximum dry density. Conversely, soil shall not be so loose that there is potential for extensive settlement, slumping, soil erosion, or excessive drainage. On-site compaction tests, if required, shall be a standard test such as Nuclear Density Meter, or Sand Cone, or Balloon Density performed at contractor expense. After finish grading, and prior to installation of any erosion control fabric, planting, seeding, the Restoration Specialist shall inspect extent of soil compaction. Restoration Specialist shall re-inspect extent of compaction after completion of all site work. If required, Contractor will be required to loosen top 12" of soil to the satisfaction of the Restoration Specialist.

E. Mycorrhizal Inoculants

All trees and shrubs planted in areas receiving topsoil from off-site sources or on-site topsoil stored more than one (1) year shall be inoculated with Mycorrhizal.

F. Measurement and Payment

The quantity of topsoil to be paid for under this item shall be the number of cubic yards of topsoil furnished from off-contract site sources (i.e. suppliers approved by the engineer), mixed, placed and incorporated in the completed work in accordance with the plans and specifications to the satisfaction of the Engineer, measured in trucks used for delivery, at the site of the work. The quantity of topsoil to be paid for under this item shall be measured in cubic yards in trucks used for delivery. No topsoil shall be furnished until ordered by the Engineer. (No deductions shall be made except for the volume of topsoil displaced by balls of trees, except in paved areas). Delivery ticket with name and address of vendor, date and estimated volume must be supplied to the Engineer prior to truck measurement.

The contract price per unit for Topsoil shall be as indicated on the BID SCHEDULE OF PRICES Item No. BMP-7.403. The bid price shall be a unit price per cubic yard of topsoil, and shall include the cost of all labor, materials and equipment necessary to prepare topsoil areas, furnish, mix, place and incorporate topsoil and compost, and all other work incidental thereto, in accordance with the plans and specifications to the satisfaction of the Engineer.

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7.404 RESTORATION SPECIALIST (CONSTRUCTION MONITOR)

NO TEXT ON THIS PAGE

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7.405 VECTOR, PEST, AND WILDLIFE CONTROLA. Description of Work

When, in the course of construction, the Engineer deems it necessary, the Contractor shall make arrangements to immediately implement a Vector and Pest Control Program at the construction site. All work is to be performed by a Licensed Applicator, and shall comply with all NYC and NYS Department of Health requirements for Vector and Pest Control and the methods outlined below. The work shall also include the control of mosquito larvae. The work shall be performed on a periodic basis as determined by the Engineer.

The Contractor shall also make arrangements to hire a Wildlife Control Agent, licensed by the NYSDEC, for live capture and removal of muskrats and any other wildlife if the Engineer deems it necessary. The wildlife, which shall include pond life such as fish, frogs, and turtles shall be removed before full-scale construction begins. The wildlife shall be relocated off-site and upstream.

It is anticipated that once construction commences, the resident water fowl will leave the existing wetland areas. However, if the waterfowl do not leave on their own following the commencement of work in the wetland areas, the Wildlife Control Agent shall make recommendations for their removal, and shall relocate the waterfowl to another water body on Staten Island.

All work in this item shall be supervised by the Restoration Specialist.

B. Material

1. Rodent Control – Rodent control shall be done in accordance with the applicable sections of New York City Department of Transportation Standard Highway Specification 7.88 Rodent and Waterbug Pest Control.
2. Mosquito Control – As directed by the Engineer or Restoration Specialist, the licensed application shall treat stagnant water for mosquito larvae with products approved by the New York City Department of Health. These include Vectolex, Altosid, Vectobac, and Aquabac. Products used shall consist of the naturally occurring bacteria, *Bacillus thuringiensis*.
3. Wildlife Control – The effort to live capture and remove pond life such as muskrats, fish, frogs and turtles shall be undertaken by a Wildlife Control Agent, licensed by NYSDEC, employing various materials such as seines for catching fish, traps for live capture of turtles and muskrats, and possible use of electric shock to also capture fish.

C. Method

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Application of rodent control shall be per the applicable section of New York City Department of Transportation Standard Highway Specification 7.88 Rodent and Waterbug Pest Control.

Application of insecticide shall be as per the manufacturer's recommended procedures and shall be in compliance with all applicable rules and regulations and at the direction of the Engineer.

The Applicator shall be responsible for collecting and disposing of all trapped and poisoned rats found in live-traps and tamper-proof boxes, and for the removal of all live-traps and tamper-proof boxes at the end of the work. The Applicator shall be responsible for posting and maintaining signs announcing the baiting and spraying of a particular location.

The Wildlife Control Agent licensed by NYSDEC, who will be responsible for the live capture and removal of pond life shall use various techniques to accomplish his/her task. As the water in the pond is slowly drawn down, life will be concentrated in the center of the pond. A geofabric may need to be rolled over the muck to make the center of the pond accessible. The fish shall be caught with a seine (net), electric shock or other approved method, and shall be scooped into buckets. Traps shall be used for turtles. Buckets containing wildlife shall be kept shaded, and wildlife shall be relocated to off-site and upstream release sites immediately so that there is no need to use aerators.

D. Measurement and Payment

The quantity to be measured for payment under this section shall be the total number of hours necessary for completion of Vector, Pest and Wildlife Control.

The contract price per unit for Vector, Pest and Wildlife Control shall be indicated on the BID SCHEDULE OF PRICES Item No. BMP-7.405-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 Engineer.

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7.406. WOOD CHIPSA. Description of Work

Under this item, the Contractor shall furnish and place wood chips, as directed by the Engineer. The Contractor shall spread the chips over the surface of the ground in selected areas prone to erosion (i.e. bare ground) as directed by the Engineer. In general, the Contractor shall spread wood chips on dirt roads and trails to stabilize them and to prevent erosion. Shaded areas where the ground surface has been disturbed and which are not designated for seeding/mulching shall receive wood chips. This item shall not be used for the mulching of landscaped areas and BMPs.

The Contractor shall carefully protect against damage of all existing trees, plants and other features to remain and shall be liable for any damage to such trees, plants, structural features and other property caused by wood chipping operations. All damaged trees, plants, structural features and other property shall be replaced or restored to their original condition to the satisfaction of the Engineer.

B. Materials

Wood chips shall be a natural organic product free from deleterious materials and suitable for dressing bare ground surfaces. Wood chips shall be of any wood except elm, and shall not be from diseased trees. No pieces shall be greater than 3 inches in length and 1 1/4 inches in width, and from an approved source. Wood chips produced on the site may be used for this work.

C. Construction Methods

Placement of wood chips shall be done by competent workers only and in a professional manner.

Chips shall be transported to receiving sites in Contractor's vehicle (e.g. dump truck, front end loader). Wheel barrows shall be used for transporting wood chips into work areas not accessible from the road. Rakes shall be used for spreading the wood chips over the surface of the ground at selected areas.

The wood chips shall be spread to varying depths as necessary to fill in/smooth out ruts and depressions and dress surface areas to the satisfaction of the Engineer. The minimum thickness for the wood chip layer shall be two (2) inches.

D. Measurement and Payment

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The quantity to be measured for payment shall be as described herein and on the plans.

The price bid shall be a unit price per cubic yard for wood chips furnished as indicated on the BID SCHEDULE OF PRICES Item No. BMP-7.406. The bid price shall constitute full compensation for all materials, labor, equipment and work incidental thereto, necessary to complete this item in accordance with the plans and specifications to the satisfaction of the Engineer.

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7.407 JUTE MESH

A. Description of Work

Under this item, the Contractor shall furnish and place jute mesh for steep slope protection within areas designated on the plans or where directed by the Engineer.

B. Material

JUTE MESH SPECIFICATION

<u>Property</u>	<u>Test Method</u>	<u>I. Typical Value</u>	<u>Units</u>
Yard Fiber	-	Woven jute, undyed & unbleached	
Yarn Count – Warp	-	78 per width min	
Weft	-	42 per linear yard, min	
Color	-	Natural (Brown, Earth Tone)	
Fabric Width	-	48"	Inches
Fabric Weight	-	14	oz/sq. yd.
Strands per Warp	ASTM D-3775	19.5	
Per Weft	ASTM D-3775	14	
Mass per Unit Area	ASTM D-3776 Warp	14.7	oz/sq. yd.
Grab Tensile – Dry	ASTM D-4632	300	lbs/ft
	(modified) Fill	175	lbs/ft
Grab Tensile – Wet	ASTM D-4632 Warp	125	lbs/ft
	(modified) Fill	65	lbs/ft
Elongation at Break	ASTM D-4632 Warp	10	%
	(modified) Fill	10	%
Open Area	C.O.E. CW 002215	60-65	%
Durability	Field Experience	2-Jan	%

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Water Velocity	University Channel Test	8	ft/sec
Unit Shear Test	University Channel Test	2.76	lbs/sq. ft.
"C" Factor (1.5:1 Slope)	-	0.3	-
Mannings N	University Channel Test	0.0237	-

Wire Staples shall consist of 12-inch lengths of No. 11 gauge wire bent to form a "U" or other wire staples as approved.

Wood Pegs shall be wedge-shaped, approximately 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 12" from the original position of the cigarette after it has burned out completely.

C. Method

Jute mesh shall be placed on topsoil perpendicular to slope contours where directed by the Engineer. Jute mesh shall be laid without stretching so that it lies loosely on the soil and in contact with the soil at all points and shall be pressed firmly into the soil surface by rolling or tamping. If seeding is required, it shall be done prior to the installation of the jute mesh.

The upper end of each roll of jute mesh shall be turned and buried to a depth of six (6) inches, with the soil firmly tamped against it. Jute mesh shall have a minimum lap of six (6) inches on all sides. Ends of rolls shall also have a minimum lap of six (6) inches with the upgrade section on top.

Check slots shall be constructed at intervals of 50 feet, unless otherwise directed by placing a fold of jute six (6) inches vertically into the ground with replaced soil tamped firmly against it.

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Jute mesh shall be held tightly to the soil by staples or wood pegs driven firmly into the ground. Staples or wood pegs shall be spaced not more than three (3) feet apart, along the sides and center of the jute mesh and not more than one (1) foot apart at roll ends, check slots and at other critical areas as determined by the Engineer.

D. Maintenance

The Contractor shall maintain the areas of jute mesh installation until final acceptance of the contract. Maintenance shall consist of providing protection for jute mesh and repair of areas damaged by equipment, erosion, fire, or other causes, as well as re-establishment of the grade and conditions of the area as specified.

E. Measurement and Payment

The quantity to be measured for payment under this Section shall be the number of square feet of surface area on which jute mesh has been installed in accordance with the plans and specifications and directions of the Engineer.

The Contract price per square feet of Jute Mesh shall be as indicated on the BID SCHEDULE OF PRICES Item No. BMP-7.407. The bid price shall include the costs for all labor, material, equipment and incidental in accordance with the plans and specifications to the satisfaction of the Engineer.

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7.408B HERBICIDE APPLICATIONA. Description of Work

Under this item, the Contractor shall apply herbicide to persistent weeds and weedy growth in accordance with the plans and specifications and as directed by the Engineer.

B. Quality Assurance

The Herbicide Applicator must possess a valid NYSDEC Type 5A - Aquatic Vegetation Pesticide Applicator Certification License.

C. Materials and Construction Methods

The work will eradicate invasive, non-native plants in upland and wetland areas using Glyphosate for eradication of all plants except Oriental Bittersweet which will be treated with Garlon 4. All chemicals to be applied using backpack and hand held sprayers and individual stem wipe applications. Herbicides application to open water/marshlands is prohibited.

In wetlands, the Contractor shall spray Rodeo Herbicide or approved equal onto specified weedy growth only, as directed by the Engineer, between May and September.

The Applicator shall spray to wet--not to the point of runoff. Care must be taken to properly calibrate the tank nozzle so as to direct herbicide spray only onto the undesirable plants and obtain complete coverage of leaves and stems. Avoid spray drift onto desirable plants and minimize spray contact with soil. It is recommended to spray when plants are not under water stress. Only flat pan nozzles shall be used when using a spray applicator.

In areas where invasive plants are tightly intermixed with native plants, the applicator shall use the individual wipe or injection method to prevent the accidental treatment of desirable plant material. Marking dyes shall be added to the herbicide at the request of the engineer to prevent the accidental treatment of desirable plant material.

Apply on a warm sunny day (75 degrees to 90 degrees preferred). Do not spray if wind speed exceeds 5 mph or if weather conditions would decrease the effectiveness of the herbicide or increase the intended target area. Do not apply or allow herbicide spray into surrounding waterbodies. Do not exceed the rates indicated on product labels.

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A non-ionic surfactant that is labeled for use with herbicides shall be added to the herbicide to help penetrate targeted plants for increased control. Surfactant must contain 50% or more active ingredient.

When using water from on-site hydrants, remove all suspended particles that may reduce the effectiveness of the herbicide prior to adding the water to the mixing tank.

All treated areas shall be temporarily posted with signs indicating that the area has been treated with herbicide. Signs shall be clearly posted in areas where the public may come into contact with the plant material.

The Contractor shall return to the site after ten (10) days and remove any dead vegetation that may interfere with planting of new material. If a second application is deemed necessary, a minimum of 10 days is required before installing any new plant material. Planting may proceed when the site is deemed acceptable to the Engineer.

The plant species to be eradicated primarily include, but shall not be limited to the following, and shall include additional species at the direction of the engineer:

Japanese Knotweed (*Polygonum cuspidatum*)
Mutiflora Rose (*Rosa mutiflora*)
Purple Loosestrife (*Lythrum salicaria*)
Oriental Bittersweet (*Celastrus orbiculatus*)
Black Locust (*Robinia psuedoacacia*)
Japanese Honeysuckle (*Lonicera japonica*)
Common Reed (*Phragmites australis*)
Mile-A-Minute Vine (*Polygonum perfoliatum*)
Mugwort (*Artemisia vulgaris*)
Common Ragweed (*Ambrosia artemisifolia*)
Giant Ragweed (*Ambrosia trifida*)
English Ivy (*Hedera helix*)
Japanese Stiltgrass (*Microstegium vimineum*)
Porcelain Berry (*Ampelopsis brevipedunculata*)
Burning Bush (*Euonymus alatus*)
Russian Olive (*Elaeagnus angustifolia*)
Giant Hogweed (*Heracleum mantegazzianum*)
Tree of Heaven (*Ailanthus altissima*)
White Mulberry (*Morus alba*)

D. Measurement and Payment

The quantity to be measured for payment under this section shall be the total number of crewdays (shifts) necessary for completion of Herbicide Application.

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A crewday (shift) is defined as one period from 8AM - 4PM, including lunch and breaks. The crew shall consist of two workers.

The contract price per unit for Herbicide Application shall be as indicated on the BID SCHEDULE OF PRICES Item No. BMP-7.408B. 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 Engineer.

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7.409

MYCORRHIZAL INOCULANTS

NO TEXT ON THIS PAGE

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7.410 PLANT PROTECTION FENCE

NO TEXT ON THIS PAGE

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7.411

WATERING AND WEEDING DURING MAINTENANCE PERIOD

NO TEXT ON THIS PAGE

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7.412 SLOPE STABILIZATION

NO TEXT ON THIS PAGE

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7.413 TEMPORARY GOOSE EXCLUSION FENCEA. Description

Under this Item, the Contractor shall furnish, install, maintain and remove a temporary Goose Fence as a protective measure against plant herbivory, according to the Plans and Specifications and the direction of the Engineer.

The fence shall be a minimum of five (5) feet high above existing grade and the posts shall be a non-tropical hardwood. The fence shall completely enclose all planted areas so as to prevent geese from entering any newly planted site.

The Contractor shall repair the fence as often as is necessary throughout the guarantee and maintenance period. The Contractor shall remove the entire fence at the end of the maintenance period, or as directed by the Engineer. Removal of fence is included under this Item, no additional payment will be made for this work.

B. Submittals and Materials

The Contractor must submit the following samples or the manufacturer's catalog cuts for approval ten (10) days before beginning work:

1. Non-tropical hardwood stakes (untreated).
2. Black Bi-oriented Utility Fence (TENAXUS or approved equal). The fencing shall meet the following specifications:
 - a. Material: High density UV stabilized polyethylene plastic resin
 - b. Height/length: 48" x 50"
 - c. Weight per roll: 20 lbs
 - d. Nominal mesh opening: 1"
 - e. Tensile strength (range): 2000 - 2310psi
 - f. Elongation at Break (%): 660%
 - g. 1/4" twine or string
 - h. 1" metallic mylar
 - i. 1-1/2" galvanized roofing nails.

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- j. 2" galvanized staples.
- k. 14" Nylon cable ties.

C. Execution

The goose fence shall be installed by skilled laborers with proper tools and equipment for an aquatic environment within 1 day of completing each 50' section of planting. Layout location of stakes according to the Contract Drawings. The Contractor shall drive stakes so that they are level and 1' (min.) from the edge of proposed coir logs or wetland plugs. All broken or splintered stakes shall be removed and replaced with new ones.

Install black bi-oriented utility fencing making sure that there is no space between the existing grade and the bottom of the fence. Fasten safety fence to stake by using 1-1/2" roofing nails. Close all gaps so that adjacent pieces of fence abut tightly together.

Attach twine or string to stakes as shown on the Contract Drawings. String shall be pulled taught to reduce sagging. The string must alternate in and out of fence netting for increased stability of fence. Tie 10" strip of metallic (mylar) flagging along string every four feet. Work in one direction only. The Contractor shall be responsible for removing the fence at the end of the guarantee period for the wetland plants, or at the direction of the Engineer.

D. Measurement and Payment

The quantity to be measured for payment under this Section shall be the total number of linear feet of fence furnished, installed, maintained and accepted in accordance with the Plans and Specifications and the directions of the Engineer.

The contract price per linear foot for Goose Exclusion Fence shall be as indicated on the BID SCHEDULE OF PRICES, Item No. BMP-7.413. The unit price per linear foot shall include all labor, materials, equipment and work incidental expenses necessary or required to complete the work in accordance with the plans and specifications and to the satisfaction of the Engineer.

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7.414 BMP AS-BUILT PLANSA. Description of Work

Under this item the Contractor is to provide all labor, materials, tools and equipment necessary to complete the work described below in complete accordance with the Contract Documents and the direction of the Engineer.

B. BMP As-Built Plans and Information

The Contractor shall be responsible for providing a survey of final topographical features with contour lines every one (1) foot of elevation at a scale of 1" = 20'. The survey shall include all adjoining property lines. The survey shall indicate and clearly label all new reconstructed/rehabilitated structural features which include but are not limited to the following:

- Tipping elevation of water at weir structure;
- Inlet and outlet elevation of low flow pipe;
- Inlet and outlet elevations of drain pipe;
- Permanent pool elevation;
- Bottom elevations of forebay, low flow channel and micropool;
- All pipes, headwalls, manholes, weirs, and any other structure that is part of the storm drainage system;
- Boundary fencing and survey monuments;
- Planting spreadsheet indicating zone elevation, species, and quantity planted;
- Location, size and species of all existing trees greater than six (6") caliper.

The Contractor shall submit the as-built plans with the above information included as an electronic file to the Restoration Specialist. The Contractor shall supply the surveys immediately after the completion of each BMP site to allow the Restoration Specialist time to complete the landscape survey. The Restoration Specialist shall verify the contractor's information and include his/her information along with any additional planting and natural features information on a separate sheet to the as-built plans. Paper prints of the completed as-built plans shall be provided by the Contractor to the DEP representative, its agent or the Engineer for review.

The approved final as-built plans shall be stamped by the professional surveyor and sent as a mylar set to the NYC Department of Design and Construction for inclusion in the final complete set of project as-built plans. The final as-built BMP plans shall consist of the following three sheets per site; 1) a base map stamped by the surveyor with property lines, contours, structures, and invert elevations, 2) a tree and shrub plan, and 3) a herbaceous planting plan. The

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NYCDDC shall be responsible for routing three (3) complete sets of as-built plans to the following locations:

NYCDEP Mapping and Records Division
59-17 Junction Boulevard
Flushing, NY 11373-5108

NYCDEP Water and Sewer Permitting
10 Richmond Terrace
Staten Island, NY 10301

NYCDEP Staten Island Bluebelt
182 Joline Avenue
Staten Island, NY 10307

The Contractor shall also submit as an electronic file, AutoCAD 2008 and six sets of paper prints of the approved final (BMP only) as-built plans to the NYCDEP Bluebelt field office located at 182 Joline Avenue, Staten Island, NY 10307, and 3 sets of paper prints to the NYCDEP Staten Island Bluebelt main office located at 59-17 Junction Boulevard, 12th Floor, High Rise, Flushing, NY 11373-5108.

C. No Separate Payment

No separate payment shall be made for this work of the specification. All costs shall be included in the various Contract Items of this Contract.

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7.415 VINE AND INVASIVE PLANT REMOVAL

A. Description of Work

Under this item, the Contractor shall remove all vines and invasive plants at Staten Island Bluebelt properties throughout the BMP project area, watershed and as directed by the Engineer

B. General Removal Methods

All vine and invasive plant material shall be removed by hand. The removal of these plant and materials shall be from existing trees, fence lines, utility poles and lines, adjacent structures, BMP sites, and other areas within the watershed. All vines and invasive plant material removed shall be disposed of by the Contractor at the Contractor's own expense.

The Contractor shall carefully protect all trees, shrubs and other plant material and structures during the vine and invasive plant removal operation. Any repair to damaged trees, fence, shrubs, and other plants and structures resulting from the vine and invasive plant removal operation will be repaired by the Contractor at the Contractor's own expense.

The removal of vines and invasive plants under this item is to be done in conjunction with the work covered under Specification Section 7.408B, Herbicide Application.

The vines and invasive plants to be removed will be identified by the Engineer and restoration specialist and clearly marked prior to removal. No trees are to be removed under this item.

The plant species to be eradicated primarily include, but shall not be limited to the following, and shall include additional species at the direction of the engineer:

Japanese Knotweed (*Polygonum cuspidatum*)
 Multiflora Rose (*Rosa multiflora*)
 Purple Loosestrife (*Lythrum salicaria*)
 Oriental Bittersweet (*Celastrus orbiculatus*)
 Black Locust (*Robinia pseudoacacia*)
 Japanese Honeysuckle (*Lonicera japonica*)
 Common Reed (*Phragmites australis*)
 Mile-A-Minute Vine (*Polygonum perfoliatum*)
 Mugwort (*Artemisia vulgaris*)
 Common Ragweed (*Ambrosia artemisiifolia*)
 Giant Ragweed (*Ambrosia trifida*)
 English Ivy (*Hedera helix*)

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Japanese Stiltgrass (*Microstegium vimineum*)
Porcelain Berry (*Ampelopsis brevipedunculata*)
Burning Bush (*Euonymus alatus*)
Russian Olive (*Elaeagnus angustifolia*)
Giant Hogweed (*Heracleum mantegazzianum*)
Tree of Heaven (*Ailanthus altissima*)
White Mulberry (*Morus alba*)
Norway Maple (*Acer platanoides*)

C. Measurement and Payment

The quantity to be measured for payment under this section shall be the total number of crewday (shifts) necessary for completion of Vines and Invasive Plant Removal. A crewday (shift) is defined as one period from 8AM – 4PM, including lunch and breaks. The crew shall consist of three gardeners and one supervisor. The crew shall also consist of the following equipment:

One (1) truck (10-15 cubic yard enclosed hydraulic dump body)
Manual Pole Saw (2)
Full Size Lopping shears
Tool Kit including files for minor mechanical repairs
Dirt Shovel
Sweep Type Broom Rake
Hand Saw
First Aid Kit
Ear and Eye Protectors
Hand Saw with Scabbard (2)
Axe
Broom
Hard Hats
Safety cones
Red Flags
Danger Signs

The contract price per unit for Invasive Vine and Plant Removal shall be as indicated on the BID SCHEDULE OF PRICES Item No. BMP-7.415. The unit price bid shall include the costs for all labor, materials, equipment, vehicles and incidental expenses necessary or required to complete the work in accordance with the plans and specifications to the satisfaction of the Engineer.

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7.416

GALVANIZED CHICKEN WIRE

NO TEXT ON THIS PAGE

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7.417 DEBRIS EXCLUSION FENCE

NO TEXT ON THIS PAGE

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7.418 SAND

A. Description of Work

Under this item, the Contractor shall provide clean sand in accordance with the plans and directed by the Engineer.

B. Material

Material 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.

C. Placement

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Clean sand shall be placed as described in the Contract Drawings.

D. Measurement and Payment

The quantity of clean sand to be paid for under this item shall be the number of cubic yards of clean sand furnished from off-contract site sources (i.e. suppliers approved by the engineer), placed and incorporated in the completed work in accordance with the plans and specifications to the satisfaction of the Engineer, measured in trucks used for delivery, at the site of the work. The quantity of clean sand to be paid for under this item shall be measured in cubic yards in trucks used for delivery. No clean sand shall be furnished until ordered by the Engineer. Delivery ticket with name and address of vendor, date and estimated volume must be supplied to the Engineer prior to truck measurement.

The contract price per unit for Sand shall be as indicated on the BID SCHEDULE OF PRICES Item No. BMP-7.418-A. The bid price shall be a unit price per cubic yard of Clean Sand, and shall include the cost of all labor, materials and equipment necessary to prepare areas, furnish, place and all other work incidental thereto, in accordance with the plans and specifications to the satisfaction of the Engineer.

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7.419 TREE AND ROOT PRUNINGA. Description of Work

Under this Section, the Contractor shall provide all labor, materials, equipment, insurance, licenses, permits and payments of fees, tolls and taxes, together with all work required for general branch and root pruning, including the removal of all debris generated during the completion of this work.

All work shall be performed as directed by DEP's on-site authorized Representative. The work to be performed by the Contractor shall be done only when and where the Contractor is ordered to perform such work by DEP. Tree pruning in natural areas may have restricted or no vehicle access and in such cases trees will have to be climbed and roped by experienced personnel.

Skilled persons directly employed and supervised by the Contractor shall perform all work. All work shall be performed in a professional manner and in accordance with the most current revisions of the American National Standards for Tree Care Operations: Tree, Shrub, and other Woody Plant Maintenance and Standard Practices A-300-2001 and the American National Standards for Arboricultural Operations: Pruning, Repairing, Maintaining, and Removing Trees, and Cutting Brush – Safety Requirements Z-133.1-2000, published by the American National Standards Institute (ANSI).

Contractors shall have in their possession, or available to them, the following materials: trucks, aerial lifts, chippers, hand tools, climbing equipment, and other equipment and supplies required to perform this work. The Contractor shall also have current certification to perform the work, as specified below.

The description of the work is for general information only. It is not to be construed as an exclusive definition of the quantity or type of work that will be required.

B. Health and Safety

All work shall follow all arboricultural standards, as specified herein, and all City, State and Federal regulations as applicable. The Contractor is responsible for the preparation and submission of a Health and Safety Plan to DDC. The HASP must be approved by DDC before any of the work begins. In accordance with the HASP, the Contractor shall perform the work with all due care, taking precautions against injury to persons and damage to property, and against interference with traffic or abutting property. The Contractor shall at his/her expense erect barricades, display lights or signs, give warnings and adopt and enforce rules and regulations as may be necessary or required by DDC or by authorities having jurisdiction to safeguard the public.

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The Contractor shall furnish a twenty-four (24) hour telephone number of three (3) responsible members or employees of the Contractor's firm who can be reached in times of emergency resulting out of or in connection with the work to be performed.

C. Personnel and Equipment

All work shall be performed by skilled persons directly employed and supervised by the Contractor.

1. Contractor's Certification and Experience

- a. At least one employee on each crew working within ten (10) feet of energized conductors must be a qualified line clearance tree trimmer.
- b. The pruning shall be performed under the supervision of an "ARBORIST" from the International Society of Arboriculture (I.S.A.) or an equivalent certification.
- c. The Contractor shall be certified by the New York State Department of Agriculture and Markets to perform work within Asian Longhorned Beetle Quarantine Zones.

2. Contractor's Equipment List

- a. The Contractor shall furnish a list of proposed vehicles and equipment to be used in the completion of this work at the time of the pre-construction meeting.
- b. All equipment shall be in good working condition. The Contractor shall remove and replace any equipment in unsatisfactory condition or unsuitable for the required work as deemed by DDC.
- c. To ensure that out of service equipment be returned to service in two (2) days or less, the Contractor shall provide at all times a 24 hour repair or replacement center with maximum response time of two (2) hours.
- d. Unacceptable equipment or lack of equipment shall be grounds for disqualification of the Contractor.
- e. All required documentation and information must be provided at the time of the pre-construction meeting unless otherwise agreed to by DDC.

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D. Tree Pruning Method

The Contractor shall prune trees in accordance with accepted arboricultural practices, to the satisfaction of and in the order directed by DEP's authorized Representative.

At each marked tree location, the Contractor shall perform some or all of the following pruning work as directed by DEP's authorized Representative.

1. Crown Cleaning to remove dead, broken, crossing, rubbing, damaged (storm or otherwise), fungus and insect infected branches, dead or decaying stubs, suckers and all other undesirable growth. Live growth should not be removed unnecessarily. Clean pruning will be performed on all branches 1 inch in diameter and larger. Injured areas where healing is not taking place properly may be bark traced in accordance with accepted arboricultural practices.
2. Crown Thinning to improve the penetration of street lighting. Proper thinning retains crown shape and should provide an even distribution of foliage throughout the crown. The percentage of live foliage removed must not exceed 15%. Only remove branches ¼ to 1 inch in diameter. Excessive limb removal on the lower two-thirds of any branch or stem (lion tailing) is not acceptable.
3. Crown Raising to provide a vertical and horizontal clearance from vehicles, pedestrians, signs, buildings, lights, and transmission lines. In lifting bottom branches of trees for under clearance, care should be given to preserve the symmetrical appearance of the tree. This work may involve both the removal and shortening of limbs. Branches greater than half of the trunk diameter should not be removed. Unless otherwise directed, the canopy should be raised to 15 feet over roads, 8 feet over sidewalks and pruned to give 6 feet clearance from buildings.
4. Root pruning shall be done when roots are damaged during construction or excavation.

All pruning shall be completed to current best practice for either branch removal cuts (thinning cuts) or reduction cuts (lateral cuts or drop crotch cuts). Reduction cuts (lateral cuts or drop crotch cuts) should be to a lateral branch at least one-third to one-half the diameter of the removed portion. Do not leave stubs. When removing a dead branch, the final cut should be made just outside the collar of living tissue. All limbs one inch (1") in diameter (the size of a quarter) and over must be pre-cut to prevent splitting and/or bark rips. No more than 25 percent of the live crown of a single tree should be removed.

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The Contractor shall carefully protect against damage to all existing trees, plants, other growths and other features to remain. He/she shall be liable for any and all damage to such trees, plants, other growths, real property and vehicles. The Contractor shall replace any injured trees as per the instructions of DEP's authorized Representative.

All trees which require maintenance due to root and trunk damage shall be guaranteed for one year against death. If during this time, said trees die due to root and trunk damage, they shall be removed and replaced according to Department of Parks and Recreation removal and tree planting specifications.

The Contractor shall lower any branch that would injure the tree or other property when falling using ropes.

In the case of trees with Dutch Elm Disease, or as directed by DEP's authorized Representative, the Contractor shall disinfect all tools between use on other trees with alcohol or bleach, due to the danger of transmitting the disease on tools. All tools shall be disinfected between each use on each tree.

In the case of locations with restricted access, parked cars or where designated trees taller than the working height of a bucket, trees shall be pruned using ropes and saddles. The use of hydraulic limb loppers, hydraulic saws or climbing spikes is not acceptable. Use of any such prohibited equipment will be grounds for default proceedings.

Working Hours

All work shall be performed during the five- (5) day, forty- (40) hour week, from Monday to Friday, inclusive between the hours of 8:00 A.M. and 4:00 P.M., except for legal holidays or unless otherwise directed by DDC. The Contractor is expected to work in rain and adverse weather, unless otherwise approved by DDC. No work shall commence on streets adjacent to schools prior to 9:00 A.M. or after 2:00 P.M., when school is in session. The Contractor's employees shall wear identification, approved by the Project Manager, at all times while performing this work.

Work Area

All work areas shall be kept in such a manner to cause as little inconvenience as possible to the general public and adjacent property owners. When it is necessary to close pedestrian walks, vehicular traffic lanes or private driveways, the Contractor shall provide personnel barricades, warning signs, cones, flags or other means required by governing rules and ordinances.

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Should work require the Contractor to place equipment and/or personnel on private property, the Contractor shall obtain the property owners' permission in writing and shall notify DEP prior to the performance of any work. The Contractor shall develop a permission/indemnification form to be used for this purpose. Sites may be designated as temporary debris staging areas at the sole discretion of DEP.

External Situations

The Contractor shall appropriately address external influences, including encounters with rats, hornets, wasps, yellow jackets or other animals and insects that could interfere with tree pruning work. The Contractor shall remove all signs, boards, hoops, bags, guide wires, tree grates, tree guards, fences, poles or other foreign objects. The Contractor is responsible for addressing and solving these problems at no additional cost to the City.

E. Debris Disposal

The Contractor shall remove all debris generated during the course of a day from the contract site no later than the completion of that day's work.

The Contractor must obtain written approval from DEP's site representative to store or spread clean chips on City property within the borough at designated locations.

F. Plant Pest Control Requirements

Contractors shall comply with Federal and State Department of Agriculture regulations for plant pest control. In general, State Department of Agriculture regulations require contractors operating in infested areas to thoroughly clean all equipment units before moving to non-infested areas.

The Contractor and/or subcontractors shall be certified by the New York State Department of Agriculture & Markets to perform work within the Asian Longhorned Beetle Quarantine Zone. The Contractor must review and abide by the description of the quarantine and compliance agreements as presented in the publication entitled Part 139 of the New York State, Department of Agriculture & Markets law. Full information can be obtained from Federal and State Pest Control personnel. Quarantine areas, for the purpose of this contract shall be defined as all five Boroughs of New York City.

The Contractor shall also be responsible for complying with all state and federal requirements for infestations by the Emerald Ash Borer, including but not limited to those by the New York State Department of Agriculture and Markets.

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G. Contractor's Representative

At the discretion of DEP's Representative, the Contractor or a DDC representative must be present at the work site during all times work is being performed. While this work is being performed, a Supervisor or employee of the Contractor with equivalent authority who is not a member of the work crew(s) shall be present to properly direct and deploy the work crew(s) in completing the listed work. The foregoing provision shall be complied with irrespective of whether work is being performed by the Contractor or his sub-contractor's forces. The Contractor's representative shall maintain daily communication with DEP's Representative.

H. Inspection

DEP shall conduct an inspection of all work to ensure compliance with specifications. DEP's Representative has final discretion for approving all work for payment. No partial payments will be made for incomplete or unsatisfactory work. After the inspection is completed and the Contractor is notified in writing by DEP, the Contractor has two (2) weeks from the date of notification to complete any incomplete or unsatisfactory work.

DDC reserves the right to hold/reject the invoice if there is any incomplete or unsatisfactory work outstanding. The City will not pay any interest on the invoices that are held due to incomplete or unsatisfactory performance of the Contractor.

I. Completion

DEP's Representative will supply the Contractor with a list of trees where pruning is to be performed. DEP's Representative shall have the right to add or delete any locations from the list.

J. Measurement and Payment

The quantity to be measured for payment under this section shall be the total number of crewday (shifts) necessary for completion of general tree pruning, for eight (8) consecutive hours of work performed on weekdays between the hours of 8 a.m. and 4 p.m. All mobilization and incidental costs, including the disposal of wood chips, are included in the prices submitted by the Contractor. The contract price per shift for Tree and Root Pruning shall be as indicated on the BID SCHEDULE OF PRICES, Item No. BMP-7.419.

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7.500

SOIL EROSION AND SEDIMENTATION CONTROL MEASURES

Under soil erosion and sedimentation control work, the Contractor shall provide all labor, materials, tools and equipment necessary to complete the execution of the work in complete accordance with the Specifications and all Contract Drawings. All Soil Erosion and Sedimentation Control work shall be done in conformance with and subject to the renewed State Pollutant Discharge Elimination System (SPDES) General Permits for Discharges Stormwater from Construction Activity, GP-0-10-001, the latest edition of the "New York Guidelines for Urban Erosion and Sediment Control" published by the Empire State Chapter of the Soil and Water Conservation Society, and the New York State Department of Transportation Standard Specification Part 107-12 -Soil, Erosion and Air Pollution Statement, including, but not limited to, the following methods of erosion and sedimentation control.

1. Slopes left exposed will, within 30 working days of completion of any phase of grading, be planted or otherwise provided with ground cover device, or structures sufficient to restrain erosion.
2. A ground cover sufficient to restrain erosion must be planted or otherwise provided within 15 working days on that portion of the tract (disturbed area) upon which further active construction is not being undertaken.

The Contractor shall submit for approval by the Engineer, NYCDEP and NYSDEC, a written Erosion and Sedimentation Control Plan, prepared by a Certified Professional in Erosion and Sediment Control (CPESC), who is a Professional Engineer (P.E.) or under the supervision of a P.E. The Erosion and Sediment Control Plan must be signed and sealed by that CPESC and/or the supervising P.E. The Plan shall comply with all conditions of the applicable freshwater wetland permit issued by NYSDEC.

The Erosion and Sedimentation Control Plan shall conform to the guidelines as set forth in the latest edition of the "New York Guidelines for Urban Erosion and Sediment Control" published by the Empire State Chapter of the Soil and Water Conservation Society and he/she shall implement the followings:

- No stockpiling of excavated material would be allowed in a manner or location that would permit erosion and its subsequent sedimentation in wetlands or other natural areas.
- No storage of soil shall be permitted within the Contract limits. Soil is deemed to be for this requirement any sediment including material such as topsoil fill, sand, any excavated material, boulders, stones, cold patch, etc.
- Storm sewers will be installed in a sequence and manner that reduces the

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time during which the tops of excavated areas would be exposed and vulnerable to erosion.

- At the end of each day's work, the street where sewers are being installed will be cleaned and swept to reduce the amount of soil that could potentially impact downstream areas as sediment. The Contractor shall be required to have a street sweeper on the site.
- Use truck tracking pads at the construction access locations to remove sediment from the tires of the trucks and other construction equipment prior to driving on the adjacent streets.
- Utilize sediment basins, sediment traps and/or sediment filters in the erosion control plan to capture sediment from run-off and from water produced by dewatering operations.
- Use portable sediment tanks to remove sediment from water generated by dewatering operations. All water from dewatering shall be treated before discharge into any surface water bodies, unless the turbidity of the effluent is less than three times the ambient level of the receiving water body as measured by the turbidity meter in standard units (i.e. NTU's).
- The Contractor shall supply all portable equipment.
- Use construction limiting fence, staked hay bales, and/or reinforced silt fence as shown on Contract Drawings, unless otherwise directed by the Engineer.
- Schedule work in wet areas, such as BMP sites, during relatively dry summer months.
- Employ water diversions to direct the stream away from the area being worked on, so as to create drier conditions for in-stream work.
- Use temporary pumping sump to control water level at site.
- Prior to the start of construction activities, such as sewer installation, inspect all erosion control measures and continually monitor them, especially after each storm event.
- If Permittee uses dewatering methods which produce effluent discharges, Permittee shall monitor each discharge effluent and receiving water body. Discharges shall not cause substantial visible contrast to the natural condition in any receiving water body. A meter which records turbidity in standard units (i.e. NTUs) shall be utilized to establish ambient conditions

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in each water prior to discharge. If any monitored turbidity level exceeds three times the ambient level of the receiving water body, the Permittee shall insure (e.g., by reducing the flow rate or otherwise adjusting the dewatering system) that no substantial visible contrast to the natural condition in the receiving water body occurs. The action(s) taken, or the decision not to take any action, shall be recorded in the monitors log.

The Contractor shall not receive any payment for the preparation of the Erosion and Sedimentation Control Plan. Installation of the Erosion and Sedimentation features and maintenance of them will result in payment for their respective items as described in Section 7.501 through 7.510. The work shall take place at BMP sites only and is not payment for street work or the installation of sewers.

The work shall include items of work specified under the following sections:

<u>Section Number</u>	<u>Title</u>
7.501	Maintenance of Erosion Control Measures
7.502	Construction Limit Fence
7.504	Reinforced Silt Fence
7.505	Sand Bags
7.506	Sediment Trap with Filter
7.507	Sediment Filter
7.509A	Stabilized Construction Entrance
7.510	Portable Sediment Tank
7.511	Storm Drain – Inlet Protection
7.512	Dirtbag

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7.501 MAINTENANCE OF EROSION CONTROL MEASURES

Maintenance/repair of the erosion and sediment control measures shall be performed by the Contractor only as directed by the Engineer.

When, in the judgment of the Engineer, Restoration Specialist, and DEP Construction Monitor, the soil erosion control measures have deteriorated to a point of not functioning adequately because of storm events, the Contractor shall be notified to make the necessary repairs.

If the Engineer deems that the erosion control device was not adequately installed in the first place, repair of such a device shall be the sole responsibility of the Contractor.

Damage to the erosion control measures caused by the construction activity of the Contractor is the responsibility of the Contractor. If the Engineer determines that the damage is the result of the Contractor's construction activity, then the Engineer shall order that the devices are repaired. The Contractor shall make the repairs at his/her own expense.

In the event that the erosion control measures are damaged as a result of vandalism by the general public, the Contractor shall notify his insurance company and put forth his claim for remuneration to the said damage.

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7.502 CONSTRUCTION LIMIT FENCEA. Description of Work

The Contractor shall furnish all materials, labor, and equipment necessary to install the construction limit fence specified herein and as shown on the Contract Drawings, including all incidental and appurtenant work required for a complete job. The construction limit fence is used to mark the limit of the construction activity and to protect the adjacent areas.

Upon furnishing and installing the above sedimentation and erosion control device but prior to commencing any other work on-site, the Contractor shall notify DEP's authorized representative and arrange for an on-site inspection.

The construction limit fence shall be maintained in good condition and repaired as necessary by the Contractor during the construction and post-construction/site stabilization phases as directed by the Engineer.

B. Materials and Methods

Construction Limit Fence: The construction limit fence shall be a welded wire fence with a minimum height of four (4) feet. The fence shall be constructed of wire fabric fastened to vertical line posts.

Wire fabric shall be of No. 6 gauge wire with a mesh of approximately 2 inches. The upper edge of the fabric shall be twisted and barbed. The fabric shall be securely fastened to vertical line posts by means of ties and spaced not more than 12 inches apart on rails and not more than 14 inches apart on line posts.

The construction limit fence shall be located where indicated on the Contract Drawings. The fence shall be adjusted to avoid interference with trees and to maintain access to houses.

Line posts shall be spaced not more than 6 feet on centers. Posts shall be securely set in the ground. Line posts shall extend at least 2 feet below finished grade. Post locations shall be adjusted to avoid tree roots as appropriate.

C. Maintenance

The construction limit fences shall be inspected periodically (at least once per week), or as directed by the Engineer. Any required repairs shall be made immediately.

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D. Measurement and Payment

The quantity to be measured for payment under this Section shall be the total number of linear feet of construction limit fence furnished, installed and maintained in accordance with the Plans and Specifications and the directions of the Engineer.

The contract price per linear foot for Construction Limit Fence shall be as indicated on the BID SCHEDULE OF PRICES, Item No. BMP-7.502. The unit price per linear foot shall include all labor, materials, equipment and work incidental expenses necessary or required to complete the work in accordance with the plans and specifications and to the satisfaction of the Engineer.

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7.503A STAKED STRAW BALES

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7.504 REINFORCED SILT FENCEA. Description of Work

The Contractor shall furnish all materials, labor, and equipment necessary to construct reinforced silt fence specified herein and as shown on the Contract Drawings, including all incidental and appurtenant work required for a complete job.

Upon furnishing and installing the approved reinforced silt fence but prior to commencing any other work on-site, the Contractor shall notify the Engineer and arrange for an on-site inspection.

The reinforced silt fence shall be maintained in good condition and repaired as necessary by the Contractor during the construction and post-construction/site stabilization phases as directed by the Engineer.

B. Materials and Methods

1. Construction (Limiting) Fence: The construction (limiting) fence shall be a welded wire fence with a minimum height of four (4) feet. The fence shall be constructed of wire fabric fastened to the middle rails and to vertical line posts.

Wire fabric shall be of No. 6 gauge wire with a mesh of approximately 2 inches. The upper edge of the fabric shall be twisted and barbed. The fabric shall be securely fastened to vertical line posts means of ties and spaced not more than 12 inches apart on rails and not more than 14 inches apart on line posts.

The construction (limiting) fence shall be located where indicated on the Contract Drawings. The fence shall be adjusted to avoid interference with trees and to maintain access to houses.

Line posts shall be spaced not more than 6 feet on centers. Posts shall be securely set in the ground. Line posts shall extend at least 2 feet below finished grade. Post locations shall be adjusted to avoid tree roots as appropriate.

2. Filter Fabric: Filter fabric shall be securely attached to the vertical line posts and wire fabric, and shall be situated between the wire fabric and staked straw bales.

The filter fabric shall be purchased and delivered in a continuous roll and cut on-site to the length of the barrier(s) to avoid the use of joints.

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Dimensions of the roll shall be thirty-six (36) inches by one hundred (100) feet in length. When joints are necessary, filter cloth shall be spliced together only at a line post, with a minimum 6-inch overlap, and securely sealed. The filter fabric shall meet NYSDOT specifications on same, and shall be fabric MUTUAL MISF 1776 as manufactured by Mutual Industries Inc.; Fabric # GTF190 as manufactured by Linq Industrial Fabric; Fabric # 2130 as manufactured by Propex, or approved equal.

A trench shall be excavated approximately 4 inches wide and 4 inches deep along the line of posts and upslope from the barrier. The filter fabric shall be extending into the trench, the trench backfilled, and the soil compacted over the filter fabric.

Siltation fences shall be removed when they have served their useful purpose, but not before the upslope area has been permanently stabilized.

3. Straw Bales: All straw bales shall be of straw, and shall be standard sized bales. Bales shall be placed in a single row, with ends of adjacent bales tightly abutting one another. Bales shall be placed upslope of the filter fabric, and shall at all times run parallel to the construction (limiting) fence and abut the filter fabric.

All bales shall be fiber-bound. No string bound straw bales are accepted. Straw bales shall be installed so that bindings are oriented around the sides rather than along the tops and bottoms of the bales in order to prevent deterioration of the bindings.

The straw bale barrier shall be entrenched and backfilled. A trench shall be excavated the width of a bale and the length of the proposed barrier to a depth of 4 inches. After the bales are staked and chinked, the excavated soil shall be backfilled against the barrier. Backfill soil shall conform to the ground to the ground level on the downhill side and shall be built up to 4 inches against the uphill side of the straw bale barrier.

Each bale shall be securely anchored by at least two stakes or steel reinforcing bars driven through the bale. The first stake in each bale shall be driven toward the previously laid bale to force the bales together. Stakes or reinforcing bars shall be driven deep enough into the ground to securely anchor the bales.

The gaps between bales shall be chinked (filled by wedging) with straw to prevent water from escaping between the bales. The Contract shall scatter loose straw over the area immediately uphill from the straw bale barrier to increase barrier efficiency.

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Straw bale barriers shall be removed when they have served their usefulness, but not before the upslope areas have been permanently stabilized.

C. Maintenance

The reinforced silt fences shall be inspected periodically (at least once per week), or as directed by the Engineer. Any required repairs shall be made immediately.

Filter fabric shall be inspected at least once per week and immediately after each rainfall and at least daily during prolonged rainfall. Any required repairs shall be made immediately. Should the fabric decompose or become ineffective prior to the end of the expected usable life while the barrier is still necessary, the fabric shall be replaced promptly.

Straw bales shall be inspected at least once per week and immediately after each rainfall and at least daily during prolonged rainfall. Close attention shall be paid to the repair of damaged bales, end runs and undercutting beneath bales. Necessary repairs to barriers or replacement of bales shall be accomplished promptly. Sediment deposits should be removed after each rainfall. They must be removed when the level of deposition reaches approximately one-half foot deep in front of the straw bale. Any sediment deposits remaining in place after the straw bale barrier is no longer required shall be dressed to conform to the existing grade.

D. Measurement and Payment

The quantity to be measured for payment under this section shall be the total number of linear feet of Reinforced Silt Fence, installed and maintained in accordance with the plans, specifications and directions of the Engineer. The construction (limiting) fence, filter fabric and staked straw bales which together make up the reinforced silt fence shall be measured as one erosion and sediment control feature.

The contract price per linear foot for Reinforced Silt Fence shall be as indicated on the BID SCHEDULE OF PRICES, Item No. BMP-7.504. The bid price shall constitute full compensation for all labor, materials and equipment and incidental expenses necessary to complete the work in accordance with the plans and specifications and to the satisfaction of the Engineer.

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7.505 SAND BAGSA. Description of Work

The Contractor shall furnish all materials, labor, and equipment necessary to construct the sand bag wall specified herein and as shown on the Contract Drawings, including all incidental and appurtenant work required for a complete job.

The installation of the sand bag wall shall be maintained in good condition and repaired as necessary by the Contractor during the construction and post-construction/site stabilization phases as directed by Engineer.

B. Materials and Methods

1. The bags shall be of coarse heavy woven synthetic non-biodegradable and non-photo degradable.
2. Sand shall meet ASTM C33 concrete and specifications.
3. Sand bags shall be installed at the locations shown on the Contract Drawings and as directed by the Engineer.
4. Each bag shall be filled with 40 lbs of dry clean sand.

C. Measurement and Payment

The quantity to be measured for payment under this Section shall be the total number of sand bags furnished and installed in accordance with the Contract Drawings, specifications and directed by the Engineer.

The contract price per sand bag shall be as indicated on the BID SCHEDULE OF PRICES, Item No. BMP-7.505. The bid price shall constitute full compensation for all labor, materials, equipment and incidental expenses necessary to complete and maintain the work in accordance with the plans and specifications to the satisfaction of the Engineer.

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7.506 SEDIMENT TRAP WITH FILTER

A. Description of Work

The Contractor shall furnish all materials, labor, and equipment necessary to construct the Sediment Trap specified herein and as shown on the Contract Drawings, including all incidental and appurtenant work required for a complete job. A Sediment Trap is typically intended to serve a drainage area of three acres or less. Therefore, it is not as large as a sediment basin.

Upon furnishing and installing the approved sediment trap but prior to commencing dewatering operations, the Contractor shall notify the Engineer and arrange for an on-site inspection.

The sediment trap shall be maintained in good condition and repaired as necessary by the Contractor during the construction and post-construction/site stabilization phases as directed by the Engineer.

B. Materials

1. Rip-Rap: The rip-rap shall have a d50 of 6".
2. Staked Hay Bales. All Hay Bales shall be of straw and shall be standard sized bales as shown in the Contract Drawings. All bales shall be fiber-bound. No string-bound hay bales are acceptable.
3. Perforated Corrugated Pipe. A six inch diameter pipe shall be used as shown on the Contract Drawing.
4. Sand bags. The bags shall be of coarse heavy woven fabric (burlap). The sand shall meet ASTM C33 concrete specifications.
5. Filter Cloth. The filter cloth used for wrapping the corrugated pipe, shall be Encadrain 9120 or equivalent with the following specifications:

<u>Property</u>	<u>Test Method</u>	<u>Unit</u>
Material	Non-woven	geotextile fabric
Unit Weight	ASTM D1777 oz./sq. yd	4.3 (min)
Flow Rate	Falling Head Test gpm/sq.ft	120 (min)
Puncture	ASTM D751 lbs.	60 (min)
Thickness	in.	0.8 (min)

6. Reinforced Silt Fence as described in Specification Section 7.504.

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C. Construction Method

1. The area under excavation shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
2. Place the filter cloth in the bottom of the pool.
3. Place the rip- rap over the cloth as shown on the Contract Drawings.
4. Place the hay bales and sand bags in a single row, with ends of adjacent bales and bags tightly abutting one another. Refer to the Contract Drawings.
5. Wrap the perforated, corrugated pipe with the filter cloth and place it where is shown on the Contract Drawings.
6. The structure shall be inspected after each rain and repaired as needed.

D. Measurement and Payment

The quantity to be paid for under this item shall be the number of sediment traps with filters placed in accordance with the plans and specifications to the satisfaction of the Engineer, measured in number of above items at the site of the work. The sand bags, reinforced silt fence hay bales, filter cloth, pipe and rip-rap and sediment filter which together make up the Sediment Trap shall be measured as one erosion and sediment control feature.

The contract price per unit for sediment traps with filters shall be as indicated on the BID SCHEDULE OF PRICES Item No. BMP-7.506-A. The bid price shall be a unit price per sediment trap and shall include the cost of all labor, materials and equipment necessary to furnish, place and incorporate and all other work incidental thereto, in accordance with the plans and specifications to the satisfaction of the Engineer.

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7.507 SEDIMENT FILTER

A. Description of Work

The Contractor shall furnish all materials, labor and equipment necessary to construct the sediment filter specified herein and as shown on the Contract Drawings. A sediment filter is intended as a small device to "polish" sediment laden water before final discharge. Therefore, it may be used in conjunction with larger erosion control devices such as a sediment trap and sediment basin.

Upon furnishing and installing the approved sediment filter but prior to commencing dewatering operations, the Contractor shall notify the Engineer and arrange for an on-site inspection.

The sediment filter shall be monitored in good condition and repaired as necessary by the Contractor during the construction and post-construction/site stabilization phases directed by the Engineer.

B. Materials

1. Reinforced Silt Fence. The fence shall be as specified in this Detailed Specification Section 7.504 - Reinforced Silt Fence.
2. Hay Bales. All hay bales shall be of straw and shall be standard sizes bales as shown in the Contract Drawings. All bales shall be fiber-bound. No string bound hay bales are acceptable.
3. Crushed Stones. Stones shown on the Contract Drawings shall conform to the following gradation and shall be compacted to 98 percent density as determined by ASTM D698.

<u>Sieve Size</u>	<u>Percentage of Dry Weight</u> <u>Passing Designated Sieve Size</u>
1"	100
1/2"	90-100
1/4"	0-15

C. Construction Method

1. Clear the area where the sediment filter is to be constructed.
2. Place the crushed stone as shown on the Contract Drawings.

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3. Place the hay bales in a single row, with ends of adjacent bales tightly abutting one another as shown on the Contract Drawings.
4. The structure shall be inspected after each rain and repaired as needed.

D. No Separate Payment

No separate payment shall be made for a sediment filter when used in conjunction with a sediment trap. The cost for a sediment filter shall be included in the cost for the installation of a sediment trap.

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7.508

SEDIMENT BASIN

NO TEXT ON THIS PAGE

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7.509A STABILIZED CONSTRUCTION ENTRANCE

A. Description of Work

The Contractor shall furnish all materials, labor, and equipment necessary to construct the stabilized construction entrance specified herein and within the limits as shown on the Contract Drawings, including all incidental and appurtenant work required for a complete job.

Upon furnishing and installing the stabilized construction entrance but prior to commencing any other work on-site, the Contractor shall notify the Engineer and arrange for an on-site inspection.

The entrance shall be maintained in good condition and repaired as necessary by the Contractor during the construction phases as directed by the Engineer.

B. Materials and Methods

1. The entrance areas shall be cleared and stripped of all vegetation, roots and other objectionable material prior to installation of the access way as specified.
2. Provide surface drainage and divert excess runoff to stabilized areas as required and as directed by the Engineer.
3. Traprock - use 1-1/4" traprock concrete equivalent.
4. Thickness - not less than six (6) inches for traprock.
5. Width shall be twelve (12) foot minimum.
6. Filter cloth shall be placed over the entire area prior to placing of stone. Filter cloth shall be as specified below.

Filter cloth underliner shall be suitable for heavy duty construction traffic and have the following minimum properties:

Grab tensile strength	220 lbs.
Elongation at failure.	220%
Mullen Burst Strength	430%
Puncture Strength	125 lbs.
Equivalent opening size	40-80 mm
Filter cloth shall be Trevira Spunbound 1135, Mirafi 600x, or approved equal.	

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7. Surface water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
8. Maintenance - the entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
9. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
10. Periodic inspection and needed maintenance shall be provided after each rain.
11. After completion of the project, the stabilized construction entrance shall be removed and regraded to its original condition. Prior to grading and planting, the area shall be tilled to lessen the compaction of the soils.

C. Maintenance

1. Maintenance of the stabilized construction entrance will include periodic inspection of the surface condition. Top dress with new gravel as needed. Any areas producing sediment should be treated immediately.
2. After completion of the project, the stabilized construction entrance shall be removed and the areas regraded to their original elevations. Prior to seeding and planting, the areas shall be tilled to lessen the compaction of the soils.
3. For those stabilized construction entrances that are in the beds of permanent accessways, the traprock can stay in place for use in permanent accessways. (See specification for permanent accessways.)

D. No Separate Payment

No separate payment will be made for the work of furnishing the material, labor and equipment necessary to construct the stabilized construction entrance in accordance with the plans and specifications and the direction of the Engineer. Separate payment will however be made for all trees removed during the construction of the stabilized construction entrance. Payment for tree removal shall be in accordance with the Detailed Specifications for Tree Removal and Disposal.

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7.510 PORTABLE SEDIMENT TANKA. Description of Work

The Contractor shall furnish all materials, labor and equipment necessary to install the portable sediment tank specified herein and as shown on the Contract Drawings. A sediment tank is a compartmented tank container through which sediment laden water is pumped to trap and retain the sediment.

The purpose of the portable sediment tank is to trap and retain sediment prior to discharging the water to wetlands, adjoining properties and rights-of-way below the sediment tank site. The sediment tank shall be located for ease of cleanout and disposal of the trapped sediment and to minimize the interference with construction activities and pedestrian traffic. The temporary relocation of the tank(s) during clean-out shall be included in the cost of this item. Relocating the tank(s) from one work area to another before, during and after construction shall be included in the cost of this item.

B. Design Criteria

The following formula should be used in determining the storage volume of the sediment tank: pump discharge (gpm) x 16 = cubic foot storage.

Certified pump curves are to be provided to ensure that the pump provided can meet the hydraulic requirements.

C. Tank Specifications

The Contractor shall use steel containers with baffles to provide that the volume requirements necessary.

D. Maintenance

The Contractor shall be responsible to clean out the sediment tank when one third (1/3) is filled with silt. All sediment collected in the tank shall be disposed of off-site.

E. Measurement and Payment

The quantity to be paid for under this item shall be the number of portable sediment tanks placed in accordance with the plans and specifications to the satisfaction of the Engineer, measured in number of above items at the site of the work.

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The Contract price per unit for portable sediment tanks shall be as indicated on the BID SCHEDULE OF PRICES, Item No. BMP-7.510. The bid price shall be a unit price per portable sediment tank and shall include the cost of all labor, materials and equipment necessary to furnish, place and incorporate and all other work incidental thereto, in accordance with the plans and specifications to the satisfaction of the Engineer.

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7.511 STORM DRAIN - INLET PROTECTION MEASURESA. Description of Work

The Contractor shall furnish all materials, labor and equipment necessary to install the storm drain - inlet protection measures. Storm drain inlet protection measure consists of a sediment filter, sediment control device or an excavated impounding area around a storm drain drop inlet, curb inlet or catch basin. The purpose of the storm drain - inlet protection measures is to prevent sediment from entering storm drainage systems prior to permanent stabilization of the disturbed area.

B. Conditions Where Practice Applies

Where storm drain inlets are or are to be made operational before permanent stabilization of the corresponding disturbed drainage area.

C. Planning Considerations

Storm sewers which are, or become operational prior to stabilization of the associated drainage areas can convey large amounts of sediment to natural drainageways. In case of extreme sediment loading, the storm sewer itself may clog and lose a major portion of its capacity. To avoid these problems, it is necessary to prevent sediment from entering the system at the inlets or capturing it in the storm drain inlet.

This practice contains several types of inlet filters and traps which have different applications dependent upon site conditions and type of inlet. Other innovative techniques for accomplishing the same purpose are encouraged, but only after specific plans and details are submitted to and approved by the Engineer, NYCDDC and NYCDEP Field Representatives.

Care shall be taken when choosing a specific type of inlet protection. Field experience has shown that inlet protection which causes excessive ponding in an area of high construction activity may become so inconvenient that it is removed or bypassed, thus transmitting sediment-laden flows unchecked. In such situations, a structure with an adequate overflow mechanism should be utilized.

The best way to prevent sediment from entering the storm sewer system is to stabilize the site as quickly as possible, preventing erosion and stopping sediment at its source.

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Stone is utilized as the chief ponding/filtering agent in most of the inlet protection types described in this specification. The various types of "coarse aggregates" which are depicted are able to filter out sediment mainly through slowing down flows directed to the inlet by creating an increased flow path for the stormwater (through void space in the respective stone). The stone filtering medium by no means slows stormwater flow rate as does filter cloth and therefore cannot provide the same degree of filter efficiency when smaller silt and clay particles are introduced into stormwater flows. However, as mentioned earlier, excessive ponding in busy areas adjacent to stormwater inlets is in many cases unacceptable - that is why stone must be utilized with many installations.

Fortunately, in most instances, inlet protection utilizing stone should not be the sole control measure. At the time that storm sewer inlet and associated appurtenances become operational, areas adjacent to the structures are most likely at final grade or will not be altered for extended periods; this is the time when temporary seeding and other appropriate controls should be implemented to enhance sediment-loss mitigation. In addition, by varying stone sizes used in the construction of inlet protection, a greater degree of sediment removal can be obtained. As an option, filter cloth can be used with the stone in these devices to further enhance sediment removal. Notably, the potential inconvenience of excessive ponding must be examined with these choices, especially the latter. In addition to sediment filtering options a sediment control device can be installed. A sediment control device is installed inside the storm drain thereby catching sediment that was not removed by the inlet filters while allowing water to pass through. A sediment control device is a secondary device to be used in conjunction with other storm drain inlet protection.

D. Design Criteria

1. The drainage area shall be no greater than 1 acre.
2. The inlet protection device shall be constructed in a manner that will facilitate cleanout and disposal of trapped sediment and minimize interference with construction activities.
3. The inlet protection devices shall be constructed in such a manner that any resultant ponding of stormwater will not cause excessive inconvenience or damage to adjacent areas or structures.
4. For the inlet protection devices which utilize stone as the chief ponding/filtering medium, a range of stone sizes is offered; DOT #3, #357, or #5 Coarse Aggregate shall be used.

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5. In all designs which utilize stone with a wire-mesh support as a filtering mechanism, the stone can be completely wrapped with the wire mesh to improve stability and provide easier cleaning.
6. Filter Fabric is added to any of the devices which utilize "coarse aggregate" stone to significantly enhance sediment removal. The fabric shall be secured between the stone and the inlet (on wire-mesh if it is present). As a result of the significant increase in filter efficiency provided by the fabric, a larger range of stone sizes (DOT #1, #2 or #3 Coarse Aggregate) may be utilized with such a configuration. The larger stone will help keep larger sediment masses from clogging the cloth. Notably, significant ponding may occur at the inlet if filter cloth is utilized in this manner.
7. Sediment Control Device is a woven polypropylene bag which is inserted into a catch basin or drop inlet to capture sediment. The sediment control devices are equipped with lifting loops or lugs to allow the devices to be removed, cleaned and reinserted back into catch basin or drop inlet.

E. Construction Specifications

1. Gravel and Wire Mesh Drop Inlet Sediment Filter
 - a. Wire mesh shall be laid over the drop inlet so that the wire extends a minimum of 1 foot beyond each side of the inlet structure. Wire mesh with 2-inch openings shall be used. If more than one strip of mesh is necessary, the strips shall be overlapped.
 - b. Coarse aggregate shall be placed over the wire mesh as indicated on Plate A. The depth of stone shall be at least 12 inches over the entire inlet opening. The stone shall extend beyond the inlet opening at least 18 inches on all sides.
 - c. If the stone filter becomes clogged with sediment so that it no longer adequately performs its function, the stones must be pulled away from the inlet, cleaned and/or replaced.

Note: This filtering device has no overflow mechanism; therefore, ponding is likely especially if sediment is not removed regularly. This type of device must never be used where overflow may endanger an exposed fill slope. Consideration should also be given to the possible effects of ponding on traffic movement, nearby structures, working areas, adjacent property, etc.

2. Block and Gravel Curb Inlet Sediment Filter

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- a. Two concrete blocks shall be placed on their sides abutting the curb at either side of the inlet opening.
- b. A 2-inch x 4-inch stud shall be cut and placed through the outer holes of each spacer block to help keep the front blocks in place.
- c. Concrete blocks shall be placed on their sides across the front of the inlet and abutting the spacer blocks as depicted in Plate B.
- d. Wire mesh shall be placed over the outside vertical face (webbing) of the concrete blocks to prevent stone from being washed through the holes in the blocks. Wire mesh with 2-inch openings shall be used.
- e. Coarse aggregate shall be piled against the wire to the top of the barrier as shown in Plate B.
- f. If the stone filter becomes clogged with sediment so that it no longer adequately performs its function, the stone must be pulled away from the blocks, cleaned and/or replaced.

3. Sediment Control Devices

- a. The sediment control device shall be manufactured from woven polypropylene and sewn using high strength nylon thread.
- b. The sediment control device shall be sized to fit a standard catch basin or drop inlet.
- c. The sediment control device shall include tie down straps (See Plate C).
- d. The sediment control device shall be manufactured by ACF Environmental Inc. or approved equal.
- e. The fabric shall be woven polypropylene fabric with the following properties:

<u>Property</u>	<u>Test Method</u>	<u>Test Result</u>
Grab Tensile	ASTM D-4632	265 lb to 300 lbs.
Grab Elongation	ASTM D-4632	20%
Puncture	ASTM D-4833	120 lbs.
Min. Mullen Burst	ASTM D-3786	420 lbs

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<u>Property</u>	<u>Test Method</u>	<u>Test Result</u>
Min. Trapezoid Tear	ASTM D-4533	120 lbs.
Min. UV Resistance	ASTM D-4355	80%
Apparent Opening	ASTM D-4751	20 to 40 US Sieve
Min. Flow Rate	ASTM D-4491	40 Gal/Min/Ft ²
Permittivity	ASTM D-4491	0.55 sec. ⁻¹

F. Maintenance

1. The structure shall be inspected after each rain and repairs made as needed.
2. Sediment shall be removed and the trap restored to its original dimensions when the sediment has accumulated to one half the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
3. Structures shall be removed and the area stabilized when the remaining drainage area has been properly stabilized.
4. To empty the sediment control device place a #8 rebar through the lifting straps and lift out of the catch basin. This will lift and turn the device inside out thereby dumping its contents. Clean out and wash with water. Reinstalled when clean. Dispose sediment off site.

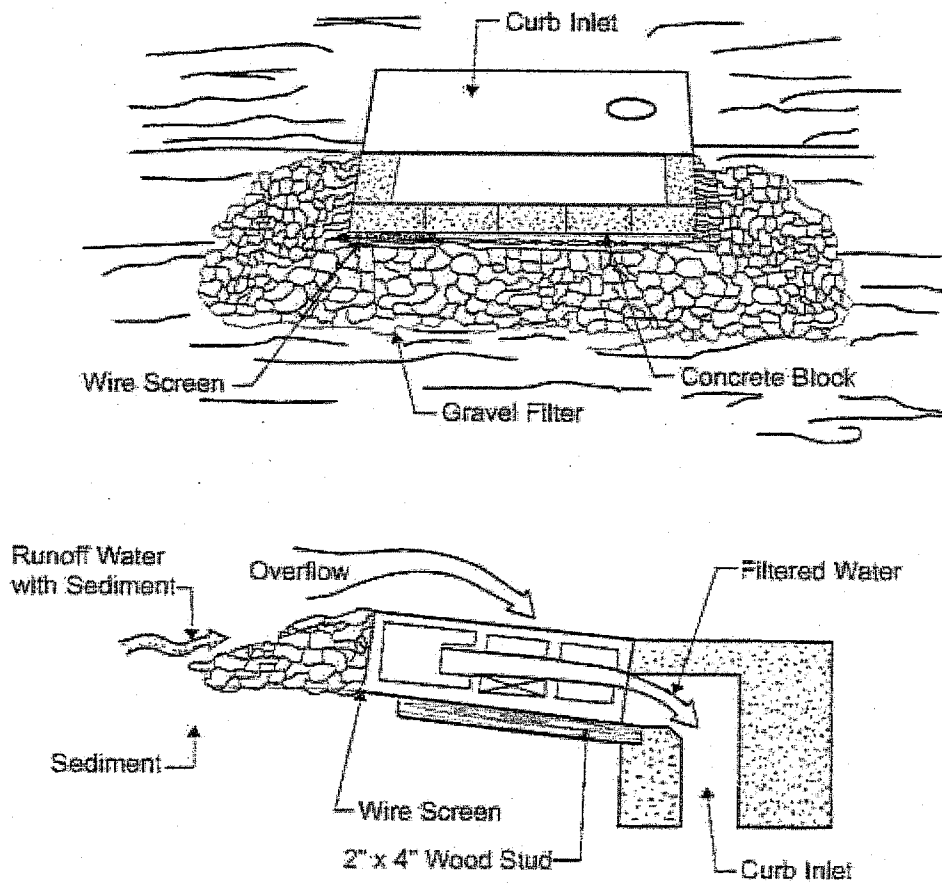
G. Measurement and Payment

The quantity to be paid for under this Item shall be the number of storm drain inlet protection measures furnished and maintained in accordance with the Contract Plans, specifications and directions of the Engineer. The Contract price per storm drain inlet protection measure shall be indicated on BID SCHEDULE OF PRICES, Item No. BMP-7.511. The unit price per measure shall include all labor, materials, equipment and work in accordance with the plans and specifications and to the satisfaction of the Engineer.

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Plate A

**Block and Gravel Curb Inlet
Sediment Filter**



Gravel Shall be DOT #3, #357 or #5 Coarse Aggregate

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Plate B

**Gravel and Wire Mesh
Drop Inlet Sediment Filter**

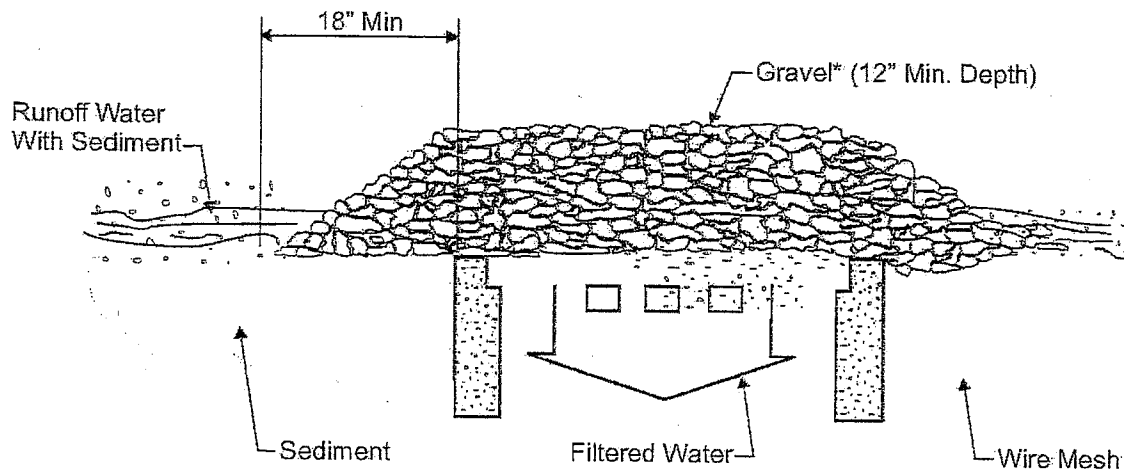
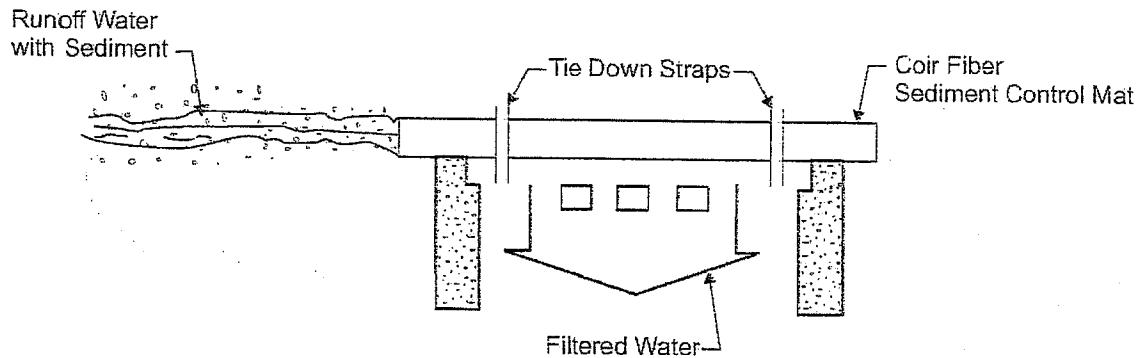


Plate C

**Drop Inlet Sediment with
Control Device Tie Down Straps**



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7.512 DIRTBAG

A. Description of Work

The Contractor shall furnish all materials, labor and equipment necessary to install the Dirtbags specified herein and as shown on the Contract Drawings.

Dirtbag is a fabric bag through which sediment laden water is pumped to trap and retain sediment. The Dirtbag is available from Erosion Control Technologies, Inc., ACF Environmental, or approved equal. The purpose of the Dirtbag is to prevent the silting of wetlands by trapping and retaining sediment prior to pumping the water to drainage ways, surrounding properties, and storm sewers.

B. Location

The Dirtbag shall be added to the portable sediment tank at the tanks discharge point. The Dirtbag can either be placed within the sediment trap or sediment basin near the inlet so that effluent from the bag flows into the trap or basin. This will serve to reduce the amount of sediment that enters the trap/basin, and provide for effective collection and disposal of sediment.

C. Specifications

<u>Properties</u>	<u>Test Method</u>	<u>Units</u>	<u>Woven 2016</u>	<u>Nonwoven</u>		
				<u>4551</u>	<u>4553</u>	<u>4555</u>
Weight	ASTM D-3776	oz./yd	8	6	8	10
Grab Tensile	ASTM D-4632	lbs.	300	150	200	270
Puncture	ASTM D-4833	lbs.	120	90	130	150
FlowRate	ASTM D-4491	Gal/Min/ft ²	40	130	80	70
Permittivity	ASTM D-4991	sec ⁻¹	0.55	1.9	1.5	1.3
UV Resistance	ASTM D-4355	%	80	70	70	80

E. Methods/Maintenance/Disposal

The flow pumped to the dirtbag should not exceed a rate of 800 gallons per minute, or as directed by the engineer.

Dirtbags shall be replaced when they observed to be half full or as directed by the engineer.

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The Contractor shall be responsible for the disposal of the Dirtbag off-site.

F. Measurement and Payment

The quantity to be paid for under this time shall be the number of Dirtbags placed in accordance with the Plans and Specifications to the satisfaction of the Engineer, measured in number of above items at the site of the work.

The Contract price per each Dirtbag shall be as indicated on the BID SCHEDULE OF PRICES, Item No. BMP-7.512. The bid price shall be a unit price per Dirtbag and shall include the cost of all labor, materials and equipment necessary to furnish, place and incorporate and all other work incidental thereto, in accordance with the Plans and Specifications to the satisfaction of the Engineer.

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PERIMETER SITE SECURITY/ACCESS CONTROL MEASURES

7.600 WORK INCLUDED

Under Perimeter Site Security and Access Control Measures, the Contractor shall provide all labor, material, 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>
7.601B	Galvanized Steel "W" Beam Guide Rail and Guide Rail Gate
7.602	Boulder Provision and Placement
7.604	Black Chain Link Fence
7.605	Sign Installation on Steel Rail Posts
7.606	Permanent Maintenance Access Way
7.608	Survey Bollards and Survey Monuments
7.612	Bronze Plaque
7.622	Forebay/Micropool Sediment Clean out Indicator
7.624	Swing Gate

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7.601B GALVANIZED STEEL "W" BEAM GUIDE RAIL AND GUIDE RAIL GATEA. Description of Work

Under this item, the Contractor shall furnish and install galvanized steel W beam guide rail in accordance with the plans, specifications and directions of the Engineer. For galvanized steel W beam guide rail details refer to the New York State Department of Transportation (NYSDOT) standard sheet 606-07.

The Contractor shall verify in the field the locations and quantities of new galvanized W beam guide rail to be installed as well as any other pertinent information regarding existing underground utilities, and shall mark in the field all existing subsurface utilities within the area of installation.

B. Materials

- a. Guide Rail: Guide rail shall be "W" beam type, meeting NYSDOT specifications 710-14 and 710-20.
- b. Details: Materials shall conform to NYSDOT sheet 606-07.
- c. Gate: The gate shall be a swing type made from No. 12 gauge galvanized steel with a welded ½" center braces at the mid span and at the end of the gate. The gate shall be 12' - 0" in length. The gate shall swing outwards and have two (2) heavy duty steel hinges each with axial capacity greater than 1000 lb and a radial capacity greater than 1500 lb. The hinges shall be welded to ½" galvanized angle.

The gate is also to have a steel hasp that secures to a steel welded loop on the post. Slot in hasp shall be oversized to allow for misalignment.

One (1) heavy duty steel gate caster with a six inch (minimum) wheel shall be furnished for each gate. The gate caster shall be the Polyurethane Gate Caster as manufactured by Caster City of Las Vegas, Nevada or approved equal. The caster shall be spring loaded and have a minimum spring deflection of 0.75 inches. The load capacity of the caster shall be a minimum of 700 lb. The non-metal wheel shall be on a swivel and have a capacity equal to or greater than that of the selected caster. The caster shall be bolted with 3/8" stainless steel bolts (ASTM F593) and nuts (ASTM F594) onto a vertical steel beam that is fastened to the "W"- beam. The mounted caster shall be positioned such that the spring compresses as the caster moves up to the high point of the gate's swing path.

Four (4) padlocks shall be furnished for each gate. The padlocks shall be American No. 5571 as manufactured by American Lock Company of Crete, Illinois (871-361-1040) or approved equal. All padlocks shall be

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keyed alike with two (2) inch width by three-quarter (3/4) inch thick brass body, maximum security, five (5) pin tumblers with hardened alloy steel chrome plated shackle no less than three-eighths (3/8) inch diameter and two (2) inch clearance (elongated shackle). The locks shall be keyed for NYC Fire Department No. 1620 keys. The Contractor shall furnish two (2) keys for each padlock.

C. Shop Drawings

The Contractor shall prepare and submit shop drawings to the Engineer for approval. No installation work shall begin until said approval has been obtained. Drawings shall show the spacing of posts, all necessary marking and dimensioning, and the details of fabrication and geometry of the special rail elements.

The Contractor shall be responsible for the proper fit of all components and completed installations.

D. Site Preparation

The area shall be cleaned and grubbed of all weeds and plant material under 6" in caliper only as necessary to install the new work by the Contractor. Wherever possible, trees are to remain. If the Engineer determines that plant material over 6" in caliper must be removed, the Contractor will perform this work under a separate item. If mounds of trash or dumped debris are present, the Contractor will be required to remove whatever is necessary for implementation of the new work. Precautions shall be taken by the Contractor to insure that all existing utilities and structures are safeguarded against injury. Any damage incurred shall be made good by the Contractor at no cost to the City.

E. Erection

Posts shall be set as shown on the plans or as directed by the Engineer, true to line and grade. The sections shall be erected in such a manner as to produce a smooth, continuous rail with the top about 29 inches above finished grade. Lap splices shall be lapped in the direction of traffic. Bolts shall be drawn tight and shall extend 3 to 2 inch beyond the nuts unless otherwise permitted.

Vertical Obstructions: The guide rail shall be interrupted for all vertical obstructions, including trees, clumps of trees, utility poles, fire hydrants and any other elements as determined by the Engineer. The Contractor shall allow a 1'-0" space on either side of the vertical element from the end of the appropriate terminal section.

The beams shall be spliced at or near each post by lapping or by butt joints with suitable splice plates allowing one-eighth (1/8) inch for change in temperature.

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Supporting posts shall be spaced not greater than twelve feet-six inches (12'-6") center to center. The splice plates shall make contact with the beams throughout the spliced area. Bolt holes in the beam at the post bolt and elsewhere as necessary shall be enlarged or slotted to permit expansion and contraction and to facilitate erection.

Posts shall be driven vertically plumb to the required depth in such manner and by such means as to insure no damage to the galvanized surface.

Water jetting in driving posts will not be permitted. The driving shall be accomplished with approved equipment and methods that will leave the posts in their final position, free of any distortion, burring or other damage. When posts are driven through asphalt concrete or a bituminous treated material, the Contractor shall take care to prevent damage to the paved or treated areas. Any voids caused by driving the posts shall be filled and compacted with bituminous material as approved by the Engineer.

F. Terminal Sections

Each end of every beam rail installation shall be fitted with an end section in the manner indicated on the plans. Each end section shall be made of the same material as that used in the construction of the beam rail. Where terminal section is not specified in plans, a single buffer end section shall be used.

G. Concrete Anchor/Anchorage Unit

Concrete anchor/anchorage unit shall be installed only as required by NYSDOT as shown on the Contract Drawings.

H. Restoration

Upon completion of the installation of the guide rail system components, the Contractor shall restore the area to the original state in which he/she found it. This may require the Contractor to repave, reseed and mulch all areas disturbed by the guide railing installation, including the areas adjacent to the anchor unit installation.

I. Measurement and Payment

The quantity to be measured for payment under this section shall be the total linear feet measured along the axis of the railing, from end of cover to end of cover, furnished and installed in accordance with the plants, specifications and directed by the Engineer.

Terminal sections of various kinds, as required by the plans and approved by New York City Department of Transportation, shall be included in the linear foot price.

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The contract price per linear foot for Galvanized Steel W Beam Guide Rail and Gate shall be as indicated on the BID SCHEDULE OF PRICES, Item and BMP-7.601-B. The contract price per linear foot for Galvanized Steel W Beam Guide Rail (no gate) shall be as indicated on the BID SCHEDULE OF PRICES, Item and BMP-7.601-G. The bid price shall constitute full compensation for all labor, materials, equipment and incidental expenses necessary the work including site restoration, minor pavement restoration, hardware splice plates and other incidental work necessary or required to complete the work in accordance with the plans and specifications to the satisfaction of the Engineer, except concrete anchor. If required, the costs for all labor, materials and equipment required for the anchor shall be deemed included in the price bid under DETAILED SPECIFICATIONS FOR CONCRETE. (Anchorage unit, steel rail and posts and swing gate are considered part of the linear foot price for this item).

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7.602 BOULDER PROVISION AND PLACEMENTA. Description of Work

Under this item, the Contractor shall furnish all material, labor and equipment necessary to place boulders throughout the contract area in accordance with the contract drawings and specifications as directed by the Engineer. In addition, the contractor will also furnish and deliver boulders as directed by the Engineer.

B. Materials and Construction Methods

Boulders are stones with a diameter between 36" to 42" or 42" to 48" or as shown in the Contract Drawings.

Unless otherwise directed, the Contractor shall excavate a depression as directed by the Engineer prior to setting each boulder in place, in order to achieve a more natural appearance.

The Contractor shall carefully protect all trees, shrubs and other growth to remain and shall be liable for all damages to property caused by boulder placement operations. All trees, plants and other property damaged by boulder placement operations shall be replaced or restored to their original condition to the satisfaction of the Engineer at no additional cost to the City.

1. Perimeter Boulder Placement: Boulders shall be placed along portions of the site perimeter to secure accessible segments. Boulders shall be set roughly parallel to the edge of road. Boulder locations shall be worked into and around existing plantings and natural features; any conflicts shall be brought to the attention of the Engineer prior to boulder placement. All boulder locations shall be marked out and shall be approved by the Engineer prior to placement.
2. Clump/Gap Design: Boulders shall be laid out roughly parallel to the edge of road, between two (2) feet and six (6) feet from road edge. Boulders shall be set in groups or "clumps" where vehicular accessibility into site exists as directed by the Engineer. Stone quantities per clump shall range between three (3) and eight (8). The groupings shall be connected by boulders placed in a single row between the clumps, hence forming "gaps". Existing natural features and vegetation located along the site perimeter shall also be incorporated as gaps. Spaces between boulders or between incorporated trees and boulders shall not exceed four (4) feet.

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3. Single Row Design: Boulders shall be laid out roughly parallel to the edge of road, between two (2) feet and four (4) feet from road edge. Boulders shall be set in a single row. Spaces between boulders or between incorporated trees and boulders shall not exceed four (4) feet.
4. Stream Placement: Boulders are to be sporadically placed in and along the streams according to the drawing and as per the Engineer.
5. Cascade Perimeter: Boulders are placed in a row along the perimeter of the granite cascades as set and spaced according to the drawings and as per the Engineer.

Boulders shall be set in locations where they will achieve the intended design function, and shall be placed so as to harmonize with existing natural features and appear naturally set. All boulder locations shall be approved by the Engineer prior to placement.

C. Delivery

The Contractor shall furnish and deliver unused boulders to the following address:

DEP Staten Island Bluebelt
182 Joline Avenue
Staten Island, NY 10307
718-984-0489
718-984-4430 (fax)

D. Measurement and Payment

The quantity to be paid for under this item shall be the number of approved boulders placed and incorporated in the completed work in accordance with the plans and specifications to the satisfaction of the Engineer.

The contract price per boulder furnished and installed shall be as indicated on the BID SCHEDULE OF PRICES Item No. BMP-7.602. The bid price shall be a unit price per boulder and shall include the cost of all labor, materials and equipment necessary to furnish, place and incorporate and all other work incidental thereto, in accordance with the plans and specifications to the satisfaction of the Engineer.

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7.604

BLACK CHAIN LINK FENCEA. Description of Work

Under this item, the Contractor shall excavate and install concrete footings and furnish, paint and erect chain link fences and gates, in accordance with the Plans and Specifications and directions of the Engineer. For Black Chain Link Fence details, refer to Contract Drawings.

The black chain link fence shall be 4 ft high as specified in the Contract Drawings.

B. Materials and Construction Methods

1. Excavation Procedures: Excavation for the concrete footings for the chain link fence posts shall be defined as the removal of earth necessary to install the concrete footings for the chain link fence in accordance with the Plans and Specifications and as directed by the Engineer.

The Contractor shall place, compact and/or dispose of any excavated material as directed by the Engineer, this includes any materials deemed suitable for re-use on site.

- a. Surplus: All surplus materials not suitable for backfill shall be removed from the site and properly disposed of by the Contractor at no additional cost to the City.
 - b. Maintenance and Draining: The Contractor shall keep all excavations for concrete footings in a dry condition and shall furnish all equipment and labor required to keep the excavations free from water, ice, or snow during construction.
 - c. Backfill: Following inspection and approval of concrete footings for the chain link fence posts, the excavated voids around these masonry footings shall be backfilled with clean, excavated material tamped and rammed into place in layers not over six (6") inches in depth.
2. Concrete Footings:
 - a. Concrete: Concrete footings shall be furnished and placed as shown on the Plans or as directed by the Engineer. Concrete for the footings shall conform to NYC Department of Transportation, Class B-32, Type II-A, air-entrained, moderate sulphate resistant. Each batch shall contain a minimum of six (6) bags of cement per cubic yard of concrete, a maximum of 63" gallons of water per

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bag, and shall have a maximum three (3") slump. Each batch of concrete shall have a compressive strength of 3,000 psi. Large aggregate shall be limited to one (1").

- b. Cement: All cement used shall be Air Entraining Portland Cement, ASTM C175.
- c. Forms: The Contractor shall furnish and place forms for the concrete footings as required in order to successfully install the footings and shall remove them following curing as directed by the Engineer.
- d. Curing: All concrete footings shall be covered and kept moist during the curing process as directed by the Engineer.

3. Fence Parts:

All fittings, hardware and equipment shall be designed to carry one hundred (100) percent overload.

Malleable Iron castings shall be hot-dipped galvanized in accordance with ASTM A153.

Wrought iron forgings and pressed steel fittings and appurtenances shall be hot dipped galvanized in accordance with ASTM A123.

All fittings, hardware and equipment shall be of materials listed in the following schedule:

<u>Fence Part</u>	<u>Material</u>
Boulevards, Split Fittings	Malleable Iron or Pressed Steel 3/16" thick and End Clamps
Post Caps and Line Tops	Malleable Iron or Pressed Couplings Steel 3/16" thick Galvanized Steel Pipe - 1/8" thick with 1/4" Diameter Rivet
Bolts and Nuts	Galvanized Steel or Stainless Steel as indicated on plans
Tension Bars	1/4" x 3/4" Galv. Steel for 2" Mesh
Tension Bands	1/8" x 1" Pressed Steel

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4. Posts and Rails:

Posts and Rails shall be of Type I or Type II specifications, as described below:

Type I - Posts and rails shall be standard weight galvanized steel pipe of the sizes shown on the plans and shall conform to ASTM F1083 Schedule 40. Posts and rails shall be galvanized in accordance with ASTM A123.

OR

Posts and rails shall be Type II, SS-40 steel tubing as manufactured by Allied Tube and Conduit Corp. of Harvey, Illinois, or approved equal. Tubing must conform to ASTM A569, cold rolled steel pipe and coated with a minimum of 0.9 ounces of zinc per square foot, a minimum of 15 micrograms of zinc chromate per square inch and a minimum of .3 mils cross link polyurethane acrylic exterior coating. Steel pipe supplied under this option shall be of the same outside diameter as Schedule 40 pipe and achieve a minimum yield strength of 50,000 psi.

5. Fabric:

Fabric shall be vinyl coated galvanized steel wire. The color of the vinyl coating shall be black.

Wire shall be of good commercial quality made in the open hearth or electric furnace and after manufacture shall have a minimum tensile strength of 78,000 psi.

Zinc for galvanized coating shall conform to ASTM B6, galvanized by the hot dipped process method, AISI, Type I, before vinyl coating. Coating shall be smooth.

Vinyl shall be polyvinyl chloride meeting the following requirements:

Specific Gravity shall be a minimum of 1.30 tested in accordance with ASTM D792.

Hardness shall have a minimum Durometer reading of A95 in accordance with ASTM D2240. Ultimate elongation shall be 275% in accordance with ASTM D412.

Tensile strength shall have a test minimum of 3,300 psi in accordance with ASTM D412.

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Vinyl shall be a dense and impervious covering free of voids, having a smooth, lustrous surface without pinholes, bubbles or voids, rough or blistered surface.

6. Thickness of Fabric:

- a. Two Inch Mesh: Uncoated wire dimension shall be 0.148 inches diameter (9 gauge). Zinc coating shall be 0.40 ounces per square foot of wire surface. Vinyl coating shall be not less than 0.022 inches.
- b. Ties: Tie-wire shall be three-sixteenth (3/16) inch diameter wrought aluminum alloy 1100-H16 wire. Ties shall be spaced fifteen (15) inches apart on rails and twelve (12) inches apart of posts. The ends of ties shall be wound in a telegraph twist two and one half turns.

7. Gates

a. Fabrication and Materials

1. All gates shall be of the swing type and shall comply with ASTM F 900.

Gate hinges shall be 180 degree heavy industrial, double clamping offset type. To hold the gate in the open or closed positions, each gate frame shall be provided with a keeper which automatically engages a gate shoe set in concrete. Gates shall have a drop latch with provision for a padlock.

Four (4) padlocks shall be furnished for each gate. The padlocks shall be American No. 5571 as manufactured by American Lock Company of Crete, Illinois (871-361-1040) or approved equal. All padlocks shall be keyed alike with two (2) inch width by three-quarter (3/4) inch thick brass body, maximum security, five (5) pin tumblers with hardened alloy steel chrome plated shackle no less than three-eighths (3/8) inch diameter and two (2) inch clearance (elongated shackle). The locks shall be keyed for NYC Fire Department No. 1620 keys. The Contractor shall furnish two (2) keys for each padlock.

All gate frames shall have intermediate horizontal rails. Gate frames shall be of welded construction and shall be

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galvanized after fabrication. Single gates 6 feet wide or wider and double gates 12 feet wide or wider shall be provided with diagonal bracing in one direction, extending from top to bottom rail. The diagonal bracing shall be at least ½ inch in diameter and shall be provided with turnbuckles. The gate's fabric shall be polyvinyl chloride coated to match fence.

b. Adjustments

1. Gates: After repeated operation of completed installation equivalent to three days' use by normal traffic, readjust gates for optimum operation and safety.
2. Lubricate operating equipment and clean exposed surfaces.

8. Field Installation:

The posts shall be set in holes which shall have been formed in the footings as shown on the Plans or directed by the Engineer. After the posts have been set in place and properly supported to hold them in line and grade, the resulting space shall be filled with a grout consisting of one (1) part cement and two (2) parts sand.

All end and corner posts shall have a 2" diameter brace rod and turn buckle.

Chain link fabric shall be attached to line and corner posts and top, intermediate and bottom rails. Posts shall be set plumb and true to line and grade. Any post not set true to line and grade shall be removed and replaced at the Contractor's expense. Bending posts to make them plumb will not be permitted.

The Contractor shall maintain the chain link fences during the life of the contract and shall repair and replace all members that are disturbed, damaged, or destroyed from any cause at no cost to the City.

Precautions shall be taken by the Contractor to protect all utilities, structures, adjacent trees, shrubs and natural features against damage or injury. Any damage or injury incurred shall be made good by the Contractor at no extra cost to the City.

- a. Bolt Installation: The ends of all bolts shall be peened after tightening. Bolts which are installed six (6) feet or less above the

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grade shall not protrude more than 3" beyond the nut after tightening. All rough edges resulting from the cutting of bolts to achieve this requirement shall be filed smooth to the satisfaction of the Engineer.

9. Submissions:

- a. Paint Substitution: A written request for paint substitution must be submitted to the Engineer. 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.

10. Certification: The Contractor shall submit at his own expense a certification from the supplier for the following:

- a. All castings are made from malleable iron.
- b. All hot-dipped galvanized items have met the ASTM as indicated in these Specifications.

11. Shop Drawings: Before all work in the shop is started, the Contractor shall submit shop drawings for approval by the Engineer.

12. Shipping Lists: The shipping list for the materials furnished shall be endorsed with the manufacturer's voucher certifying that the materials used comply with these specifications.

13. Clean-up and Removals: After field installation is complete, the Contractor shall remove from the work areas any excess material, debris, litter, etc. used for or remaining from the chain link fence installation.

C. Measurement and Payment

The Contract price per linear foot for the Black Chain Link Fence shall be as indicated on the BID SCHEDULE OF PRICES, BMP - 7.604-4 for 4 ft fence.

For Black Chain Link Fence Gates, the Contract price per each gate furnished and installed shall be as indicated on the Bid Schedule of Prices, BMP-7.604-G for 4-foot Black Chain Link Fence Gate. The bid price shall be a unit price per each gate furnished and installed and all other work incidental thereto in accordance with the plans and specifications to the satisfaction of the Engineer.

The unit price bid shall include the costs for all labor, material, equipment and incidental expenses necessary or required to complete the work in accordance

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with the plans and specifications to the satisfaction of the DEP Field Representative.

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7.605 SIGN INSTALLATION ON STEEL RAIL POSTSA. Description of Work

Under this item, the Contractor shall provide all labor, materials, equipment, testing and incidentals required to furnish and install the temporary signs on construction limit fence, new rigid aluminum permanent Sweet Brook Bluebelt Identification signs and Adopt-A-Bluebelt signs on steel rail sign posts, and furnish and deliver replacement Bluebelt Identification signs as required in this Contract and in accordance with the plans, specifications and directions of the Engineer.

B. Materials and Construction Methods

All steel rail sign posts shall be rolled from material meeting the standard specifications for Hot-Rolled Rail Steel Carbon Bars and shapes ASTM A499-64 or new billet steel ASTM A576-81. Welded or jointed sign posts will not be acceptable.

All posts shall be of a uniform, modified, flanged channel section such that the area of contact between the post and the sign is symmetrical with the vertical axis of both the sign and posts. The width of the flange face shall be 32", the width of the back face shall be 1-7/8" and the depth from face of flange to back shall be 1".

The minimum weight of each post before holes are punched shall be 3 pounds per foot of length.

The length of each steel sign post shall be 12'.

Each steel sign post shall be punched with 3/8" diameter holes along the centerline, spaced at 1" centers beginning 1" from the top of post for the entire length.

The finished posts shall be machine straightened and have a smooth, uniform finish free from cracks, flaws, injurious seams, blisters, ragged, sharp and imperfect edges or other defects affecting strength, durability, or appearance. 3/8" diameter bolt holes shall be accurately spaced vertically and centered horizontally so that the holes will register for back to back application. All holes and sheared ends shall be free from burrs.

All posts shall be painted with a weather resistant, rust inhibitive, high quality dark green enamel which shall produce a hard, mar resistant coating free from all paint cracks, blisters or other defects. Before painting, all posts shall be thoroughly cleaned of dirt, rust, loose scale, oil or grease. The minimum thickness of the dry film enamel shall be one mil. It shall pass a standard 100

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hour salt spray test (20% solution by spray or fog at 70 deg.). Painting shall be the final process after fabrication and punching are completed.

All steel sign posts furnished under this Contract shall be packed and delivered in such a manner that no injury or defacement may occur to the finished unit.

C. Steel Rail Installation

The area for concrete footing shall be excavated to the dimensions shown on the drawings. The footing shall be dug with a power auger, post hole digger or as directed by the Engineer.

The steel railing sign post shall be set and centered in the hole, to the elevation shown on the drawings which shall have been previously excavated. After the post has been set and properly supported to hold it true and plumb, the hole shall be filled with concrete. The concrete footing for the steel rail sign post shall be constructed from 3,000 psi strength concrete.

The Contractor shall take every precaution to safeguard against damage or injury to all existing utilities, structures, adjacent trees, shrubs and natural features to remain. Any damage or injury incurred shall be remedied by the Contractor at no cost to the City and to the satisfaction of the Engineer.

D. Signage Installation

Following installation of the steel rail sign posts, the Contractor shall install the rigid aluminum BMP Identification Signs on the steel rail sign posts with two (2), d" diameter Machine Bolts with nuts and washers in accordance with the plans and specifications and as directed by the Engineer.

Two (2) sets of replacement fasteners shall be supplied to the Bluebelt Field Office located at 182 Joline Avenue for each sign installed.

The Contractor shall remove any excess material, debris, litter, etc., used for or remaining from the installation work area.

E. Furnish Temporary (During Construction) Flexible Aluminum Signs, 0.020" Gauge Aluminum & Install on Construction Limit Fence

1. Description of Work

Under this item, signs furnished shall be new aluminum, not previously used as a sign, with white vinyl sheeting. The appropriate lettering and graphics shall be silk screened onto the vinyl sheeting.

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The Contractor shall provide all labor, materials, equipment, testing and incidentals required to furnish new signs and install the temporary (during construction) flexible aluminum signs on the construction limit fence and/or reinforced silt fence, in accordance with the plans, specifications and directions of the Engineer. The Contractor will be responsible for maintaining the signs on the fencing for as long as the adjacent street is an active construction site. In order to do this, the Contractor will replace as necessary. For each sign installed, the Contractor will supply one replacement sign to the DEP Bluebelt office located at 182 Joline Avenue. All leftover signs after the project is over will also be delivered to 182 Joline Avenue.

2. Materials and Methods

Signs shall be made of flat, unpainted aluminum, Alloy 6063-T5, 0.020" thick. The sign dimensions shall be 14" x 8-1/2". Each sign shall be cut from one piece of aluminum, and shall be free of wind buckle, dents, twists. The face of each sign shall be substantially a plane surface. All edges and corners shall be filed or ground smooth, so that the sign shall be free from sharp edges and burrs. Welded or jointed signs will not be accepted. The Contractor shall install signs every fifty (50) feet on reinforced silt fence and on construction limit fence.

Signage shall be as manufactured by the Walter Sign Corporation, Sign Designers of New York, Inc., or approved equal.

3. Cleaning Treatment:

Each sign shall be prepared by the manufacturer as follows:

- a. Initial cleaning of all blanks shall be by complete submersion in a three percent (3%) solution of an inhibited alkaline cleaner at 160 to 180 degrees Fahrenheit for three (3) minutes, followed by a rinse with clean, cold running water. Alternatively, a grease solvent such as Naptha or Trichlorethylene may be used, when the application is in accordance with the directions of the manufacturer of the cleaner product.
- b. Secondary cleaning shall follow preliminary cleaning by immersion for one (1) minute in circulating hot water at 180 degrees Fahrenheit. Each sign shall then be dried by forced warm air. Alternatively, the clean sign blank may be prepared by the process conforming to military specifications MIL-C-5541, such as Alodine or approved equal. If a chemical conversion coating is employed, the coating shall be free of all powder residue.

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- c. Following preliminary cleaning, the sign blanks shall be handled only by mechanical means or with gloved hands.
- d. All aluminum sheets shall be guaranteed to maintain flatness when exposed to 340 degrees for ten (10) minutes.

4. Vinyl Sheeting

Vinyl sheeting shall be either Type I, Class I, pressure sensitive adhesive or Type III, Class I, heat activated adhesive conforming to Military Specifications MIL-M-43719B.

Apply the vinyl sheeting to the treated sign in accordance with the manufacturer's specifications.

Durability of sheeting shall provide for a minimum of 10 years of useful life in the climatic conditions existing in New York under normal, vertical, exterior street sign exposure when applied in accordance with the manufacturer's recommendations.

5. Lettering:

The signs shall be inscribed by means of a silk screen process with the borders, lettering, and graphics as indicated on the Contract Drawings.

When vandal resistant inks, compatible with the vinyl sheeting, are available and are recommended by the sheeting manufacturer, these inks shall be used. Vandal resistant inks shall be applied in accordance with the manufacturer's specifications.

The colors shall be blue and green lettering and graphics on a white baked enamel background in accordance with the Contract Drawings and to the satisfaction of the Engineer. Colors shall correspond as follows: Green PMS 355 and Blue PMS 287.

Lettering shall be the font styles and point sizes as represented on the Contract Drawings or approved substitute fonts and sizes.

6. Sign Layout

Layout of the sign shall be in accordance with the Contract Drawings and to the satisfaction of the Engineer.

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7. Finish

The finished sign shall be clear coated, with a Finishing Clear, unless the manufacturer of the sheeting recommends that the sign not be coated. The Finishing Clear shall be compatible with the sheeting and applied in accordance with the specifications of the manufacturer of the vinyl sheeting. When clear coating is optional the sign shall be clear coated. When the manufacturer of the sheeting recommends a vandal resistant Finishing Clear or vandal overlay, the Finishing Clear or overlay shall be used and applied in accordance with the manufacturer's specifications. Vandal resistant inks will not be required when vandal resistant Finishing Clear or overlay is used.

The finished sign shall be uniform in color and tone, with sharply defined edges and borders and without blemishes on the sign background that will affect sign use.

The sign surface shall be readily refurbished by cleaning and clear overcoating in accordance with the manufacturer's recommendations.

8. Provision of Sign Mock-Up

The Contractor shall provide one full-size sign as a mock-up, to the Engineer for approval, prior to production of the required number of signs. The Contractor shall not begin sign production until the Engineer has given approval in writing. Any corrections required to make the mock-up in conformance with these specifications and Contract Drawings shall be done at the Contractor's expense.

9. Time of Performance

The temporary flexible aluminum sign will be installed on the snow fencing with hay bales before sewer construction proceeds in the adjacent street or not later than fifteen (15) days after the date of the Notice to Proceed letter sent by the Engineer whichever is first.

10. Measurement and Payment

The quantity of 0.020" Gauge Aluminum Signs to be paid for under this item shall be the total number of signs fabricated and installed at the designated locations or delivered to DEP, in accordance with the plans, specifications and directions of the Engineer.

The contract price per 0.020" Temporary Sign shall be as indicated on the BID SCHEDULE OF PRICES Item No. BMP-7.605-B. The unit price

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shall include the costs of all labor, materials, equipment and incidental expenses necessary or required to complete the work in accordance with the plans and specifications and to the satisfaction of the Engineer.

F. Furnish Permanent Sweet Brook ID and Adopt-A-Bluebelt Rigid Aluminum Signs. (0.080" Gauge Aluminum) Furnish Permanent ID Replacement Signs

1. Description of Work

Under this item, signs furnished shall be new aluminum, not previously used as a sign, with white vinyl sheeting. The appropriate lettering and graphics shall be silk screened onto the vinyl sheeting.

The Contractor shall provide all labor, materials, equipment, testing and incidentals required to furnish and store new Sweet Brook BMP Identification signs and Adopt-A-Bluebelt signs in accordance with the plans, specifications and directions of the Engineer. The Contractor shall supply five replacement Sweet Brook BMP Identification signs to the DEP Bluebelt Field Office, located at 182 Joline Avenue. No Adopt-A-Bluebelt replacement signs shall be provided.

2. Materials and Construction Methods

Signs shall be made of flat, unpainted Aluminum, Alloy 6061-T6, 0.080" thick. The sign dimensions shall be 12" x 18". The corners of the sign shall be rounded so that all edges shall have 1" radius corners as per NYCDOT standard. Each sign shall be cut from one piece of aluminum, and shall be free of wind buckle, dents, and twists. The face of each sign shall be substantially a plane surface. All edges and corners shall be filed or ground smooth, so that the sign shall be free from sharp edges and burrs. Welded or jointed signs will not be accepted. The sign blanks shall be cut and drilled in accordance with the Contract Drawings. Holes shall be drilled in the following manner: each rigid aluminum sign shall receive a d" diameter hole at the centerline of the sign 1" from the top and a d" diameter hole at the centerline of the sign 1" from the bottom of the sign. To permit interchangeability of signs on existing and new sign posts, the distance between drilled holes must be accurately maintained.

Signage shall be as manufactured by Sign Designers of New York, Inc., Walter Sign Corporation, or approved equal.

3. Cleaning Treatment

Each sign shall be prepared by the manufacturer as follows:

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- a. Initially, clean all blanks by complete submersion in a three percent (3%) solution of an inhibited alkaline cleaner at 160 to 180 degrees Fahrenheit for three (3) minutes, followed by a rinse with clean, cold running water. Alternatively, a grease solvent such as Naptha or Trichlorethylene may be used, when the application is in accordance with the directions of the manufacturer of the cleaner product.
 - b. Secondary cleaning shall follow preliminary cleaning by immersion for one (1) minute in circulating hot water at 180 degrees Fahrenheit. Each sign shall then be dried by forced warm air. Alternatively, the clean sign blank may be prepared by the process conforming to military specifications MIL-C-5541, such as Alodine or approved equal. If a chemical conversion coating is employed, the coating shall be free of all powder residue.
 - c. Following preliminary cleaning, the sign blanks shall be handled only by mechanical means or with gloved hands.
 - d. All aluminum sheets shall be guaranteed to maintain flatness when exposed to 340 degrees for ten (10) minutes.
4. Vinyl Sheeting:
- a. Vinyl sheeting shall be either Type I, Class I, pressure sensitive adhesive or Type III, Class I, heat activated adhesive conforming to military specifications MIL-M-43719B.
 - b. Apply the vinyl sheeting to the treated sign in accordance with the manufacturer's specifications.
 - c. Durability of sheeting shall provide for a minimum of 10 years of useful life in the climatic conditions existing in New York under normal, vertical, exterior street sign exposure when applied in accordance with the manufacturer's recommendations.
5. Lettering
- a. The signs shall be inscribed by means of a silk screen process with the borders, lettering, and graphics as indicated on the Contract Drawings.
 - b. When vandal resistant inks, compatible with the vinyl sheeting, are available and are recommended by the sheeting manufacturer,

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these inks shall be used. Vandal resistant inks shall be applied in accordance with the manufacturer's specifications.

- c. For BMP ID signs, the colors shall be blue and green lettering and graphics on a white baked enamel background in accordance with the Contract Drawings and to the satisfaction of the Engineer. Colors shall correspond as follows: Green PMS 355 and Blue PMS 287.
- d. Lettering shall be the font styles and point sizes as represented on the Contract Drawings or approved substitute fonts and sizes.

6. Sign Layout

- a. Layout of the sign shall be in accordance with the Contract Drawings and to the satisfaction of the Engineer.

7. Finish

- a. The finished sign shall be clear coated, with a Finishing Clear, unless the manufacturer of the sheeting recommends that the sign not be coated. The Finishing Clear shall be compatible with the sheeting and applied in accordance with the specifications of the manufacturer of the vinyl sheeting. When clear coating is optional the sign shall be clear coated. When the manufacturer of the sheeting recommends a vandal resistant Finishing Clear or vandal overlay, the Finishing Clear or overlay shall be used and applied in accordance with the manufacturer's specifications. Vandal resistant inks will not be required when vandal resistant Finishing Clear or overlay is used.
- b. The finished sign shall be uniform in color and tone, with sharply defined edges and borders and without blemishes on the sign background that will affect sign use.
- c. The sign surface shall be readily refurbished by cleaning and clear overcoating in accordance with the manufacturer's recommendations.

8. Provision of Sign Mock-Up:

The Contractor shall provide one full-size sign as a mock-up, to the Engineer for approval, prior to production of the required number of signs. The Contractor shall not begin sign production until the Engineer has given approval in writing. Any corrections required to make the mock-up

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in conformance with these specifications and Contract Drawings shall be done at the Contractor's expense.

9. Delivery of Replacement and Left-Over Signs

After all signs required for this project are installed, the Contractor shall deliver all replacement and left-over signs to the following location:

DEP Staten Island Bluebelt Field Office
182 Joline Avenue
Staten Island, New York 10307
718-984-0489
718-984-4430 (fax)

The signs shall be packaged so as to prevent scratching, bending or other damage while they are being shipped and stored. DEP reserves the right to inspect and reject any damaged signs. The Contractor will supply five replacement BMP Identification signs to the DEP Bluebelt Field Office. No Adopt-A-Bluebelt replacement signs shall be provided.

10. Time of Performance:

The Contractor shall supply all the signs not later than fifteen (15) days after the date of the Notice to Proceed Letter sent by the Engineer.

11. Packaging and Storage:

The BMP Identification signs shall be packaged and stored so as to facilitate their proper handling and storage until such time the Contractor can install them on the steel rail sign posts.

12. Measurement and Payment

The quantity of 0.080" Gauge Aluminum Signs to be paid for under this item shall be the total number of signs, fabricated and installed on steel rail posts or delivered in accordance with the plans, specifications and directions of the Engineer. All extra signs not installed shall be delivered to the DEP Bluebelt Field office on Staten Island at no extra cost to the City.

The contract price per 0.080" Permanent Sign installed on Steel Post shall be as indicated on the BID SCHEDULE OF PRICES: Item No. BMP-7.605-A. The contract price per 0.020" Temporary Sign installed shall be as indicated on the BID SCHEDULE OF PRICES: Item No. BMP-7.605-B.

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The schedule of 0.080" Permanent Sign furnished, delivered and installed shall be as follows:

Quantity	Description
4	Adopt A Bluebelt
3	BMP ID
4	Sweet Brook

The unit price shall include the costs of all labor, materials, equipment, installation and incidental expenses necessary or required to complete the work in accordance with the plans and specifications and to the satisfaction of the Engineer.

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7.606 PERMANENT ACCESSWAY WITH CONCRETE PAVERS OR GRAVEL

A. Description of Work

The Contractor shall provide all labor, materials, tools and equipment necessary to complete the permanent accessways as shown in the Contract Drawings and as directed by the Engineer.

B. Materials and Methods - Concrete Pavers

1. Pavers

The permanent accessway shall be constructed using concrete grid pavers. Unless directed by the Engineer, materials and methods shall conform to ICPI Technical Specification #8. The pavers shall be 23 5/8" x 15 3/4". They shall be made in a grid-like pattern 3 1/8" in height. The pavement accessway edges shall be secured with a concrete curb. The pavers and adjoining curb shall be earthtone brown in color. The pavers shall be fabricated of Portland Cement Type II or III fine and course aggregates (ASTM C-33-61) utilizing a steel mesh-6"/6" x 8/8 gauge with an air-entraining agent between 4%-6% (ASTM C-173) achieving a concrete strength of 5,000 psi at 28 days (ASTM C-39-49) and a maximum water absorption of 5% (ASTM C-97). The concrete grid pavers shall be manufactured by Metromont Materials Company or approved equal.

2. Crushed Stone

The crushed stone layer shall consist of 1/2" to 1" stone, with gradation conforming to ASTM D2940.

3. Sand

Sand bedding shall consist of concrete sand, with gradation conforming to ASTM33(6).

4. Filter Cloth

Filter cloth underliner shall have the following minimum properties:

Grab tensile strength	220 lbs.
Elongation at failure	220%
Mullen Burst Strength	430%
Puncture Strength	125 lbs.
Equivalent opening size	40-80 mm
Filter cloth shall be Trevira Spunbound 1135, Mirafi 600x, or approved equal.	

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5. Testing

The pavers should be tested and confirm to the following tests:

Compression/Load Test (ASTM C 67 - Adapted)

Samples are to be conditioned at 70°F (21°C) and 50% relative humidity room for 24 hours prior to testing. Cut samples of 12" x 12" were used for this test.

A. Load Tests - Quarter of a full Panel.

Sample No.	Effective Area (sq.in)	Maximum Load (lbs.)	Load Strength Per Unit (PSI)
1	49.00	287,000	5,857
2	49.00	296,000	6,041
3	49.00	322,000	6,571
<i>Average:</i>			6,156

B. Compression Tests - Single Block Unit

Sample No.	Effective Area (sq.in)	Maximum Load (lbs.)	Compression Strength Per Unit (PSI)
1	12.25	68,500	5,592
2	12.25	65,000	5,306
3	12.25	70,000	5,714
<i>Average:</i>			5,537

6. Installation Procedure

- a. Prior to placing a dense-graded base, the soil subgrade or approved fill should be uniformly compacted to at least 95% of standard Proctor density per ASTM D698(4). Remove from the setting bed rock or other materials which would create uneven bearing.

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- b. Install concrete curb along the perimeter outlining the entire area to receive crushed stone and pavers.
- c. A 12 inch deep crushed stone base should then be installed, compacted to a minimum of 98% standard Proctor density (4).
- d. Place sand in a 2" compacted layer over the base to present a true and even grade over entire area to receive pavers.
- e. Set pavers and line up to abut.

7. Void Filler

Thoroughly mix topsoil with fertilizer and spread loosely to fill voids in pavers. Water with a mist spray to settle. Add additional topsoil mix to bring the topsoil flush with top of the paver. Seed at slightly less than normal rate. When grass is 2 1/2" high, cut to 1 3/4".

C. Material and Methods - Gravel

The specifications for permanent gravel accessway shall be the same as those for stabilized construction entrance of this Detailed Specification Section 7.509A.

D. Measurement and Payment

The contract price per square foot for Permanent Accessway with Concrete Pavers shall be as indicated on the BID SCHEDULE OF PRICES Item No. BMP-7.606-B for pavers and Item No. BMP-7.606-C for gravel. No separate payment shall be made for concrete curbing or sub base material used for pavers. The unit price per square foot shall include all labor, materials, equipment and incidental expenses necessary to complete the work in accordance with the plans and specifications to the satisfaction of the Engineer.

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7.607

HERBIVORE EXCLUSION FENCE

NO TEXT ON THIS PAGE

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7.608 SURVEY BOLLARDS AND SURVEY MONUMENTSA. Description

The Contractor shall furnish and install Survey Bollard and Survey Monuments which are used to delineate the boundaries of DEP properties. The Surveying services to determine the location of the Survey Bollards and Monuments is provided under a separate contract item. The general location of the Bluebelt properties to have the Survey Bollards and Survey Monuments to be installed are shown on the Contract Drawings.

B. Materials

1. Survey Bollards – All bollards shall be made of wood. All wood bollards shall be Southern Yellow Pine, No. 1 grade timbers as graded by the Southern Pine Inspection Bureau (SPIB), conforming to the American Softwood Lumber Standards and defined in paragraph 402 of the SPIB grading rules, 1994 edition. Additionally, the following requirements shall be met:

All bollards shall be free of any knots on edges or ends.

All bollards shall be free of holes, ring shakes, warp (including bow, cup, crook and twist). Warp is restricted to the "light" category as described in SPIB paragraph No. 752.

The bollards shall be free from wane and bark inclusions and decay. Splits and checks shall not exceed 3/8" in width of more than one-half the length and thickness of the timber. The grain deviation shall not deviate more than 1 in 15.

All wood bollards shall be fabricated in strict accordance with the contract drawings and specifications and shall be dressed to finished dimension of not less than 1/2" below nominal thickness and width. Bollards which measure below 1/2" finished dressed size will be rejected in the field by the Engineer. All edges and ends shall be uniformly eased. The top exposed end shall receive a 1" chamber in accordance with the contract detail plan drawings. All fabrications shall take place before pressure preservative treatment.

Wooden Bollards shall be manufactured by Boro Lumber & Timber Company, Inc., P.O. Box 78, Maspeth, New York 11378, Telephone: (718) 821-3600; or by an approved equal.

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Wood Bollards shall be CCA (Chromated copper Arsenate) pressure treated to a maximum retention of 0.40 lbs per cubic foot in accordance with the American Wood Preservers' Association (APWPA) Standards C1 and C2. The preservative shall penetrate 2.5" or 85% of the sapwood. The method of preservative treatment shall be in accordance with the latest AWP standards.

Each bollard shall be installed plumb and square and to the required height, at the locations specified, and to the satisfaction of the Engineer. After the installation of the bollard is complete, the contractor shall remove all excess excavated material and dispose of off-site. The disturbed area shall be graded and mulched by the Contractor, as directed by the Engineer. No extra payment shall be made for this work.

2. Concrete Property Monuments

The concrete monument shall be dimensioned as shown on the detail on the Contract drawing. The concrete monument shall consist of a concrete shaft 30 inches long with dimensions at the top of five (5) inches and five (5) inches. The dimensions at the bottom of the shaft shall be five (5) inches and six (6) inches, so there shall be a slight taper on one side of the shaft.

The top of each monument shall have an aluminum disk with a diameter of two (2) inches attached to an 18 inch long #4 rebar embedded in the concrete. The concrete shall be class A-40 with a compressive strength of 4,000 psi. The top of the disk shall have text as shown in the Contract Drawings. The following wording shall appear on the top of the disk:

N.Y.C.D.E.P.
MONUMENT
BLUEBELT BOUNDARY

Each disk shall have a cross in the middle marking the exact boundary point, and the number for the monument shall be stamped on the top. The Engineer will instruct the Contractor as to what number the contractor is to stamp on a particular aluminum disk.

The installation of the monument in the field shall consist of digging a hole with a diameter of 12 to 16 inches and a depth of at least 36 inches. The hole shall be filled with cement into which the monument shall be set. The hole shall then be backfilled.

The top of the monument shall be set so that it is flush with existing grade in areas where pedestrians frequent such as sidewalks. This is required so the monument will not become a tripping hazard. If the monument is

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located in areas without pedestrians, the top of the monument shall be elevated 1 to 2 inches above existing grade, so it can be more easily found in the future. In all cases, the concrete part of the top of the monument shall be painted red, omitting the aluminum disk, again for ease of detection. The Engineer shall direct the Contractor in all aspects of monument installation.

As directed the Engineer the monument shall be located at a corner or other point easily identified. If a tree, structure, fence or other obstruction prevents the monument from being located exactly on a line, the surveyor shall provide an 8 ½ x 11 inch sketch indicating what offset from the line was necessary because of the obstruction.

After installation of the monument is complete, the contractor shall remove all excess excavated material and dispose off-site. The Contractor shall also be responsible for a general clean-up of the work-site.

C. Measurement and Payment

The quantity to be measured for payment under this section shall be the total number of survey monuments furnished and installed in accordance with the plans and specifications and directions of the Engineer.

The contract price per unit for survey monuments furnished and installed shall be as indicated on the BID SCHEDULE OF PRICES, Item No. BMP-7.608-B. The bid price shall be a unit price per survey monument installed and shall include all labor material, equipment, and all work incidental thereto, necessary to complete this item in accordance with the plans and specifications and to the satisfaction of the Engineer.

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7.609

CURB PLATE

NO TEXT ON THIS PAGE

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7.610

CURB PLATE INSTALLATION

NO TEXT ON THIS PAGE

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7.611

CEDAR SPLIT RAIL FENCE

NO TEXT ON THIS PAGE

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7.612 BRONZE PLAQUEA. Description of Work

Under this item the contractor shall furnish and install the bronze plaques as per the direction of the Engineer and as shown on the Contract drawing.

B. Material and Construction Methods

The bronze plaque dimensions, details, lettering, symbols and art work as are shown on the Contract Drawings.

Lettering style(s), surface finishes, and fabrication details and techniques shall be verified by the manufacturer and approved by the Engineer prior to casting. The fabricator shall submit a full size mockup of the bronze plaque to the Engineer for approval prior to production of the plaque.

The bronze of the plaque shall be copper alloy casting UNS No. C00500, commercial designation: 88-10-02 from Virgin Ingots ASTM B-3090 for sand castings and shall be manufactured by American Monument Company, Englewood, NJ (800) 666-8636; George Koch and Sons, Hackensack, NJ, (800) 675-5624, Campbell Foundry; Harrison, NJ, (201) 483-5480 or approved equal. A Foundry Certificate verifying the quality of bronze used in the bronze plaque shall be submitted. The certificate shall be on Foundry letterhead, dated and signed by a Foundry representative.

The bronze plaque shall have two dowels, five inches (5) long with an outer diameter of three-eighths (3/8) inch made of stainless steel welded to the rear of the plaque for installation. The dowels shall be set into cored holes in the stone facing of the headwall. The bronze plaque shall also be grouted onto the headwall. The grout shall be a non-shrink epoxy grout. After the grout has hardened the remaining space around the edges of the bronze plaque shall be filled with an epoxy sealer. The sealer shall be applied in strict accordance with the manufacturer's instructions, and shall be tooled into fill voids. The color of the epoxy sealer shall match the stone facing.

C. Measurement and Payment

The quantity to be measured for payment under this section shall be the total number of bronze plaques supplied and installed in accordance with the plans and specifications and direction of the Engineer.

The Contract price per bronze plaque shall be as indicated on the BID SCHEDULE OF PRICES, Item BMP-7.612. The bid price shall be a unit price and shall include the cost of all labor, materials, equipment and work incidental

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thereto, necessary to furnish and install this item in accordance with the plans and specification to the satisfaction of the Engineer.

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7.613 SPLIT RAIL FENCE

NO TEXT ON THIS PAGE

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7.614 BELGIUM BLOCKS

NO TEXT ON THIS PAGE

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7.615

ORNAMENTAL SWING GATE

NO TEXT ON THIS PAGE

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7.616 STEEL PANEL FENCE

NO TEXT ON THIS PAGE

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7.617

WELDED STAINLESS STEEL PIPE RAIL

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7.618

SURVEYING SERVICES FOR LOCATION OF BOUNDARY POINTS

NO TEXT ON THIS PAGE

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7.619 HYDRANT UTILITY MARKER

NO TEXT ON THIS PAGE

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7.620

ALUMINUM PIPE RAILING

NO TEXT ON THIS PAGE

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7.621

TIMBER BARRIER RAIL

NO TEXT ON THIS PAGE

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7.622 FOREBAY/MICROPOOL SEDIMENT CLEAN-OUT INDICATOR

A. Description of Work

Under this item, the Contractor shall furnish, install and adjust Forebay-/Micropool Sediment Clean-Out Indicator in accordance with the plans, specifications and directions of the Engineer within the BMP Project limits and associated work areas.

B. Submittals

1. Before the work is started, the Contractor shall submit shop drawings for approval by the Engineer.
2. Drawings for the fabrication and installation of stainless steel welded Forebay/Micropool Sediment Clean-Out Indicator with sizes of members, components and anchorage devices, all based on specified requirements. Include copies of standard and custom detail drawings and installation instructions. Include all plans and elevations identifying the location and top elevation to establish sediment clean-out indicator removal depth.

C. Materials

All fittings and hardware shall be of the materials listed in the following schedule:

Stainless Steel:

1. Stainless Steel Rod or Pipe: ASTM A554, Type 316L. Provide posts and plates with 1.0 inch outside diameter, Schedule 10 min.
2. Stainless Steel Fittings: Same material and thickness as posts and plates except where otherwise shown on Contract Drawings.

Non-Shrink, Non-Metallic Grout:

1. Pre-mixed non-staining cementitious grout requiring only the addition of water.
2. Product and Manufacturer: Provide one of the following:
 - a. Euco N-S by the Euclide Chemical Company.
 - b. Masterflow 713 by Master Builders Company.
 - c. Or approved equal.

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D. Installation

1. The Forebay/Micropool Sediment Clean-Out Indicators shall be set in concrete as shown on the plans or as directed by the Engineer.
2. Adjust Clean-Out Indicators prior to securing in place with concrete or grout to ensure proper and correct alignment throughout their length. Plumb in each direction and adjust to the appropriate elevation.
3. Anchor or grout into concrete substrate.
4. All Clean-Out Indicators shall be set plumb and true to line and grade. Any Indicators not set true to line and grade shall be removed and replaced at the Contractor's expense. Bending posts to make them plumb will not be permitted.

E. Measurement and Payment

The quantity of Forebay/Micropool Sediment Clean-Out Indicators to be paid for under this item shall be the total number furnished and installed in accordance with the plans, specifications and directions of the Engineer.

The contract price for Each - Forebay/Micropool Sediment Clean-Out Indicator shall be as indicated on the BID SCHEDULE OF PRICES, Item BMP-7.622. The bid price shall include the cost for all labor, material, equipment and incidental expenses necessary to complete the work, including submissions and approvals, materials, fabrication, installation, and adjustment to the proper elevation, all in accordance with the plans and specifications to the satisfaction of the Engineer.

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STREAMBANK STABILIZATION

7.700 WORK INCLUDED

Under Streambank Stabilization, the Contractor shall provide all labor, material, 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>
7.701	Live Stakes
7.703	Natural Field Stones
7.705	Erosion Control Mat
7.707	Coir Logs
7.710	Reno Mattress

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7.701 LIVE STAKESA. Description of Work

The Contractor shall furnish all materials, labor, and equipment necessary to plant live stakes specified herein and as shown on the Contract Drawings, including all incidental and appurtenant work required for a complete job.

Live staking involves the insertion and tamping of live, dormant vegetative cuttings into the ground in order to create a fast growing vegetative cover.

A system of stakes creates a living root mat that stabilizes the soil by reinforcing and binding soil particles together and by extracting excess soil moisture. This technique is especially useful in stream bank stabilization. The Restoration Specialist or DEP representative shall supervise this work.

B. Materials

1. Cuttings shall be taken from appropriate native species, and may include native willows (*Salix* spp), Silky Dogwood (*Cornus amomum*) and Buttonbush (*Cephalanthus occidentalis*). Where possible, cuttings shall be taken from existing material on site.
2. Erosion control mat as described in the Specification Section 7.705.

C. Construction Guidelines

Live stakes shall be cut from long, upright branches taken off the parent plant. Only healthy, disease free parent plants shall be used as stock. Cuttings shall be taken only from species which are common, and no more than five (5) percent of the parent plant is to be cut. If the entire parent plant is to be removed due to construction, the entire plant may be used for cuttings.

Cuttings are to be taken and planted during the dormant season from October 15th to March 30th. Live stakes shall be planted only in areas that remain moist throughout the growing season.

Live stakes shall be between eighteen (18) and thirty-six (36) inches in length, and at least one-half (1/2) of an inch in diameter. A straight cut is to be made at the narrow end of the stake, just above a leaf bud (toward the tip of the branch). The thicker end (toward the trunk) shall be cut at an angle, 45°, so that it makes a point. Sharp pruning shears shall be used to cut all live stakes. The pointed end is to be driven into the ground. Leaves and small branches shall be removed from the stakes as soon as possible after cutting them to keep the stakes from drying out.

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At the Restoration Specialist's direction, two (2) to three (3) inches of the narrow end (top) of the stake shall be dipped in latex paint (water based) to prevent drying and cracking. Different colors may be used to differentiate species.

Install Erosion Control Blanket as per Specification Section 7.705.

Stakes shall be planted within twenty four (24) hours of cutting. Between cutting and planting, live stakes shall be kept in the shade and are to be kept moist in buckets or wet burlap. Stakes shall be soaked in water for 24 hours prior to installation.

At the Restoration Specialist's direction, the bottom ends (sharp end) may be dipped into a solution of appropriate growth hormone to stimulate root growth. This is not needed for most Willows.

Drive the stakes into the streambank or wetland edge at appropriate elevations for at least 75% of its length deep. If live stakes are not planted immediately after cutting, a fresh angled cut shall be made at the base of the stake. Three (3) to six (6) inches shall be left above the ground to sprout leaves. Stakes shall be driven into the ground with a rubber mallet or by hand. A planting bar or length of rebar shall be used to make a planting hole in hard soils. Stakes shall be installed perpendicular to streambanks and not the water body.

Stakes at least one-half (1/2) inch in diameter shall be used when planting in rip-rap. In shaded areas, longer stakes are to be used with at least one (1) foot above the ground.

D. Measurement and Payment

The quantity to be paid for under this item shall be the number of live stakes furnished and placed in accordance with the plans and specifications to the satisfaction of the Engineer.

The contract bid shall be a unit price per each live stake as indicated on the BID SCHEDULE OF PRICES Item No. BMP-7.701A. The bid price shall include the cost of all labor, plant material, excavating, adding soil amendment and equipment necessary to furnish, place and incorporate and all other work incidental thereto, in accordance with the plans and specifications to the satisfaction of the Engineer. The cost of the erosion control mat shall be included in the price bid under that item.

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7.702

ROCK TOE PLANTING

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7.703 NATURAL FIELD STONESA. Description of Work

Under this item, the Contractor shall furnish all material, labor, and equipment necessary to place Natural Field Stones throughout the Contract area in accordance with the contract drawings and specifications and as directed by the Engineer.

B. Materials and Construction Methods

Stones shall be sized between 4" to 8", 8" to 18", 18" to 36" and 36" to 48" in diameter as shown on the Contractor Drawings. Natural field stones shall be free of concrete, asphalt, rip-rap, bricks and construction rubble. Stones shall be dark in coloration and rounded in appearance.

The Contractor may use the Field Stones excavated in the project site, contingent upon the approval of the Engineer.

The Contractor shall carefully protect all trees, shrubs to their dripline and herbaceous material to their limit of cover and other growth to remain and shall be liable for all damages to property caused by stone placement operations. All trees, plants and other property damaged by stone placement operations shall be replaced or restored to their original condition to the satisfaction of the Engineer at no additional cost to the City.

Field Stone Placement: Stones shall be placed along portions of the stream to secure bank stabilization. Stone sizes shall be as shown on the Contract Drawings. Any conflicts shall be brought to the attention of the Engineer prior to stone placement. Spaces between stones shall be minimal not to exceed one (1) inch. All locations for stone placement shall be marked out and shall be approved by the Engineer prior to placement.

Stones shall be set in locations where they will achieve the intended design function, and integrated into the surrounding landscape as determined by the Restoration Specialist. shall be placed so as to harmonize with existing natural features and appear naturally set. All stone locations shall be approved by the Engineer prior to placement.

C. Measurement and Payment

The quantity to be measured for under this item shall be the number of cubic yards of approved Natural Field Stones as measured in containers and vehicles, and the quantity to be paid for will be eight tenths (8/10) of the yardage determined by such measurements.

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The contract price per cubic yard of Natural Field Stones shall be as indicated on the BID SCHEDULE OF PRICES Item No. BMP-7.703. The bid price shall constitute full compensation for all labor, materials and equipment necessary to furnish, place and incorporate and all other work incidental thereto, in accordance with the plans and specifications to the satisfaction of the Engineer.

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7.704

OAK STAKES

NO TEXT ON THIS PAGE

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7.705 EROSION CONTROL MATA. Description of Work

The Contractor shall furnish all labor, materials, and equipment necessary for placement of erosion control Mat as indicated on the Contract Drawings and as specified herein.

The erosion control mat shall be used for stabilization as indicated in the Contract Drawings.

The erosion control mats are 100% cleaned and wheel spun coconut fiber strands, uniformly twisted and woven into a flexible matrix. Coconut fiber is 100% mattress grade, 45% Lignin with a low elongation factor and high fabric tearing strength. The erosion control mats biodegrade in approximately five to ten years. The erosion control mat shall meet the specifications of Coirmat 700 as supplied by Rolanka Corporation, or approved equal.

B. Material

100% high strength coir (coconut) fiber.

C. Staples

Minimum 11 gauge, 8" x 1" driven in a pattern of three per square yard and at intervals of 1' - 0" along sides and overlapping sections.

D. Installation

The erosion control blanket shall be installed as indicated on the Contract Drawings.

E. Measurement and Payment

The quantity to be measured for payment under this Section shall be the number of square feet of surface area on which erosion control mats has been installed in accordance with the Contract Drawings, Specifications and directions of the Engineer.

The contract price per square foot of erosion control mats shall be as indicated on the BID SCHEDULE OF PRICES Item No. BMP-7.705. The bid price shall include the costs for all labor, materials, equipment and incidental expenses necessary to complete the work in accordance with the Plans and Specifications and to the satisfaction of the Engineer.

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7.706 FILTER FABRIC

A. Description of Work

A filter fabric is a layer of geotextile placed between the rip rap and the underlying drainage layer to prevent soil movement into or through the rip rap and prevent small media particles from entering and clogging the drainage layer below.

B. Materials

Filter Fabric. The filter fabric used in the step pools shall be classified as a Drainage Geotextile on the NYSDOT Materials Bureau Approved List and meet the following characteristics.

MINIMUM REQUIRED GEOTEXTILE PROPERTIES*	
GEOTEXTILE PROPERTY	FILTER GEOTEXTILE
Geotextile Construction	Nonwoven Needlepunched
Mass per Unit Area (Unit Weight), ASTM D5261 (oz/yd ²)	5.6
Ultraviolet Resistance, (500 hrs.) ASTM D4355, Average % Strength Retention	70
Grab Tensile Strength (lbs.), ASTM D4632	130
Grab Tensile elongation (%) ASTM D4632	50
Wide Width Tensile Strength @ 5% Strain, (lbs./in.) ASTM D4595	N/A
Burst Strength, ASTM D3786, Diaphragm Method (psi)	290
Apparent Opening Size (AOS), (mm), ASTM D4751	0.21
Permittivity at 50 mm constant head (sec ⁻¹), ASTM D4491	1.6
Puncture Resistance, ASTM D4833 (lb)	80

* MINIMUM AVERAGE ROLL VALUE (MARV)

Submittals for all materials in this item shall consist of certifications that the material meets the specification requirements and samples of material for visual review. All submittals shall be approved by the Engineer.

C. Construction Methods

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Subgrade Preparation

Prepare the subgrade for rip rap and filter to the required lines and grades shown on the plans. Compact any fill required in the subgrade to a density approximating that of the undisturbed material or overfill depressions with rip rap. Remove brush, trees, stumps and other objectionable material. Cut the subgrade sufficiently deep so that the finished grade of the rip rap will be at the elevation of the surrounding area. Channels shall be excavated sufficiently to allow placement of the rip rap in a manner such that the finished inside dimensions and grade of the rip rap meet design specifications.

Filter Fabric

Place the filter fabric blanket immediately after the ground foundation is prepared. The filter fabric installation shall include anchor pins every 3 feet. Bury the upper and lower ends of the fabric a minimum of 12 inches below the ground. To prevent undercutting, a continuous sheet of filter shall be used along the cross section. There shall be a minimum overlap of 12 inches for adjacent rolls.

D. Measurement and Payment

The quantity to be measured for payment under this Section shall be the number of square feet of surface area on which Filter Fabric has been installed in accordance with the plans and specifications and directions of the Engineer.

The contract price per square foot of approved filter fabric placed shall be as indicated on the BID SCHEDULE OF PRICES Item No. BMP-7.706-A. The bid price shall constitute full compensation for all labor, materials, equipment and work incidental thereto, necessary to complete this item in accordance with the plans and specifications to the satisfaction of the Engineer.

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7.707

COIR LOGSA. Description of Work

The Contractor shall furnish all labor, materials, equipment necessary for installation of Coir Log as indicated on the Contract Drawings and as specified herein.

The coir log effectively manages the change in stream flow velocity, provide channel and shoreline stabilization and a planting medium for vegetation.

The coir log shall be North American Greene log or approved equal. Logs shall be 12" in diameter unless otherwise specified in project contract plans.

B. Material

1. 100% coir (coconut fiber).
2. Oak wood stakes.

C. Installation

1. Place the Coir log along the toe of the bank as shown on the Contract Drawings.
2. Submerge the Coir log at a constant depth of 1/2 to 2/3 of the log's height. The proper submersion of the Coir log is important for the plugged plants' survival.
3. Tie the ends of adjacent logs together with a strong twine or the recommended coir twine. Make a number of passes with the twine in the end netting of the adjacent Coir logs - effectively lacing the Coir logs together.
4. Push oak wood stakes (2" x 2" x 36") through two loops of the Coir log's coir netting along both sides of the Coir log. Stakes shall meet all requirements of Specification Section 7.704.
5. Drive the stakes in at the recommended spacing of 24" o.c. Pound the stakes down so the top of the stake is level with the top of the Coir log. Stakes shall be notched one (1) inch below the top, and the Coir log cross-tied with Coir or Nylon String. Stakes should be cut flush with coir log material.

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6. Where a Coir log does not abut another Coir log, bend the end in towards the shore and dig it into the bank. This keeps the water from getting behind the Coir log, preventing pull out of the logs. Be certain to trench in both ends of either a single or a continuous line of Coir logs.
7. Plug plants into the Coir log by pulling the coir fibers apart with fingers and gently pushing the plug deep into the Coir log.
8. Recommended spacing of plant plugs is 6" or less.
9. Plant sedges, rushes and grasses so that roots are 3-4" above the water level where they will receive adequate moisture.

E. Measurement and Payment

The quantity to be measured for payment under this section shall be the total number of linear feet of coir log furnished, installed and maintained in accordance with the plans and specifications and directions of the Engineer.

The contract price per linear foot for coir log shall be as indicated on the BID SCHEDULE OF PRICES, Item No. BMP-7.707-A. The unit price per linear foot shall also include installation of the oak stakes and all labor, materials, equipment and work incidental expenses necessary or required to complete the work in accordance with the plans and specifications and to the satisfaction of the Engineer.

* * * * *

DIVISION VII - DETAILED SPECIFICATIONS -
CONTRACT SE818

7.708

ROOT WAD/BRANCH CLUSTER AND DOWNED TREE PROVISION AND
PLACEMENT

NO TEXT ON THIS PAGE

DIVISION VII - DETAILED SPECIFICATIONS -
CONTRACT SE818

7.709

STRAIGHT VANE

NO TEXT ON THIS PAGE

DIVISION VII - DETAILED SPECIFICATIONS -
CONTRACT SE818

7.710 RENO MATTRESSA. Description of Work

Under this item the Contractor shall furnish all labor, materials, equipment necessary to install Reno Mattress as shown on the Contract drawings and in accordance with the specification and as directed by the Engineer.

B. Materials and Construction

Reno Mattress is a wire mesh container uniformly partitioned into internal cells with relatively small height in relation to the other dimensions. The internal cells are interconnected with other units and filled with stone at the project site to form flexible, permanent monolithic structures used for channel bottom protection. The reno mattress shall have the dimensions as shown on the contract drawings.

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 is made from zinc coated and overcoated with PVC. PVC coatings shall not show cracks or breaks after the fabrication of the mesh. Fasteners used to assemble and interconnect the individual units shall be made of stainless steel.

The stones for the reno mattress shall be between 4" and 6" in diameter. The stones shall meet the specifications of the Rip Rap, Section 7.107 of this contract.

The subgrade shall be excavated to allow for the placement of the reno mattress to form the grade shown of the contract drawings. The reno mattress shall be placed on geotextile fabric laid directly on the compacted subgrade.

C. Measurement and Payment

The quantity to be measured for payment under this Section shall be the total number of square yards of reno mattress installed as directed by the Engineer.

The contract price per square yard of reno mattress installed shall be as indicated on the BID SCHEDULE OF PRICES Item No. BMP-7.710. The contract price shall include all excavation, grading and geotextile fabric necessary to install the reno mattress as directed by the Engineer. The bid price shall constitute full compensation for all labor, materials, equipment and work incidental thereto, necessary to complete this item in accordance with the plans and specifications to the satisfaction of the Engineer.

END OF ADDENDUM NO. 4
This Addendum consists of three hundred thirteen (313) pages

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

PROJECT ID SE818

For the construction of Storm, Sanitary Sewers, Water Mains
and appurtenances in:

Sheldon Avenue between Ellsworth Avenue and BMP-SB1 approximately
1,000 feet east of Delmar Ave
Sinclair Avenue between Ellsworth Avenue and Dead End
Stafford Avenue between Huguenot Avenue and Heenan Avenue
Vineland Avenue between Huguenot Avenue and Heenan Avenue
Crown Avenue between Nippon Avenue and Belfield Avenue
Woodrow Road between Powell Street and Belfield Avenue
Castor Place between Huguenot Avenue and Anaconda Street
Sperry Place between Anaconda Street and Everton Avenue
Powell Street between Sinclair Avenue and Woodrow Road
Walker Place between Sinclair Avenue and Woodrow Road
Dahlia Street between Woodrow Road and Shift Place
Huguenot Avenue between Rensselaer Avenue and Shift Place
Cardiff Street between Castor Place and Rosedale Avenue
Boulder Street between Woodrow Road and Rosedale Avenue
Nippon Avenue between Rensselaer Avenue and Woodrow Road
Anaconda Street between Sperry Place and Delmar Avenue
Ballard Avenue between Woodrow Road and Sperry Place
Delmar Avenue between Rensselaer Avenue and Anaconda Street
Crown Place between Crown Avenue and Dead End
Everton Avenue between Woodrow Road and Sperry Place
Heenan Avenue between Vineland Avenue and Dead End

Together With All Work Incidental Thereto
BOROUGH OF STATEN ISLAND
CITY OF NEW YORK

ADDENDUM NO.5

DATED: February 19, 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 A5-4 through A5-14)
 - B. Schedule U-1 (Page A5-15)
 - C. Schedules U-2 (one for each Utility Company) (Pages A5-16 through A5-54)

D. Section U-3, Page A5-55 (as per the Private Utilities reference document for SECTION U called "CET SPECIFICATIONS AND SKETCHES", dated November 2010, and Test Pits Pages (A5-56 through A5-59) in this Addendum; and,

E. Utility drawings (20 Sheets)
(Sheet 1 of 20 through 6 of 20) Con Edison Electrical Condition Report
(Sheet 7 of 20 through 11 of 20) Con Edison Low Tension and Service Plates
(Sheet 12 of 20 through 16 of 20) Con Edison Conduit and Duct Occupancy Plates
(Sheet 17 of 20 through 20 of 20) Con Edison CET-700, 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 A5-14, 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

SE-818

SHELDON AVE.

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	718-977-8138
TIME WARNER	MARCELLO DEMAIO	917-417-9552

SCHEDULE U-2
 FOR INFORMATION ONLY
 ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE
 FOR CONSOLIDATED EDISON

SE818
 SHELDON AVENUE, ETC

CET ITEM	DESCRIPTION	UNITS	ESTIMATED QUANTITY
CET 100.1	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TESTPIT (TYPE .1)	EA	12
CET 100.3	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TESTPIT (TYPE .3)	EA	3
CET 101.1	UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCL. 24" DIAMETER (TYPE .1)	EA	71
CET 101.3	UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCL. 24" DIAMETER (TYPE .3)	EA	21
CET 102.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .1)	EA	6
CET 103.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMETER (TYPE .1)	EA	8
CET 108.1	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .1)	EA	29
CET 108.3	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .3)	EA	6
CET 200.1	EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTIONS (INVERT DEPTH 4'-6" TO 5' FOR TYPE 2 OR UP TO 5'-6" FOR TYPE 3)	L.F.	47
CET 225.1A	INSTALLATION AND REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	EA	3
CET 225.1B	INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES	EA	11
CET 300	SPECIAL CARE EXCAVATION AND BACKFILING	C.Y.	1
CET 304 A	FURNISH, DELIVER AND INSTALL CONCRETE ROAD BASE	C.Y.	1
CET 330E-A.3	SUPPORT & PROTECT ELEC, GAS & STEAM FAC. DURING EXCAVATION OF CITY TRENCH WHEN FAC. LIE W/IN TRENCH LIMITS W/O SHEETING (TYPE .3)	L.F.	23
CET 350	OVERHEAD ACCOMMODATION, PROTECTION OF OVERHEAD FACILITIES AND APPURTENANCES	L.S.	1
CET 351	INSTALL AND REMOVE "A" FRAME ON UTILITY POLES	EA	1
CET 353E	SPECIAL CARE OPERATION - TREE PRUNING	EA	1

SCHEDULE U-2
 FOR INFORMATION ONLY
 ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE
 FOR CONSOLIDATED EDISON

SE818
 SHELDON AVENUE, ETC

CET ITEM	DESCRIPTION	UNITS	ESTIMATED QUANTITY
CET 400	TEST PITS FOR UTILITY FACILITIES	C.Y.	50
CET 401	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITIES	C.Y.	5
CET 402.2	EXISTING OCCUPIED NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION W/O CONCRETE ENCASEMENT	L.F.	60
CET 636 MD	MOD. OF WORK METHODS TO ACCOMM. UTILITY STREET HARDWARE DURING PAVE MILL. & RESURF. OPS. (30" TO UNDER 34" WIDTH)	EA	2
CET 700	SPECIAL MOD. OF WORK METHODS TO ACCOMM./ PROTECT U.G. FACILITIES WITH LIMITED COVER	C.Y.	151
CET 710.1	REMOVAL OF ABANDONED UTILITY STEEL/CAST IRON/PLASTIC, UP TO AND INCL. 12" DIAMETER PIPES	L.F.	260
CET 802A	SPECIAL MODIFICATION OF WORK FOR INSTALLATION OF NEW SIDEWALKS	S.F.	1,735
CET 802B	SPECIAL MODIFICATION OF WORK FOR INSTALLATION OF NEW CURBS	L.F.	587
CET 1006V	6" VERTICAL OR ROLLED WATER MAIN OFFSET	EA	4
CET 1012V	12" VERTICAL OR ROLLED WATER MAIN OFFSET	EA	2

CON EDISON SCOPE OF WORK
SUPPORT AND PROTECTION

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CET 100.1 UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TESTPIT (TYPE .1) EA

At the following locations:

N/E/C Sperry Pl. & Ballard Ave.
W Intersec Sheldon Ave. & Nippon Ave.
S/W/C Sheldon Ave. & Delmar Ave.
S/W/C Huguenot Ave. & Sheldon Ave.
N/W/C Delmar Ave. & Sinclair Ave.
W Intersec Sheldon Ave. & Nippon Ave.
F/O #649 Sheldon Ave.
N/W/C Sinclair Ave. & Nippon Ave.
N/E/C Sinclair Ave. & Nippon Ave.
F/O #550 Sinclair Ave.
S/E/C Sinclair Ave. & Nippon Ave.
F/O #459 Stafford Ave.

Total quantity for CET 100.1 = 12

CET 100.3 UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TESTPIT (TYPE .3) EA

At the following locations:

S/W/C Huguenot Ave. & Sinclair Ave.
F/O #639 Huguenot Ave.
F/O #496 Huguenot Ave.

Total quantity for CET 100.3 = 3

CON EDISON SCOPE OF WORK
SUPPORT AND PROTECTION

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CET 101.1

UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCL. 24" DIAMETER (TYPE .1)

EA

At the following locations:

F/O #663 Huguenot Ave.
Opp #575 Huguenot Ave.
F/O #571 Nippon Ave.
N/E Intersec Nippon Ave. & Sinclair Ave.
N Intersec Nippon Ave. & Vineland Ave.
N Intersec Nippon Ave. & Stafford Ave.
F/O #4 Nippon Ave.
N Intersec Anaconda St. & Sperry Pl.
F/O #40 Anaconda St.
N Intersec Anaconda St. & Castor Pl.
S Intersec Anaconda St. & Ballard Ave.
F/O #32 Ballard Ave.
F/O #29 Delmar Ave.
F/O #182 Delmar Ave.
S Intersec Delmar Ave. & Sheldon Ave.
S/E Intersec Delmar Ave. & Sheldon Ave.
N/E Intersec Delmar Ave. & Sheldon Ave.
F/O #162 Delmar Ave.
E Intersec Delmar Ave. & Sinclair Ave.
F/O #468 Crown Ave.
F/O #436 Crown Ave.
F/O #534 Vineland Ave.
F/O #12 Vineland Ave.
F/O #485 Vineland Ave.
F/O #461 Vineland Ave.
F/O #385 Vineland Ave.
F/O #370 Vineland Ave.
F/O #555 Stafford Ave.
F/O #480 Stafford Ave.
F/O #463 Stafford Ave.
F/O #458 Stafford Ave.
F/O #371 Stafford Ave.
F/O #610 Sinclair Ave.
F/O #594 Sinclair Ave.
F/O #561 Sinclair Ave.
F/O #445 Sinclair Ave.
F/O #437 Sinclair Ave.

CON EDISON SCOPE OF WORK
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W Intersec Huguenot Ave. & Sheldon Ave.
F/O #60 Sheldon Ave.
F/O #607 Sheldon Ave.
F/O #590 Sheldon Ave.
W Intersec Sheldon Ave. & Nippon Ave.
F/O #550 Sheldon Ave.
F/O #451 Sheldon Ave.
20' E/O #534 Sheldon Ave.
F/O #506 Sheldon Ave.
S/E Intersec Sheldon Ave. & Delmar Ave.
N/E Intersec Sheldon Ave. & Delmar Ave.
12' W/O #452 Sheldon Ave.
12' W/O #452 Sheldon Ave.
N Intersec Nippon Ave. & Vineland Ave.
N Intersec Nippon Ave. & Stafford Ave.
F/O #571 Nippon Ave.
N Intersec Anaconda St. & Sperry Pl.
F/O #40 Anaconda St.
N Intersec Anaconda St. & Castor Pl.
N Intersec Anaconda St. & Castor Pl.
F/O #594 Sinclair Ave.
F/O #590 Sheldon Ave.
W Intersec Sheldon Ave. & Nippon Ave.
F/O #506 Sheldon Ave.
S Intersec Delmar Ave. & Sheldon Ave.
F/O #162 Delmar Ave.
E Intersec Delmar Ave. & Sinclair Ave.
F/O #468 Crown Ave.
F/O #436 Crown Ave.
F/O #534 Vineland Ave.
F/O #12 Vineland Ave.
F/O #385 Vineland Ave.
F/O #371 Stafford Ave.

Total quantity for CET 101.1 = 71

CON EDISON SCOPE OF WORK
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CET 101.3	UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCL. 24" DIAMETER (TYPE .3)	EA
	<i>At the following locations:</i> W Intersec Huguenot Ave. & Sheldon Ave. F/O #663 Huguenot Ave.(House Connection) F/O #640 Huguenot Ave.(House Connection) W/S Huguenot Ave. Bet. Sinclair Ave & Woodrow Rd.(H.Conn.) W/S Huguenot Ave. Bet. Woodrow Rd. & Shift Pl.(H.Conn.)	
	Total quantity for CET 101.3 = 21	
CET 102.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .1)	EA
	<i>At the following locations:</i> S Intersec Sperry Pl. & Ballard Ave. F/O #32 Ballard Ave. F/O #610 Sinclair Ave. F/O #594 Sinclair Ave. F/O #561 Sinclair Ave. F/O #594 Sinclair Ave.	
	Total quantity for CET 102.1 = 6	
CET 103.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMETER (TYPE .1)	EA
	<i>At the following locations:</i> N/E Intersec Nippon Ave. & Sinclair Ave. N/E Intersec Delmar Ave. & Sheldon Ave. F/O #162 Delmar Ave. F/O #480 Stafford Ave. F/O #463 Stafford Ave. F/O #458 Stafford Ave. N/E Intersec Sheldon Ave. & Delmar Ave. 12' W/O #452 Sheldon Ave.	
	Total quantity for CET 103.1 = 8	

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CET 108.1

UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .I)

EA

At the following locations:

F/O #663 Huguenot Ave.
N/W Intersec Nippon Ave. & Sinclair Ave.
N Intersec Nippon Ave. & Vineland Ave.
N Intersec Nippon Ave. & Stafford Ave.
F/O.#4 Nippon Ave.
N Intersec Anaconda St. & Sperry Pl.
N Intersec Sperry Pl. & Ballard Ave.
S/E Intersec Delmar Ave. & Sheldon Ave.
F/O #162 Delmar Ave.
N/E Intersec Delmar Ave. & Sinclair Ave.
N/E Intersec Heenan Ave. & Stafford Ave.
S/W Intersec Heenan Ave. & Vineland Ave.
F/O #465 Crown Ave.
F/O #485 Vineland Ave.
F/O #461 Vineland Ave.
F/O #385 Vineland Ave.
F/O #370 Vineland Ave.
F/O #371 Stafford Ave.
F/O #445 Sinclair Ave.
F/O #437 Sinclair Ave.
N/W/C Huguenot Ave. & Sheldon Ave.
N/W Intersec Sheldon Ave. & Nippon Ave.
S/E Intersec Sheldon Ave. & Delmar Ave.
12' W/O #452 Sheldon Ave.
F/O #480 Huguenot Ave.
F/O #25 Ballard Ave.
N/W Intersec Nippon Ave. & Sinclair Ave.
N/W Intersec Nippon Ave. & Sinclair Ave.
F/O #365 Stafford Ave.(Lot 56)

Total quantity for CET 108.1 = 29

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CET 108.3	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE 3)	EA
	<i>At the following locations:</i>	
	Opp #565 Huguenot Ave.(hydrant)	
	W Intersec Huguenot Ave. & Woodrow Rd.	
	F/O #480 Huguenot Ave.	
	W Intersec Huguenot Ave. & Woodrow Rd.	
	F/O #639 Huguenot Ave.	
	Opp #637 Huguenot Ave.(hydrant)	
	Total quantity for CET 108.3 = 6	
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.
	<i>At the following locations:</i>	
	S/W/C Huguenot Ave. & Sinclair Ave.	
	F/O #496 Huguenot Ave.	
	F/O #639 Huguenot Ave.	
	Total quantity for CET 200.1 = 47	
CET 225.1A	INSTALLATION AND REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	EA
	<i>At the following locations:</i>	
	F/O #639 Huguenot Ave.	
	S/W/C Sheldon Ave & Delmar Ave.	
	N/E/C Delmar Ave. & Sheldon Ave.	
	Total quantity for CET 225.1A = 3	
CET 225.1B	INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES	EA
	<i>At the following locations:</i>	
	S/W/C Huguenot Ave. & Sheldon Ave.	
	S/W/C Huguenot Ave. & Sinclair Ave.	
	N/E/C Sperry Pl. & Ballard Ave.	
	N/W/C Sinclair Ave. & Nippon Ave.	
	N/E/C Sinclair Ave. & Nippon Ave.	
	F/O #649 Sheldon Ave.	
	F/O #550 Sinclair Ave.	
	F/O #496 Huguenot Ave.	
	F/O #534 Sheldon Ave.	
	N/E/C Nippon Ave. & Sinclair Ave.	
	S/E/C Sinclair Ave. & Nippon Ave.	
	Total quantity for CET 225.1B = 11	

CON EDISON SCOPE OF WORK
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CET 300	SPECIAL CARE EXCAVATION AND BACKFILING <i>At the following locations:</i> S/W Intersec Huguenot Ave. & Rensselaer Ave. Total quantity for CET 300 = 1	C.Y.
CET 304 A	FURNISH, DELIVER AND INSTALL CONCRETE ROAD BASE <i>At the following locations:</i> N/E/C Nippon Ave. & Sinclair Ave. Total quantity for CET 304 A = 1	C.Y.
CET 330E-A.3	SUPPORT & PROTECT ELEC, GAS & STEAM FAC. DURING EXCAVATION OF CITY TRENCH WHEN FAC. LIE W/IN TRENCH LIMITS W/O SHEETING (TYPE 3) <i>At the following locations:</i> F/O #484 Huguenot Ave. (Lot 36). Total quantity for CET 330E-A.3 = 23	L.F.
CET 350	OVERHEAD ACCOMMODATION, PROTECTION OF OVERHEAD FACILITIES AND APPURTENANCES <i>At the following locations:</i> Various Locations (See O. H. Condition Report) AS SHOWN ON CONTRACT DOCUMENTS Total quantity for CET 350 = 1	L.S.
CET 351	INSTALL AND REMOVE "A" FRAME ON UTILITY POLES <i>At the following locations:</i> F/O #60 Castor Pl. Total quantity for CET 351 = 1	EA
CET 353E	SPECIAL CARE OPERATION - TREE PRUNING <i>At the following locations:</i> F/O #60 Castor Pl. Total quantity for CET 353E = 1	EA
CET 400	TEST PITS FOR UTILITY FACILITIES <i>At the following locations:</i> Various Locations Total quantity for CET 400 = 50	C.Y.

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CET 401	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITIES	C.Y.
	<i>At the following locations:</i>	
	F/O #649 Sheldon Ave.(DBC SL)	
	N/E/C Sinclair Ave. & Nippon Ave.	
	F/O #550 Sinclair Ave.	
	AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE	
	Total quantity for CET 401 = 5	
CET 402.2	EXISTING OCCUPIED NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION W/O CONCRETE ENCASEMENT	L.F.
	<i>At the following locations:</i>	
	F/O #649 Sheldon Ave.(DBC SI)	
	N/E/C Sinclair Ave. & Nippon Ave.	
	F/O #550 Sinclair Ave.	
	AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE	
	Total quantity for CET 402.2 = 60	
CET 636 MD	MOD. OF WORK METHODS TO ACCOMM. UTILITY STREET HARDWARE DURING PAVE MILL. & RESURF. OPS. (30" TO UNDER 34" WIDTH)	EA
	<i>At the following locations:</i>	
	Opp #575 Huguenot Ave.	
	F/O #496 Huguenot Ave.	
	AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE	
	Total quantity for CET 636 MD = 2	

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CET 700 SPECIAL MOD. OF WORK METHODS TO ACCOMM./ PROTECT U.G. FACILITIES WITH LIMITED COVER C.Y.

At the following locations:

N Intersect Nippon Ave. & Sinclair Ave.
W Intersect Nippon Ave. & Sinclair Ave.
N Intersect Nippon Ave. & Stafford Ave.
N Intersect Nippon Ave. & Vineland Ave.
F/O #498 Nippon Ave.
S Intersec Sperry Pl. & Anaconda St.
S Intersec Sperry Pl. & Ballard Ave.
E Intersec Sperry Pl. & Ballard Ave.
F/O #25 Ballard Ave.
F/O #162 Delmar Ave.
E Intersect Delmar Ave. & Sheldon Ave.
S Intersect Delmar Ave. & Sheldon Ave.
8' N/O #195 Delmar Ave.
10' W #534 Sheldon Ave.
F/O #558 Vineland Ave.
F/O #534 Vineland Ave.
F/O #26 Vineland Ave.
F/O #480 Stafford Ave.
F/O #463 Stafford Ave.
F/O #458 Stafford Ave.
F/O #371 Stafford Ave.
15'N/N/C Sinclair Ave., On Nippon Ave.
F/O #550 Sinclair Ave.
F/O #551 Sinclair Ave.
F/O #506 Sheldon Ave.
F/O #182 Sheldon Ave.
F/O #452 Sheldon Ave.
F/O #371 - #351 Stafford Ave.
43' W/O #526 Sinclair Ave.
F/O #534 Sheldon Ave.
F/O #553 - 557 Sheldon Ave.
AS SHOWN ON CONTRACT DRAWINGS AND DIRECTED BY A CON EDISON
REP.

Total quantity for CET 700 = 151

CON EDISON SCOPE OF WORK
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CET 710.1 REMOVAL OF ABANDONED UTILITY STEEL/CAST IRON/PLASTIC, UP TO AND INCL. 12"
DIAMETER PIPES L.F.

At the following locations:

F/O #476-480 Sheldon Ave. (Remove pipes if prim. cable are relocated.)

Total quantity for CET 710.1 = 260

CET 802A SPECIAL MODIFICATION OF WORK FOR INSTALLATION OF NEW SIDEWALKS S.F.

At the following locations:

N/E/C Nippon Ave. & Sinclair Ave.

S/E/C Nippon Ave. & Sinclair Ave.

N/W/C Nippon Ave. & Sinclair Ave.

N/E/C Nippon Ave. & Stafford Ave.

N/W/C Nippon Ave. & Stafford Ave.

N/E/C Nippon Ave. & Vineland Ave.

N/W/C Nippon Ave. & Vineland Ave.

S/E/C Sperry Pl. & Anaconda St.

N/E/C Sperry Pl. & Anaconda St.

N/W/C Anaconda St. & Castor Pl.

S/W/C Sperry Pl. & Ballard Ave.

S/E/C Sperry Pl. & Ballard Ave.

Opp #28 Ballard Ave.

F/O #12 G - 12 J Delmar Ave.

N/E/C Delmar Ave. & Sheldon Ave.

N/W/C Delmar Ave. & Rensselaer Ave.

F/O #463 Stafford Ave.

Opp #463 Stafford Ave.

F/O #500 Sheldon Ave.

S/W/C Sheldon Ave & Delmar Ave.

F/O #452 Sheldon Ave.

F/O #351 Stafford Ave.

AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE

Total quantity for CET 802A = 1,735

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CET 802B

SPECIAL MODIFICATION OF WORK FOR INSTALLATION OF NEW CURBS

L.F.

At the following locations:

F/O #562 Nippon Ave.
N/E/C Nippon Ave. & Sinclair Ave.
S/E/C Nippon Ave. & Sinclair Ave.
N/W/C Nippon Ave. & Sinclair Ave.
F/O #561 Nippon Ave.
N/E/C Nippon Ave. & Stafford Ave.
N/W/C Nippon Ave. & Stafford Ave.
N/E/C Nippon Ave. & Vineland Ave.
N/W/C Nippon Ave. & Vineland Ave.
F/O #498 Nippon Ave.
Opp #498 Nippon Ave.
S/E/C Sperry Pl. & Anaconda St.
N/E/C Sperry Pl. & Anaconda St.
N/W/C Anaconda St. & Castor Pl.
S/W/C Sperry Pl. & Ballard Ave.
S/E/C Sperry Pl. & Ballard Ave.
F/O #28 Ballard Ave.
Opp #28 Ballard Ave.
F/O #12 F - 12 J Delmar Ave.
F/O #162 Delmar Ave.
Opp #162 Delmar Ave.
N/E/C Delmar Ave. & Sheldon Ave.
S/E/C Delmar Ave. & Sheldon Ave.
S/W/C Delmar Ave. & Sheldon Ave.
S/O #480 Sheldon Ave.(On Delmar Ave.)
8' N/O #195 Delmar Ave.
Opp #195 Delmar Ave.
S/W/C Delmar Ave. & Rensselaer Ave.
N/W/C Delmar Ave. & Rensselaer Ave.
10' W #452 Sheldon Ave.
Opp #558 Vineland Ave.
F/O #558 Vineland Ave.
Opp #534 Vineland Ave.
F/O #26 Vineland Ave.
Opp #26 Vineland Ave.
F/O #480 Stafford Ave.
Opp #480 Stafford Ave.

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F/O #463 Stafford Ave.
Opp #463 Stafford Ave.
F/O #458 Stafford Ave.
Opp #458 Stafford Ave.
F/O #371 Stafford Ave.
N/E/C Sinclair Ave. & Nippon Ave.
F/O #505 Sinclair Ave.
F/O #506 Sheldon Ave.
F/O #500 Sheldon Ave.
S/W/C Sheldon Ave & Deimar Ave.
F/O #452 Sheldon Ave.
F/O #371 Stafford Ave.
F/O #351 Stafford Ave.
43' W/O #526 Sinclair Ave.
N/W/C Hennan Ave. & Stafford Ave.
AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE

Total quantity for CET 802B = 587

CET 1006V 6" VERTICAL OR ROLLED WATER MAIN OFFSET

EA

At the following locations:

Opp #565 Huguenot Ave.(side of #640)
Opp #637 Huguenot Ave.
F/O #639 Huguenot Ave.
F/O #480 Huguenot Ave.

AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE

Total quantity for CET 1006V = 4

CET 1012V 12" VERTICAL OR ROLLED WATER MAIN OFFSET

EA

At the following locations:

F/O #480 Huguenot Ave.
W Int. Huguenot Ave. & Woodrow Rd.

AS ENCOUNTERED AND DIRECTED BY A CON EDISON REPRESENTATIVE

Total quantity for CET 1012V = 2

SCHEDULE U-2
 FOR INFORMATION ONLY
 ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE
FOR VERIZON

SE 818

STORM & SANITARY SEWERS & APPUTENANCES IN SHELDON AVE., etc., S.I.N.Y.

CET ITEM NUMBER	DESCRIPTION	UNITS	ESTIMATED QUANTITY
100.1	UTILITIES CROSSING TRENCH FOR SEWERS <= 12",CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .1)	EA.	65
100.2	UTILITIES CROSSING TRENCH FOR SEWERS <= 12",CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .2)	EA.	3
101.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .1)	EA.	16
102.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .1)	EA.	10
102.2	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER (TYPE .2)	EA.	1
103.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMETER (TYPE .1)	EA.	1
105.1	UTILITIES CROSSING TRENCH FOR SEWER OVER 54"TO 60" DIAMETER - BOX SEWER (TYPE .1)	EA.	2
108.1	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL 12" DIAMETER (TYPE .1)	EA.	31
108.2	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL 12" DIAMETER (TYPE .2)	EA.	3
109.1	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1)	EA.	2
225.1A	INSTALLATION/REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	EA.	8
225.1B	INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES	EA.	30

SCHEDULE U-2
 FOR INFORMATION ONLY
 ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE

FOR VERIZON

SE 818

STORM & SANITARY SEWERS & APPURTENANCES IN SHELDON AVE., etc., S.I.N.Y.

CET ITEM NUMBER	DESCRIPTION	UNITS	ESTIMATED QUANTITY
300	SPECIAL CARE EXCAVATION & BACKFILLING	CY	250
330T	SUPPORT & PROTECTION OF COMMUNICATION UTILITY FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE IN OR CLOSE PROXIMITY TO TRENCH LIMITS	LF	1575
350	OVERHEAD ACCOMMODATION - PROTECTION OF OH FACILITIES, POLES & APPURTENANCES	LS	1
351	INSTALL AND REMOVE "A" FRAMES ON UTILITY POLES	EA.	2
400	TEST PITS FOR UTILITY FACILITIES	CY	120
401	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES	CY	80
402T.2	EXIST. OCCUPIED NON-CONCRETE ENCASED CONDUITS PLCD. IN FINAL POS. WITHOUT CONCRETE ENCASEMENT.	LF	4480
402T.V2	EXIST. VACANT NON-CONCRETE ENCASED CONDUITS PLCD. IN FINAL POS. WITHOUT CONCRETE ENCASEMENT.	LF	3760
402T.2A	EXIST. OCCUPIED NON-CONCR. ENCASED CONDUITS PLCD. IN FINAL POS. WITH CONCRETE ENCASEMENT.	LF	320
402T.J2	EXIST. OCCUPIED NON-CONC. ENCASED CONDUITS PLCD. IN FINAL POS. W/O CONC. ENCASEMENT IN WHICH ONLY CONDUIT JOINTS ARE BROKEN OUT AND CONDUITS REMAIN INTACT	LF	15
403	PLACING STEEL PROTECTION PLATES FOR UTILITY FACILITIES	SF	200
6.36ME	MODIFICATION OF WORK METHODS TO ACCOMMODATE UTILITY HARDWARE (34" to under 41" Width)	EA.	3

VERIZON
Support and Protection
SE 818
Storm & Sanitary Sewer and Appurtenances in Sheldon Ave., Etc.
Borough of Staten Island

**CET 100.1 UTILITIES CROSSING TRENCH for SEWERS 12" and UNDER and/or
CATCH BASIN CHUTE CONN. and/or TEST PIT (Type .1) 65**

Dwg. No. At the following locations:

- 3U Intersection of Sinclair Ave. and Powell St. (Sanitary Sewer)
- 4U Intersection of Sinclair Ave. and Walker Place (Sanitary Sewer)
- 6U Intersection of Huguenot Ave. and Sinclair Ave. on West Side (Sanitary Sewer)
- 11U On Nippon Ave. just north of Vineland Ave. (Chute Crossing)
- 11U Intersection of Nippon Ave. and Vineland Ave. (Sanitary Sewer)
- 11U On Nippon Ave. just north of Stafford Ave. (Chute Crossing)
- 11U Intersection of Nippon Ave. and Stafford Ave. (Sanitary Sewer)
- 12U Intersection of Anaconda St. and Castor Place (Sewer Crossing)
- 12U Intersection of Anaconda St. and Castor Place (Chute Crossing)
- 14U On Ballard Ave. west of Woodrow Road (Sanitary Sewer)
- 16U SWC of Sheldon Ave. and Delmar Ave. (Sanitary Sewer)
- 16U Intersection of Delmar Ave. and Sheldon Ave. (Sanitary Sewer)
- 16U Intersection of Delmar Ave. and Sheldon Ave. – on Delmar Ave. (Chute Crossing)
- 16U Intersection of Delmar Ave. and Stafford Ave. – north side (Sanitary Sewer)
- 17U Intersection of Delmar Ave. and Vineland Ave. – west side (Sanitary Sewer)
- 17U Intersection of Delmar Ave. and Vineland Ave. – north side (Sanitary Sewer)
- 17U Intersection of Delmar Ave. and Crown Ave. – south side (Sanitary Sewer)

VERIZON
Support and Protection
SE 818
Storm & Sanitary Sewer and Appurtenances in Sheldon Ave., Etc.
Borough of Staten Island

**CET 100.1 UTILITIES CROSSING TRENCH for SEWERS 12" and UNDER and/or
CATCH BASIN CHUTE CONN. and/or TEST PIT (Type .1) (Con't)**

Dwg. No. At the following locations:

- 17U Intersection of Delmar Ave. and Crown Ave. – east side (Sanitary Sewer)
- 20U On Delmar Ave. east of Sperry Place (Chute Crossing)
- 22U Intersection of Heenan Ave. and Stafford Ave. – south side (Sanitary Sewer)
- 24U Midblock north side Crown Ave. between Nippon Ave. and Delmar Ave (Sanitary)
- 24U Midblock south side Crown Ave. between Nippon Ave. and Delmar Ave (Chute)
- 24U Midblock on Crown Ave. between Nippon Ave. and Delmar Ave – south side
- 26U Midblock on Vineland Ave. west of Nippon Ave. – Storm Sewer
- 26U Midblock on Vineland Ave. west of Nippon Ave. – Sanitary Sewer
- 26U SWC of Vineland Ave. and Nippon Ave. on Vineland Ave.
- 26U SEC of Vineland Ave. and Nippon Ave. on Vineland Ave.
- 27U On Vineland Ave. between Nippon Ave. and Delmar Ave. chute, north side
- 27U On Vineland Ave. between Nippon Ave. and Delmar Ave. chute, south side
- 27U On Vineland Ave. between Nippon Ave. and Delmar Ave. chute, north side
- 27U On Vineland Ave. between Nippon Ave. and Delmar Ave. chute, south side
- 27U On Vineland Ave. between Nippon Ave. and Delmar Ave. chute, north side
- 27U On Vineland Ave. between Nippon Ave. and Delmar Ave. chute, south side
- 27U On Vineland Ave. between Delmar Ave. and Heenan Ave. – chute, north side
- 27U On Vineland Ave. between Delmar Ave. and Heenan Ave. – chute, north side

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**CET 100.1 UTILITIES CROSSING TRENCH for SEWERS 12" and UNDER and/or
CATCH BASIN CHUTE CONN. and/or TEST PIT (Type .1) (Con't)**

Dwg. No. At the following locations:

- 28U On Vineland Ave. between Delmar Ave. and Heenan Ave – chute,,north side
- 28U On Vineland Ave. between Delmar Ave. and Heenan Ave – chute, south side
- 28U On Vineland Ave. west of Heenan Ave.
- 29U On Stafford Ave. between Huguenot Ave. and Nippon Ave. - Sanitary
- 29U On Stafford Ave. between Huguenot Ave. and Nippon Ave. – Sanitary
- 29U On Stafford Ave. between Huguenot Ave. and Nippon Ave. – chute north side
- 29U On Stafford Ave. between Huguenot Ave. and Nippon Ave. – Chute south side
- 29U On Stafford Ave. between Huguenot Ave. and Nippon Ave. – Chute north side
- 29U On Stafford Ave. between Huguenot Ave. and Nippon Ave. – Chute south side
- 30U On Stafford Ave. between Nippon Ave. and Delmar Ave. – Chute, north side
- 30U On Stafford Ave. between Nippon Ave. and Delmar Ave. – Chute, north side
- 30U On Stafford Ave. between Nippon Ave. and Delmar Ave. – Chute, north side
- 30U On Stafford Ave. between Nippon Ave. and Delmar Ave. – Chute, north side
- 31U On Stafford Ave. between Delmar Ave. and Heenan Ave.
- 33U On Sinclair Ave. between Huguenot Ave. and Nippon Ave.
- 34U On Sunclair Ave. between Nippon Ave. and Delmar Ave.
- 34U On Sinclair Ave. between Delmar Ave. and Dead End – north side
- 34U On Sinclair Ave. between Delmar Ave. and Dead End – south side

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**CET 100.1 UTILITIES CROSSING TRENCH for SEWERS 12" and UNDER and/or
CATCH BASIN CHUTE CONN. and/or TEST PIT (Type .1) (Con't)**

Dwg. No. At the following locations:

- 28U On Vineland Ave. between Delmar Ave. and Heenan Ave – chute,,north side
- 28U On Vineland Ave. between Delmar Ave. and Heenan Ave – chute, south side
- 28U On Vineland Ave. west of Heenan Ave.
- 29U On Stafford Ave. between Huguenot Ave. and Nippon Ave. - Sanitary
- 29U On Stafford Ave. between Huguenot Ave. and Nippon Ave. – Sanitary
- 29U On Stafford Ave. between Huguenot Ave. and Nippon Ave. – chute north side
- 29U On Stafford Ave. between Huguenot Ave. and Nippon Ave. – Chute south side
- 29U On Stafford Ave. between Huguenot Ave. and Nippon Ave. – Chute north side
- 29U On Stafford Ave. between Huguenot Ave. and Nippon Ave. – Chute south side
- 30U On Stafford Ave. between Nippon Ave. and Delmar Ave. – Chute, north side
- 30U On Stafford Ave. between Nippon Ave. and Delmar Ave. – Chute, north side
- 30U On Stafford Ave. between Nippon Ave. and Delmar Ave. – Chute, north side
- 30U On Stafford Ave. between Nippon Ave. and Delmar Ave. – Chute, north side
- 31U On Stafford Ave. between Delmar Ave. and Heenan Ave.
- 33U On Sinclair Ave. between Huguenot Ave. and Nippon Ave.
- 34U On Sunclair Ave. between Nippon Ave. and Delmar Ave.
- 34U On Sinclair Ave. between Delmar Ave. and Dead End – north side
- 34U On Sinclair Ave. between Delmar Ave. and Dead End – south side

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**CET 100.2 UTILITIES CROSSING TRENCH for SEWERS 12" and UNDER and/or
CATCH BASIN CHUTE CONN. and/or TEST PIT (Type .2) (Con't.)**

Dwg. No. At the following locations:

7U On Huguenot Ave. north of Castor Place

7U On Huguenot Ave. north of Castor Place

Total Quantity for CET 100.2

3

**CET 101.1 UTILITIES CROSSING TRENCH for SEWERS OVER 12" TO 24" Dia.
(Type .1)**

16

Dwg. No. At the following locations:

5U Intersection of Huguenot Ave. and Sheldon Ave.

5U On Huguenot Ave. north of Sheldon Ave.

5U On Huguenot Ave. north of Sheldon Ave.

5U On Huguenot Ave. north of Sheldon Ave.

5U On Huguenot Ave. north of Sheldon Ave.

6U Intersection of Huguenot Ave. and Sinclair Ave.

8U Intersection of Anaconda St. and Castor Place

11U Intersection of Nippon Ave. and Vineland Ave.

11U Intersection of Nippon Ave. and Stafford Ave.

16U Intersection of Delmar Ave. and Stafford Ave.

17U Intersection of Delmar Ave. and Vineland Ave.

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CET 101.1 UTILITIES CROSSING TRENCH for SEWERS OVER 12" TO 24" Dia.

(Type .1)

(Con't.)

Dwg. No.	At the following locations:
24U	On Crown Ave. between Nippon Ave. and Delmar Ave.
29U	On Stafford Ave. between Huguenot Ave. and Nippon Ave.
29U	On Stafford Ave. between Huguenot Ave. and Nippon Ave.
37U	On Sheldon Ave. between Huguenot Ave. and Nippon Ave.
38U	On Sheldon Ave. between Huguenot Ave. and Delmar Ave.

Total Quantity for CET 101.1 **16**

CET102.1 UTILITIES CROSSING TRENCH for SEWERS OVER 24" TO 36" Dia.

(Type .1)

10

Dwg. No.	At the following locations:
3U	Intersection of Sinclair Ave. and Powell St.
4U	Intersection of Sinclair Ave. and Walker Place
14U	On Ballard Ave. west of Woodrow Road
16U	Intersection of Delmar Ave. and Sheldon Ave.
16U	Intersection of Delmar Ave. and Stafford Ave.
17U	Intersection of Delmar Ave. and Vineland Ave. – north side
17U	Intersection of Delmar Ave. and Crown Ave. – south side
17U	Intersection of Delmar Ave. and Crown Ave.
31U	On Stafford Ave. between Delmar Ave. and Heenan Ave.

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CET102.1 UTILITIES CROSSING TRENCH for SEWERS OVER 24" TO 36" Dia.

(Type .1) **(Con't.)**

Dwg. No. At the following locations:

33U On Sinclair Ave. between Huguenot Ave. and Nippon Ave.

Total Quantity for CET 102. **10**

CET102.2 UTILITIES CROSSING TRENCH for SEWERS OVER 24" TO 36" Dia.

(Type .2) **1**

Dwg. No. At the following locations:

6U Intersection of Huguenot Ave. and Sinclair Ave. – east side

Total Quantity for CET 102.2 **1**

CET103.1 UTILITIES CROSSING TRENCH for SEWERS OVER 36" TO 48" Dia.

(Type .1) **1**

Dwg. No. At the following locations:

16U Intersection of Delmar Ave. and Stafford Ave. – north side

Total Quantity for CET 103.1 **1**

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**CET 105.1 UTILITIES CROSSING TRENCH FOR SEWERS OVER 54" TO 60" DIA.
(Type .1) - BOX SEWER 2**

Dwg. No. At the following locations:

16U Intersection of Delmar Ave. and Stafford Ave.

16U Intersection of Sinclair Ave. and Delmar Ave.

Total Quantity for CET 105.1 2

**CET 108.1 UTILITIES CROSSING TRENCH FOR WATER MAINS UP TO AND
INCLUDING 12" Dia. (Type .1) 31**

Dwg. No. At the following locations:

3U Intersection of Sinclair Ave. and Powell St.

4U Intersection of Sinclair Ave. and Walker Place

5U On west side Huguenot Ave. south of Sheldon Ave. – hydrant

5U Intersection of Huguenot Ave. and Sheldon Ave.

5U On Huguenot Ave. north of Sheldon Ave.

5U On Huguenot Ave. north of Sheldon Ave.

6U Intersection of Huguenot Ave. and Sinclair Ave. – west side

11U Intersection of Nippon Ave. and Vineland Ave.

11U Intersection of Nippon Ave. and Stafford Ave.

11U Intersection of Anaconda St. and Castor Place

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CET 108.1 UTILITIES CROSSING TRENCH FOR WATER MAINS UP TO AND INCLUDING 12" Dia. (Con't)

Dwg. No.	At the following locations:
12U	Intersection of Anaconda St. and Castor Place – east side
14U	On Ballard Ave. west of Woodrow Road
16U	Intersection of Delmar Ave. and Sheldon Ave. – SEC
16U	Intersection of Delmar Ave. and Sheldon Ave.
16U	Intersection of Delmar Ave. and Stafford Ave.
16U	Intersection of Delmar Ave. and Stafford Ave. –north side
17U	Intersection of Delmar Ave. and Vineland Ave.
17U	Intersection of Delmar Ave. and Vineland Ave. –north side
17U	Intersection of Delmar Ave. and Crown Ave. –south side
17U	Intersection of Delmar Ave. and Vineland Ave. –east side
22U	Intersection of Heenan Ave. and Stafford Ave. – south side
22U	Intersection of Heenan Ave. and Stafford Ave. – west side
24U	On Crown Ave. between Nippon Ave. and Delmar Ave.
24U	On Crown Ave. between Nippon Ave. and Delmar Ave. – hydrant, north side
27U	On Vineland Ave. between Nippon Ave. and Delmar Ave. – hydrant
27U	On Vineland Ave. between Nippon Ave. and Delmar Ave. – hydrant
27U	On Vineland Ave. between Nippon Ave. and Delmar Ave. – hydrant
28U	On Vineland Ave. west of Heenan Ave.

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CET 108.1 UTILITIES CROSSING TRENCH FOR WATER MAINS UP TO AND INCLUDING 12" Dia. (Con't)

31U	On Stafford Ave. between Delmar Ave. and Heenan Ave.	
38U	On Sheldon Ave. between Delmar Ave. and Dead End	
38U	On Sheldon Ave. between Delmar Ave. and Dead End	
Total Quantity for CET 108.1		31

CET 108.2 UTILITIES CROSSING TRENCH FOR WATER MAINS UP TO AND INCLUDING 12" Dia. (Type .2) 3

Dwg. No.	At the following locations:	
5U	Intersection of Rensselaer Ave. and Huguenot Ave.	
6U	Intersection of Huguenot Ave. and Sinclair Ave. – east side	
29U	Intersection of Huguenot Ave. and Stafford Ave.	
Total Quantity for CET 108.2		3

CET 109.1 UTILITIES CROSSING TRENCH FOR WATER MAINS OVER 12" UP TO 24" Dia. (Type .1) 2

Dwg. No.	At the following locations:	
11U	Intersection Nippon Ave. and Stafford Ave.	
16U	Intersection of Delmar Ave. and Stafford Ave.	
Total Quantity for CET 109.1		2

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CET 225.1A INSTALLATION/REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES

8

Dwg. No.	At the following locations:
6U	On Huguenot Ave. between Sinclair Ave. and Stafford Ave.
7U	On Huguenot Ave. north of Castor Place
7U	On Delmar Ave. west of Sperry Place
12U	On Anaconda St. off of Castor Place
12U	Intersection of Anaconda St. and Castor Place – NWC on Anaconda St.
16U	On Delmar Ave. south of Sheldon Ave.
16U	Intersection of Delmar Ave. and Stafford Ave. – NWC on Stafford Ave.
16U	Intersection of Delmar Ave. and Stafford Ave. – NEC on Stafford Ave.

Total Quantity for CET 225.1A

8

CET 225.1B INSTALLATION of CATCH BASINS WITH UTILITY INTERFERENCE

30

Dwg. No.	At the following locations:
3U	On Powell St. off of Sinclair Ave.
4U	On Walker place off of Sinclair Ave.
5U	On Sheldon Ave. east of Huguenot Ave.
6U	On Huguenot Ave. south of Sinclair Ave.

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CET 225.1B INSTALLATION of CATCH BASINS WITH UTILITY INTERFERENCE
(Con't)

- 6U On Huguenot Ave. between Stafford Ave. and Woodrow Road
- 16U Intersection of Delmar Ave. and Sheldon Ave. – SWC on Delmar Ave.
- 16U Intersection of Delmar Ave. and Sheldon Ave. – NWC on Delmar Ave.
- 24U On Crown Ave. between Nippon Ave. and Delmar Ave. – south side
- 24U On Crown Ave. between Nippon Ave. and Delmar Ave. – south side
- 26U Intersection of Vineland Ave. and Nippon Ave. – SWC on Vineland Ave.
- 26U Intersection of Vineland Ave. and Nippon Ave. – SEC on Vineland Ave.
- 27U On Vineland Ave. between Nippon Ave. and Delmar Ave. – north side
- 27U On Vineland Ave. between Nippon Ave. and Delmar Ave. – south side
- 27U On Vineland Ave. between Nippon Ave. and Delmar Ave. – north side
- 27U On Vineland Ave. between Nippon Ave. and Delmar Ave. – south side
- 27U On Vineland Ave. between Nippon Ave. and Delmar Ave. – north side
- 27U On Vineland Ave. between Nippon Ave. and Delmar Ave. – south side
- 27U On Vineland Ave. between Delmar Ave. and Heenan Ave. – north side
- 27U On Vineland Ave. between Delmar Ave. and Heenan Ave. – south side
- 28U On Vineland Ave. between Delmar Ave. and Heenan Ave. – south side
- 29U On Stafford Ave. between Huguenot Ave. and Nippon Ave. – north side
- 29U On Stafford Ave. between Huguenot Ave. and Nippon Ave. – south side
- 29U On Stafford Ave. between Huguenot Ave. and Nippon Ave. – north side
- 29U On Stafford Ave. between Huguenot Ave. and Nippon Ave. – south side

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CET 225.1B INSTALLATION of CATCH BASINS WITH UTILITY INTERFERENCE

(Con't)

- 30U On Stafford Ave. between Nippon Ave. and Delmar Ave. – north side
- 30U On Stafford Ave. between Nippon Ave. and Delmar Ave. – south side
- 30U On Stafford Ave. between Nippon Ave. and Delmar Ave. – north side
- 30U On Stafford Ave. between Nippon Ave. and Delmar Ave. – south side
- 36U Intersection of Huguenot Ave. and Sheldon Ave. – NEC on Sheldon Ave.
- 37U On Sheldon Ave. between Nippon Ave. and Delmar Ave. – on Sheldon Ave.

Total Quantity for CET 225.1A **30**

CET 300 SPECIAL CARE EXCAVATION AND BACKFILL **250 CY**

Dwg. No. At the following locations:

- 5U On Sheldon Ave. east of Huguenot Ave.
- 12U On Castor Place off Anaconda St.
- 28U On Vineland Ave. between Delmar Ave. and Heenan Ave.

Total Quantity for CET 300 **250 CY**

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**CET 330T SUPPORT AND PROTECTION OF COMMUNICATION UTILITY FACILITIES
DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE IN OR CLOSE
PROXIMITY TO TRENCH 1575 LF**

- Dwg. No. At the following locations:
- 11U East side Delmar Ave. between Sinclair Ave. and Stafford Ave.
 - 11U West side Delmar Ave. south of Sinclair Ave.
 - 16U West side of Delmar Ave. south of Sinclair Ave
 - 31U On Stafford Ave. between Delmar Ave. and Heenan Ave.
 - 34U On Sinclair Ave. between Delmar Ave. and the Dead End
 - 35U On Sheldon Ave. between Delmar Ave. and the Dead End

Total Quantity for CET 330T 1575 CY

**CET 350 OVERHEAD ACCOMMODATION - PROTECTION OF OVERHEAD
FACILITIES, POLES AND APPURTENANCES LS**

- At the following locations:
- On south side Huguenot Ave. from Rensselaer Ave. to Shift Place
 - Intersection of Nippon Ave. and Rensselaer Ave – west side
 - Intersection of Nippon Ave., Crown Ave and Woodrow Road – west side
 - On east side of Delmar Ave. from Crown Ave. to Woodrow Road
 - On east side Ellsworth Ave and Sinclair Ave.
 - On east side of Powell St.

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CET 350 OVERHEAD ACCOMMODATION - PROTECTION OF OVERHEAD FACILITIES, POLES AND APPURTENANCES

At the following locations:

On the west side of Walker Place

On the north side of Sheldon Ave. from Huguenot Ave. to Nippon Ave

On south side of Sinclair Ave. west of Nippon Ave.

On the south side of Vineland Ave. from Huguenot Ave. to Nippon Ave.

On the north side of Woodrow Road

On the south side of Castor Place

On the east side of Ballard Ave.

On the east side of Delmar Ave.

On the east side of Everton Ave.

CET 351 INSTALL AND RMOVE "A" FRAMES ON UTILITY POLES 2

Locations as directed by Verizon Field Representative

Total Quantity for CET 351 2

CET 400 TEST PITS FOR UTILITY FACILITIES 120 CY

Locations as directed by Verizon Field Representative

Total Quantity for CET 400 120 CY

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CET 401 TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES
80 CY

Dwg. No. At the following locations:

- 5U On Sheldon Ave east of Huguenot Ave.
- 6U On Huguenot Ave. south of Sinclair Ave.
- 6U On Huguenot Ave. between Sinclair Ave. and Stafford Ave.
- 6U On Huguenot Ave. between Stafford Ave. and Woodrow Road
- 7U On Huguenot Ave. north of Castor Place
- 41U On Vineland Ave. east of Huguenot Ave.

Total Quantity for CET 401 **80 CY**

**CET 402T.2 EXISTING OCCUPIED NON-CONCRETE ENCASED CONDUITS PLACED IN
FINAL POSITION WITHOUT CONCRETE ENCASEMENT** **4480 LF**

Dwg. No. At the following locations:

- 5U On Sheldon Ave. east of Huguenot Ave.
- 6U On east side of Huguenot Ave. south of Sinclair Ave.
- 6U On Huguenot Ave. between Sinclair Ave. and Stafford Ave.
- 6U On Huguenot Ave. between Stafford Ave. and Woodrow Road
- 7U On Huguenot Ave. north of Castor Place
- 41U On Vineland Ave. east of Huguenot Ave.

Total Quantity for CET 402T.2 **4480 LF**

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**CET 402T.V2 EXISTING VACANT NON-CONCRETE ENCASED CONDUITS PLACED IN
FINAL POSITION WITHOUT CONCRETE ENCASEMENT 3760 LF**

Dwg. No.	At the following locations:
5U	On Sheldon Ave. east of Huguenot Ave.
6U	On east side of Huguenot Ave. south of Sinclair Ave.
6U	On Huguenot Ave. between Sinclair Ave. and Stafford Ave.
6U	On Huguenot Ave. between Stafford Ave. and Woodrow Road
7U	On Huguenot Ave. north of Castor Place

Total Quantity for CET 402T.V2 3760 LF

**CET 402T.2A EXISTING OCCUPIED NON CONCRETE ENCASED CONDUITS PLACED
IN FINAL POSITION WITH CONCRETE ENCASEMENT**

320 LF

Dwg. No.	At the following locations:
6U	On Huguenot Ave. between Sinclair Ave. and Stafford Ave.

Total Quantity for CET 402T.2A 320 LF

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**CET 402T.J2 EXISTING OCCUPIED NON-CONCRETE ENCASED CONDUITS PLACED
IN FINAL POSITION WITHOUT CONCRETE ENCASUREMENT IN WHICH ONLY
CONDUIT JOINTS ARE BROKEN OUT AND CONDUIT REMAINS INTACT 15 LF**

Dwg. No. At the following locations:

3U On Powell St. off Sinclair Ave.

Total Quantity for CET 402T.J2 15 LF

CET 403 PLACING STEEL PROTECTION PLATES FOR UTILITY FACILITIES 200 SF

Locations as directed by the Verizon Field Representative

**CET 6.36ME MODIFICATION OF WORK METHODS TO ACCOMMODATE UTILITY
HARDWARE (34" TO UNDER 41") 3**

At the following locations:

On Huguenot Ave. between Stafford Ave. and Woodrow Road

On Huguenot Ave. south of Castor Place

On Huguenot Ave. south of Sinclair Ave.

Total Quantity for CET 6.36 ME 3

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**CET 700 SPECIAL MODIFICATION OF WORK METHODS TO
ACCOMMODATE/PROTECT UNDERGROUND FACILITIES WITH LIMITED COVER**
50 CY

Locations as directed by the Verizon Field Representative

Total Quantity for CET 700 50 CY

FOR INFORMATION ONLY
ENGINEER'S ESTIMATE OF QUANTITIES AND TYPES OF INTERFERENCE
TIME WARNER CABLE OF NEW YORK CITY

SE-818

Sheldon Ave.

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CET ITEM	DESCRIPTION	UNITS	ESTIMATED QUANTITY
100.1	UTILITIES CROSSING TRENCH FOR CB CHUTE CONNECTION	EA	6
101.1	UTILITIES CROSSING TRENCH FOR SEWERS UP TO & INCLUDING 24" DIAMETER	EA	96
108.1	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO & INCLUDING 12" DIAMETER	EA	32
350	OVERHEAD ACCOMMODATION, PROTECTION OF OVERHEAD FACILITIES, POLES & APPURTENANCES	LS	1
400	TEST PITS FOR UTILITY FACILITIES	CY	5

TIME WARNER CABLE
SUPPORT & PROTECTION
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CET 100.1 UTILITIES CROSSING TRENCH FOR CB CHUTE CONNECTION	EA
At the following locations:	
NWC Sinclair Ave & Nippon Ave.	1
NWC Vineland Ave & Nippon Ave.	1
NWC Stafford Ave & Nippon Ave.	1
F/O # 550 Sinclair Ave.	1
F/O # 437 Sinclair Ave.	1
SWC Sheldon Ave & Delmar Ave.	1
Total quantity for CET 100.1	6
CET 101.1 UTILITIES CROSSING TRENCH FOR SEWERS UP TO & INCLUDING 24" DIAMETER	EA
At the following locations:	
Intersection of Sheldon Ave & Nippon Ave.	3
F/O # 83 Nippon Ave	1
Intersection of Sinclair Ave & Nippon Ave.	2
F/O # 31 Nippon Ave.	2
F/O # 498 Nippon Ave.	2
Intersection of Stafford Ave. & Nippon	2
Intersection of Vineland Ave. & Nippon	2
Intersection of Crown Ave. & Nippon	1
F/O # 42 Anaconda Street	2
Intersection of Sperry Place & Anaconda St.	3
Intersection of Castor Place & Anaconda St.	2
F/O # 64 Anaconda Street	1
F/O # 199 Delmar Ave.	1
F/O # 146 Delmar Ave.	3
F/O # 142 Delmar Ave.	1
F/O # 135 Delmar Ave.	3
Intersection of Stafford Ave. & Delmar	2
Intersection of Sinclair Ave. & Delmar	2
Intersection of Sheldon Ave. & Delmar	4
Intersection of Vineland Ave. & Delmar	2
F/O # 475 Crown Ave.	2
F/O # 457 Crown Ave.	2
F/O # 489 Vineland Ave.	2
F/O # 476 Vineland Ave.	2
F/O # 461 Vineland Ave.	2
F/O # 445 Vineland Ave.	2
F/O # 414 Vineland Ave.	2
F/O # 394 Vineland Ave.	2
F/O # 370 Vineland Ave.	2
F/O # 555 Stafford Ave.	2
F/O # 529 Stafford Ave.	2
F/O # 517 Stafford Ave.	2
F/O # 511 Stafford Ave.	2
F/O # 480 Stafford Ave.	2
F/O # 464 Stafford Ave.	2
F/O # 444 Stafford Ave.	2
F/O # 432 Stafford Ave.	2
F/O # 400 Stafford Ave.	2
F O # 562 Sinclair Ave.	2
Side of # 156 Delmar Ave on Sinclair Ave.	4
F/O # 460 Sinclair Ave.	2
F/O # 441 Sinclair Ave.	1
F/O # 591 Sheldon Ave.	2
F/O # 579 Sheldon Ave.	2

	F/O # 557 Sheldon Ave.	1
	F/O # 553 Sheldon Ave.	1
	F/O 549 Sheldon Ave.	1
	F/O 541 Sheldon Ave.	1
	F/O 506 Sheldon Ave.	2
	Total quantity for CET 101.1	96
CET 108.1	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO & INCLUDING 12" DIAMETER	EA
	At the following locations:	
	Intersection of Sinclair Ave. & Nippon Ave.	1
	Intersection of Sheldon Ave & Nippon Ave.	2
	F/O # 498 Nippon Ave.	1
	Intersection of Stafford Ave & Nippon	1
	Intersection of Vineland Ave & Nippon	2
	Intersection of Sperry Place & Anaconda St.	1
	Intersection of Castor Place & Anaconda St.	2
	F/O # 199 Delmar Ave.	1
	F/O # 146 Delmar Ave.	1
	F/O # 142 Delmar Ave.	1
	F/O # 135 Delmar Ave.	1
	Intersection of Sinclair Ave. & Delmar	1
	Intersection of Sheldon Ave. & Delmar	2
	Intersection of Vineland Ave. & Delmar	1
	F/O # 475 Crown Ave.	1
	F/O 457 Crown Ave.	1
	Intersection of Crown & Nippon Ave.	1
	F/O # 489 Vineland Ave.	1
	F/O # 476 Vineland Ave.	1
	F/O # 461 Vineland Ave.	1
	F/O # 445 Vineland Ave.	1
	F/O # 370 Vineland Ave.	1
	Intersection of Stanford Ave. & Delmar	1
	F/O # 400 Stafford Ave.	1
	Intersection of Heenan Ave & Stanford	1
	Side of # 156 Delmar Ave on Sinclair Ave.	1
	F/O # 460 Sinclair Ave.	1
	F/O # 437 Sinclair Ave.	1
	Total quantity for CET 108.1	32
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 400	TEST PITS FOR UTILITY FACILITIES	CY
	At the following locations:	
	AS DIRECTED BY TIME WARNER CABLE REPRESENTATIVE	5
	Total quantity for CET 400	5

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.



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JOB NO: SE818

SHEET NO. 1 OF 1

PREPARED BY: J.BELLO

DATE: 10/23/12

CHECKED BY: A. CHIN

DATE: 10/23/12

JOB: SEWERS & WATER MAINS.

TEST PIT # 1

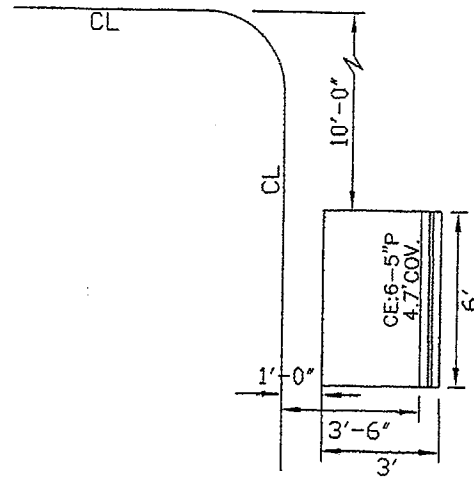
LOCATION: 1'E/W/C HUGUENOT AVE.

PURPOSE: INSTALL CATCH BASIN

10'SSC SINCLAIR AVE.



SINCLAIR AVE.

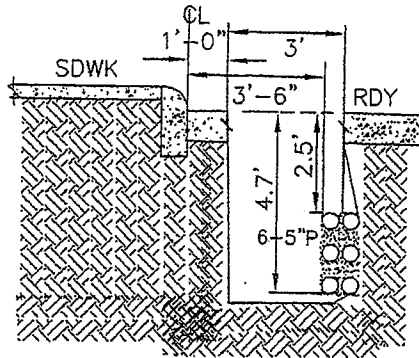


HUGUENOT AVE.

PLAN

SCALE: 1/4"=1'-0"

CET
ITEM
225.1B
200.1
100.3



PROFILE - LOOKING SOUTH

SCALE: 1/4"=1'-0"



JOB NO: SE818

SHEET NO. 1 OF 1

PREPARED BY: J.BELLD

DATE: 11/13/12

CHECKED BY: A. CHIN

DATE: 11/13/12

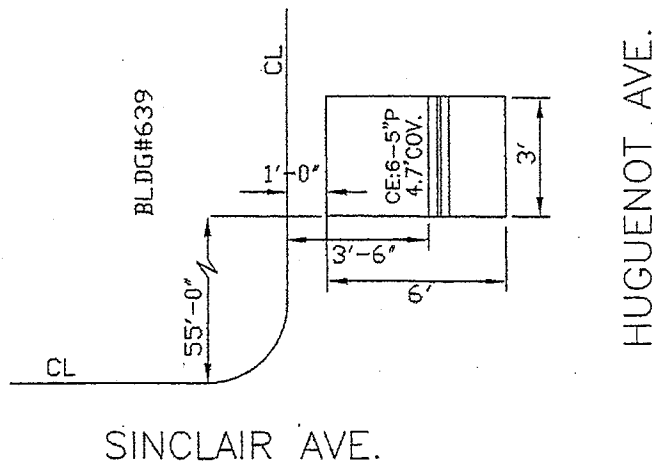
JOB: SEWERS & WATER MAINS.

TEST PIT # 2

LOCATION: 1'E/W/C HUGUENOT AVE.

PURPOSE: REPLACE CATCH BASIN

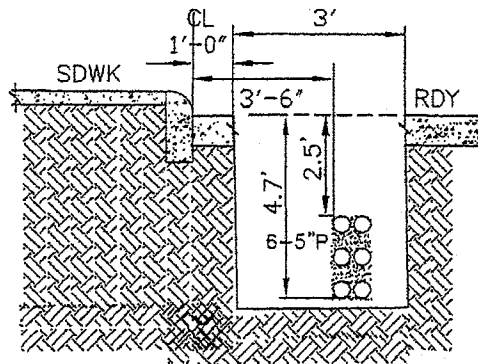
55'NNC SINCLAIR AVE.



PLAN

SCALE: 1/4"=1'-0"

CET
ITEM
225.1A
200.1
100.3



PROFILE - LOOKING NORTH

SCALE: 1/4"=1'-0"



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JOB NO: SE818

SHEET NO. 1 OF 1

PREPARED BY: J.BELLD

DATE: 10/18/12

CHECKED BY: A. CHIN

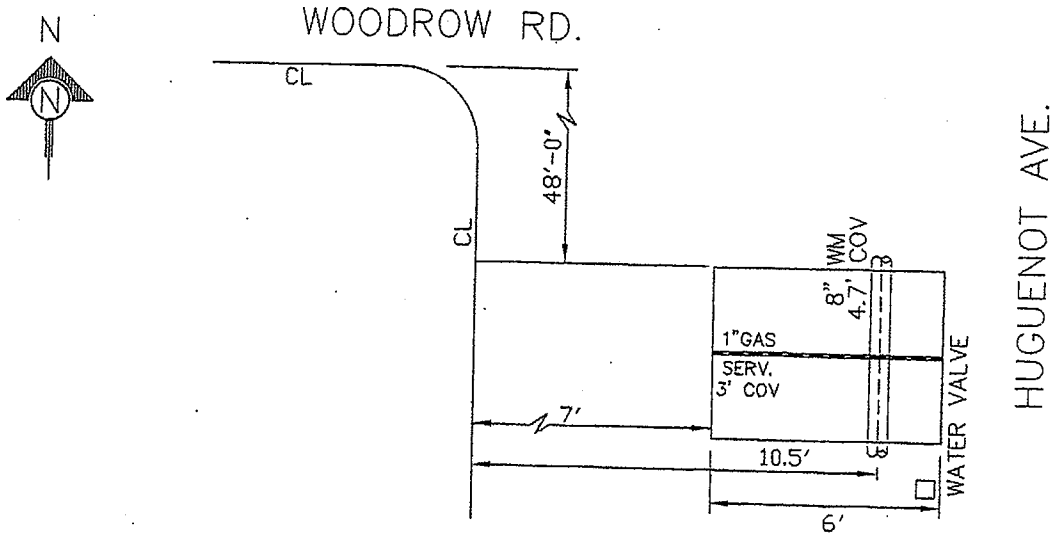
DATE: 10/18/12

JOB: SEWERS & WATER MAINS. TEST PIT # 3

LOCATION: 7'E/W/C HUGUENOT AVE. &

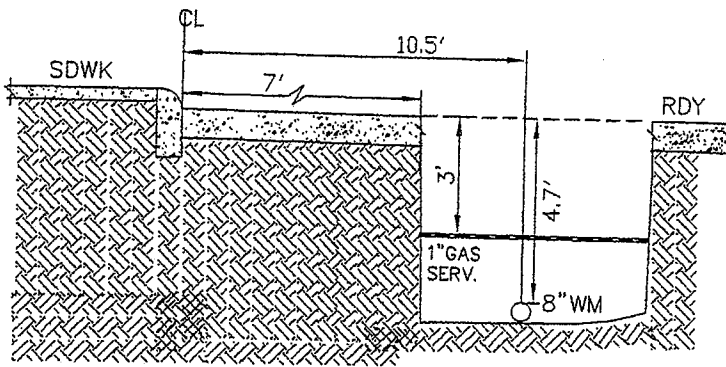
PURPOSE: REPLACE 8" WATER MAIN

48'SSC WOODROW RD.



PLAN

SCALE: 1/4"=1'-0"



PROFILE - LOOKING SOUTH

SCALE: 1/4"=1'-0"

PROJECT ID: SE818

END OF ADDENDUM No.5
This Addendum consists of Sixty (60) pages
And Twenty (20) sheets of Contract Drawings

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NEW YORK CITY DEPARTMENT OF
DESIGN + CONSTRUCTION

**INFRASTRUCTURE DIVISION
BUREAU OF DESIGN**

VOLUME 3 OF 3

PROJECT ID: SE818

FOR THE CONSTRUCTION OF SANITARY AND STORM SEWERS IN: SHELDON AVENUE BETWEEN ELLSWORTH AVENUE AND BMP-SB1 A POINT APPROXIMATELY 1,000-FEET EAST OF DELMAR AVENUE; SINCLAIR AVENUE BETWEEN ELLSWORTH AVENUE AND DEAD END; STAFFORD AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; VINELAND AVENUE BETWEEN HUGUENOT AVENUE AND HEENAN AVENUE; CROWN AVENUE BETWEEN NIPPON AVENUE AND BELFIELD AVENUE; WOODROW ROAD BETWEEN POWELL STREET AND BELFIELD AVENUE; CASTOR PLACE BETWEEN HUGUENOT AVENUE AND ANACONDA STREET; SPERRY PLACE BETWEEN ANACONDA STREET AND EVERTON AVENUE; POWELL STREET BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; WALKER PLACE BETWEEN SINCLAIR AVENUE AND WOODROW ROAD; DAHLIA STREET BETWEEN WOODROW ROAD AND SHIFT PLACE; HUGUENOT AVENUE BETWEEN RENSSELAER AVENUE AND SHIFT PLACE; CARDIFF STREET BETWEEN CASTOR PLACE AND ROSEDALE AVENUE; BOULDER STREET BETWEEN WOODROW ROAD AND ROSEDALE AVENUE; NIPPON AVENUE BETWEEN RENSSELAER AVENUE AND WOODROW ROAD; ANACONDA STREET BETWEEN SPERRY PLACE AND DELMAR AVENUE; BALLARD AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; DELMAR AVENUE BETWEEN RENSSELAER AVENUE AND ANACONDA STREET; CROWN PLACE BETWEEN CROWN AVENUE AND DEAD END; EVERTON AVENUE BETWEEN WOODROW ROAD AND SPERRY PLACE; AND, HEENAN AVENUE BETWEEN VINELAND AVENUE AND DEAD END

INCLUDING WATER MAIN WORK

Together With All Work Incidental Thereto
BOROUGH OF STATEN ISLAND
CITY OF NEW YORK

Contractor

Dated _____, 20____